ESMF FOR WBEDGMP UNDER WORLD BANK ASSISTANCE

LABOR MANAGEMENT PROCEDURE

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ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK FOR WBEDGMP UNDER WORLD BANK FUND ASSISTANCE

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WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED

Vidyut Bhavan, Bidhan Nagar Kolkata – 700 091

Executed by



Indian Institute of Social Welfare & Business Management, Kolkata – 700 073

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EXECUTIVE SUMMARY

1.0 INTRODUCTION

West Bengal State Electricity Distribution Company Limited (WBSEDCL) is a power distribution licensee for almost the entire State of West Bengal and accounts for about 80% of the power supply in the State and caters to almost 18.1 million customers (2018-19). At present grid connectivity has been extended in every nook and corner of the State covering 99% villages. To achieve Power for All (PFA) objective, the Government of West Bengal (GoWB) has sought World Bank assistance to support part of their investments in High Voltage Distribution System (HVDS), 33/11 KV GIS, Underground Cabling (UG) across select districts/towns (besides modern technology and institutional capacity building) to facilitate increased availability of power, improve service delivery and reduce system losses.

For implementation of proposed distribution network strengthening project, it is not only mandatory to comply with applicable national and state legislations/regulatory framework on environment and social issues but to carry out due diligence on such issues as per the provisions of World Bank's Environmental and Social Framework (ESF) to meet the overall requirement of sustainable development.

The Labour Management Procedures (LMP) set out the way in which project workers would be managed, in accordance with the requirements of National and State's regulations along with World Bank's Environmental & Social Standards. Accordingly, LMP for the West Bengal Electricity Distribution Grid Modernization Project (WBEDGMP) has been developed in adherence to applicable National/State regulations and World Bank's Environmental & Social Standard (ESS - 2): Labor and Working Conditions.

The prime objectives of the LMP includes:

- To promote safety and health at work.
- To promote the fair treatment, non-discrimination and equal opportunity of project workers.
- To protect project workers, including vulnerable workers such as women, persons with disabilities, migrant workers, contracted workers and primary supply workers, as appropriate.
- To prevent the use of all forms of forced labor and child labor.



- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.
- To provide project workers with accessible means to raise workplace concerns.

The present LMP would be applicable to all the "project worker" of WBEDGMP which includes:

- Direct Workers- people employed or engaged directly including contractual staff by the WBSEDCL to work specifically in relation to the WBEGMP.
- Contracted Workers- people employed or engaged through third parties (which may include contractors and sub-contractors, etc.) by the WBSEDCL to perform work related to core functions (i.e. for specific project activities without which project cannot continue) of the WBEGMP.
- Primary Supply Workers- people employed or engaged by the WBSEDCL's primary suppliers (those who on an ongoing basis, provide directly to the project goods or materials essential for the core functions) of the WBEGMP.

The present LMP also set out mechanism to implement the various provisions for fair treatment, non-discrimination and equal opportunity, occupational health and safety to all project worker as defined above. It also provides grievance mechanism for all direct workers and contracted workers to raise work place concern.

2.0 ASSESSMENT OF KEY POTENTIAL LABOUR RISK

The main labor risks associated with the project are assessed to be related to the work environment, associated risk of accidents and labor influx, if any. Based on current conditions in the sector it is assessed that the risk of child or forced labor is negligible, and already managed through national legislation and WBSEDL corporate requirement.

Labor influx: While a substantial number of jobs are likely to be created as part of the distribution line upgrade, UG cabling network and setting up of new GIS primarily during construction phase but no substantial labor influx are expected as most of the unskilled and semi-skilled labours would be engaged locally. WBSEDCL's existing operational procedure is to mandate and localize the economic benefits and only allow for outside, including expatriate labor, where there is a requirement for special skills. External workers, which will be few in numbers, may be accommodated at campsites in the area which has been prior practice by WBSEDCL in similar projects. There will be no dedicated camps established for worker accommodation in the project.



Specific requirements to manage risks associated with labor influx, related to interaction between project workers and local communities, such as communicable diseases including Covid-19 and gender-based violence, are managed through contractual requirements, code of conduct and training set out in this document.

Occupational Health and Safety: The risk related to the distribution network is associated with the risk of falling from height while installation of poles/DTRs as well as stringing of distribution line conductor, etc. There could also be a risk of electrocution during installation, testing and commissioning phase. WBSEDCL has existing corporate requirements for contractor training and safety, records of which are inspected monthly and audited bi-annually. Occupational Health and Safety measures adopted are being reported in annual report of WBSEDCL.

Contractor/sub-contractor(s) shall ensure implementation of the following measures to minimize the potential negative impacts:

Cleanliness: Pest extermination, vector control and disinfection are to be carried out throughout the living facilities in compliance with local requirements and/or good practice.

Complaints and incident reporting: A formal Complaints Procedure will be implemented to ensure timely and transparent response to complaints as received from labour.

Labour education: The workforce will be sensitized to local social and cultural practices through provision of an induction course for all employees that stipulates expected behaviour.

Labour Compensation and Accommodation, if required: Contractor shall ensure that labourers are provided with benefits such as annual leave, weekly rest day, etc. Accommodation to be provided for the migrant construction labour, if any which cover facilities (including catering facilities, dining areas, washing and laundry facilities etc.) and supporting utilities.

Labour behaviour in campsite provided, if any: A Code of Behaviour governing appropriate behaviour in the accommodation facilities, if any to be kept in place and to be strictly enforced. The contractor shall ensure implementation of the "rules of engagement" between labourers living in campsite and community and shall be implemented by construction contractors for all engaged labourers.

3.0 OVERVIEW OF LABOUR LEGISLATION

The prime applicable National and State legislations which regulate the terms and conditions of employment in the project workers includes, The Industrial Employment (Standing Order) Act 1946, Factories Act, 1948, Payment of Wages Act, 1936, The Minimum Wages Act, 1948, Child and Adolescent Labour (Prohibition and Regulation) Act 1986, Employee Compensation Act,



1923, Contract Labour (Regulation and Abolition) Act, 1970, Equal Remuneration Act, 1976, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

The World Bank's Environmental & Social Standard ESS-2 on Labor and working condition requires promoting worker-management healthy relationship, developing strategies to improve working condition like fair treatment of workers and vulnerable groups that are involved in the project and preventing all forms of forced and child labors. This standard helps to monitor health of the worker, working condition, hours of work and other necessary requirements including grievance mechanism and measures related to Occupational Health and Safety and shall be complied in accordance with ESS. WBSEDCL will ensure that project activities implemented are consistent with provisions of these ESS -2.

4.0 LABOUR & WORKING CONDITIONS

The LMP have been evolved in accordance with requirements of national regulations as well as ESS 2. The key elements of LMP includes-

Terms and Conditions of Employment

- Project Workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment including their rights related to hours of work, wages, overtime, compensation and other benefits at beginning of the working relationship.
- Project worker will be paid on regular basis as per the contract daily/weekly/monthly.
- Deduction from payment of wages will only be made as per employment terms and conditions with written information to concerned project workers.
- Where required Project worker will get written notice of termination of employment.
- All wages that have been earned, social security benefits, pension contributions and any other entitlement will be paid on or before termination of working relationship with project workers.

Non-discrimination and Equal Opportunity

- Project Workers will be employed only based on the principle of equal opportunity and fair treatment and there will be no discrimination with respect to any aspects of employment relationship.
- Measures to prevent and address harassment, intimidation and/or exploitation would be taken as per applicable national regulations.
- Measures will be provided to address the vulnerability of specific groups of project workers such as women, people with disabilities, migrant worker.



Worker's Organisations

- The national law recognizes workers' rights to form and to join workers' organisations to bargain collectively.
- The role of legally established workers' organisations and legitimate workers' representative will be respected, and they will be provided with information needed for meaningful negotiation in timely manner.

Child Labour and Forced Labour

- No child labour is proposed to be involved in proposed project considering the nature of work and activities under various components of Project.
- No forced labour i.e. bonded labour, indentured labour, etc are proposed to be employed in connection with proposed project.

Contractors will keep records in accordance with specifications set out in this LMP. WBSEDCL may at any time require records to ensure that labour working conditions are met. The PIU will review records against actual at a minimum on a monthly basis and can require immediate remedial actions if warranted. A summary of issues and remedial actions will be included in quarterly reports to the World Bank.

The code of conduct of workforce serves to establish the broad framework within which an action, or default by work force may be judged. Any action, or default, which conflicts with the code, is unacceptable. The description incorporates the necessary skills of labor worker as well as general labor duties and responsibilities specifically to avoid conflicts with the local population, transmission of diseases including Covid-19, any form of sexual harassment and violence, Personal Integrity and Discrimination. The major duties and responsibilities that workforce should strictly follow in their work place includes:

Prevention of Labour Conflicts with the Local Community

To prevent labor conflicts with local communities, the labors to follow the code of conduct listed below:

- The workers shouldn't allow themselves to be influenced in the execution of their duties by any consideration other than the legitimate and reasonable interests of the respective labors.
- The workers are advised to refrain from unnecessary interactions with the local population. They are also advised to avoid conflicts and altercations with the locals at any cost.



- The workers should spend more time either at work place or their company provided residences, if any.
- The workers should show respect towards local languages, culture and traditions and shouldn't make any derogatory remarks towards them either by words or actions even unintentionally.
- The workers show respect towards the local womenfolk.
- Restriction in use of local resources.

Prevention of Transmission of Diseases

To prevent significant risk of transmission of any serious disease, it is duty of the labor to follow the code of conduct listed below:

- The Workers should disclose complete information about their existing health conditions including any ailment prior to joining.
- The workers should inform the project manager to get their health checked as soon as possible if he/she witnesses any symptom of communicable disease and start treatment as soon as possible to avoid transmission to others.
- It is the duty of the worker to avoid being exposed to any communicable diseases wherever possible by taking care not to be in contact with affected people.
- The transient workers should adhere to national requirements and guidelines with respect to COVID-19.
- Labors need to comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.
- The workers must avoid promiscuous behavior as this may expose them to serious communicable diseases such as HIV-AIDS. Adequate safety measures such as restriction on outsiders' entry into labor camp particularly in night be imposed.

Prevention of Sexual Harassment and Violence

Prevention of harassment and violence in the workplace it is duty of the project workers to follow the code of conduct listed below:

 All supervisor and workers must understand their responsibility towards provide a safe work environment. It must be understood by the workers that sexual harassment doesn't only violates company's charter but also prohibited under applicable National Regulations.



- No worker should indulge in sexual harassment of other workers either by actions or by words.
- The workers should avoid videos, films or books with objectionable content.
- Any worker who is subject to sexual harassment either by actions or words must immediately bring the matter to the attention of his supervisor/manager as well as project manager.

Personal Integrity

Maintaining highest degree of integrity both in personal and professional conduct by each member of work force is a primary requirement for ensuring a conducive work environment. Accordingly, the workers must ensure the followings:

- Utmost honesty in both personal and professional dealings.
- Refrain from fraudulent behavior in both personal as well as professional matters
- Refrain from stealing and other nefarious activities.
- Non-disclosure of Company's confidential information.
- The workers shouldn't accept any gifts, favors or other considerations of anything more than token value, from any other party.

Discrimination

Discrimination in any form will not be tolerated. All workers should be aware of:

- No worker should discriminate against other workers on any basis including that of Religion, Caste, Language, Nationality, Ethnicity etc.
- Nobody should refer to others' Religious, National, Ethnic and caste/language-based identities in derogatory language/terms.
- Nobody should pass comments/jokes etc on others' Religious/ National/ Ethnic/ Racial/ Caste/ Language based identities.

5.0 OCCUPATIONAL HEALTH & SAFETY PLAN

The Occupational Health & Safety (OHS) plan have been formulated in compliance with national and state regulations as well as World Bank's ESS 2 and applicable Environmental, Health and Safety Guidelines (EHSGs) and Good International Industry practice (GIIP). The prime objectives of OHS Plan includes increased safety consciousness and awareness among WBSEDCL employees, contractors and sub-contractors by uplifting the safety standards and setting the trend in safety excellence through established goals and objectives, training programs, audits and motivations.



WBSEDCL shall be responsible for planning, reporting, implementing and monitoring all OHS requirements and compliance of all laws and statutory requirements. The Contractor shall also ensure that the OHS requirements are clearly understood and faithfully implemented at all levels at site. The OHS Plan includes following:

- All contractors/sub-contractors shall ensure that WBSEDCL OHS standards & procedures along with OHSG and GIIP requirements shall be strictly adhered.
- All Contractors/Subcontractors must ensure that their employees are competent and qualified to carry out their specific tasks. Necessary documents pertaining to the qualifications and certification must be submitted for evaluation and approval from WBSEDCL OHS Departments.
- All necessary PPE's shall be provided by the contractors/sub-contractors. All such items should comply with WBSEDCL specifications.
- Contractors/sub-contractors should deploy a qualified/experienced safety officer/supervisor at site who will work in close co-ordination with WBSEDCL's DM and will be responsible for implementation of safety norms at site. The credentials of the safety Officer/Supervisors must be submitted to the PIU-WBSEDCL for approval.
- All contractors/sub-contractors should ensure that their workers have been given safety Induction by their Safety officer.
- All contractors/sub-contractors should ensure that the non-conformities found during the monthly audits by the SO are closed within the stipulated period.
- All contractors/sub-contractors should arrange for all site facilities of their workers viz. First Aid, drinking water, toilets, waste bins on suitable location at the site.
- contractors/sub-contractors should ensure that all the equipment's and tools and tackles (Crane, Hydra, slings, shackles etc.) being used at site is duly certified by competent authorities. A copy of these certificates should be submitted to PIU-WBSEDCL for verification, approval and record.
- All contractors/sub-contractors should follow any other guidelines given by PIU-WBSEDCL as per site specific requirements.

WBSEDCL would evolve a comprehensive, planned and documented system for implementation and monitoring of the OHS requirements of WBEDGMP. The monitoring for implementation shall be done by regular inspections and compliance to the observations thereof. WBSEDCL Contractor shall get similar OHS requirements implemented at his sub-contractor(s) work site / office. However, compliance of overall OHS requirements shall be the responsibility of the WBSEDCL.

6.0 GRIEVANCE REDRESSAL MECHANISM

Grievance Redressal Mechanism (GRM) is an integral part of the institutional arrangement in



relation to LMP. A three -tier consumer GRM is already in place at WBSEDCL and this will also be a channel for the project workers to file the grievances. To effectively address grievances related to ESMP implementation including LMP, two GRM bodies are proposed to be established; Project Steering Committee (PSC) at the corporate level and Field level Grievance Redressal Committees (GRCs) at the sub-project sites.

The established PSC for WBEDGMP under the chairmanship of Additional Chief Engineer (Distribution) of WBSEDCL, shall be used to monitor and review the progress of implementation of ESMP including LMP of each sub-project. Additional Chief Engineer (Distribution) WBSEDCL, will be convener of this Committee. This Committee should meet every quarter to review the progress made in the implementation of the ESMP including LMP of each sub-project and to solve any grievances of the project worker. This Committee will also provide policy related direction to the GRC and the participating departments with regard to ESMF.

The field level Grievance Redressal Committee (GRC) will be established at each sub-project site under the chairmanship of Divisional/Regional Manager, WBSEDCL for redressal of grievances of the project workers. Designated Divisional Manager of concerned region shall be the convener of this Committee. At the sub-project level, contractor/sub-cotractors will provide support to this Committee. Block/Sub-division/District level head of all participating departments will be members along with a representative of project worker and/or worker's organization, if any.

Complaint boxes will be placed at every sub-projects locations i.e. RM/DM office of WBSEDCL which would be collected once in two days by concerned RM/DM. Grievances received through other modes (postal, email, or over the phone), existing customer three tier GRM channels will be compiled. An e-mail and toll free phone number will be provided for receiving grievances/complaints through these methods. Toll free phone number, email, and address of PIU shall also be suitably displayed at sub-project locations. Additionally, PIU will provide support to illiterate, physically challenged and other vulnerable workers to record their grievances.

The project worker who are not satisfied with the decision/mechanism has the freedom to move court of law at any stage for redressal of their complaint. In case it is referred to court, the above referred GRM shall cease to take cognizance of complaint.



1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

West Bengal State Electricity Distribution Company Limited (WBSEDCL) is a power distribution licensee for almost the entire State of West Bengal, except for certain areas, which are catered by private distribution licensees. WBSEDCL accounts for about 80% of the power supply in the State and caters to almost 18.1 million customers (2018-19). At present grid connectivity has been extended in every nook and corner of the State covering 99% villages and the low and medium voltage consumer base has seen a significant increase post implementation of rural electrification schemes. However, this has led to a steady increase in Aggregate Technical and Commercial (AT&C) loss levels. WBSEDCL continually strives to enhance the quality of services delivered to its customers. WBSEDCL provides quality power to a gargantuan customer base of more than 1.95 crore across West Bengal through its service network spanning 5 Zones, 20 Regional Offices, 76 Distribution Divisions and 530 Customer Care Centers.

To achieve Power for All (PFA) objective, the Government of West Bengal (GoWB) has sought World Bank assistance to support part of their investments in High Voltage Distribution System (HVDS), 33/11 KV GIS, Underground Cabling (UG) across select districts/towns (besides modern technology and institutional capacity building) to facilitate increased availability of power, improve service delivery and reduce system losses. Further the State has planned investments in modern ICT technologies including operational technologies across the complete electricity supply and demand chain to ensure efficiency and monitor reliable supply of power.

For implementation of proposed distribution network strengthening project, it is not only mandatory to comply with applicable national and state legislations/regulatory framework on environment and social issues but to carry out due diligence on such issues as per the provisions of World Bank's Environmental and Social Framework (ESF) to meet the overall requirement of sustainable development.

To accomplish this mission, it is imperative to undertake a) preparation of Environmental and Social Management Framework (ESMF) along with Labour Management Procedure (LMP), Gender Development Framework (GDF), Tribal Peoples Planning Framework (TPPF), Stakeholder Engagement Plan (SEP) and Resettlement Policy Framework (RPF) for proposed project and b) Environmental and Social Impact Assessments (ESIA) including preparation Environment & Social Management Plan (ESMP) for each proposed sub-project. The LMP would promote sound worker-management relationship and enhance the development benefits of a



project by treating workers in proposed project fairly and providing safe and healthy working conditions.

1.2 LABOUR MANAGEMENT PROCEDURE FOR WBEDGMP

The Labour Management Procedures (LMP) set out the way in which project workers would be managed, in accordance with the requirements of National & State's regulations along with World Bank's Environmental & Social Standards. Accordingly, LMP for the West Bengal Electricity Distribution Grid Modernization Project (WBEDGMP) has been developed in adherence to applicable National/State regulations and World Bank's Environmental & Social Standard (ESS - 2): Labor and Working Conditions.

The prime objectives of the LMP includes:

- To promote safety and health at work.
- To promote the fair treatment, non-discrimination and equal opportunity of project workers.
- To protect project workers, including vulnerable workers such as women, persons with disabilities, migrant workers, contracted workers and primary supply workers, as appropriate.
- To prevent the use of all forms of forced labor and child labor.
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.
- To provide project workers with accessible means to raise workplace concerns.

The present LMP would be applicable to all the "project worker" of WBEDGMP as defined below-

- Direct Workers- people employed or engaged directly by the WBSEDCL to work specifically in relation to the WBEGMP.
- Contracted Workers- people employed or engaged through third parties (which may include contractors, sub-contractors, brokers, agents, intermediaries) by the WBSEDCL to perform work related to core functions (i.e. for specific project activities without which project cannot continue) of the WBEGMP.



Primary Supply Workers- people employed or engaged by the WBSEDCL's primary suppliers (those who on an ongoing basis, provide directly to the project goods or materials essential for the core functions) of the WBEGMP.

The present LMP also set out mechanism to implement the various provisions for fair treatment, non-discrimination and equal opportunity, occupational health and safety to all project worker as defined above. It also provides grievance mechanism for all direct workers and contracted workers to raise work place concern.



2.0 ASSESSMENT OF KEY POTENTIAL LABOR RISKS

2.1 MANPOWER REQUIREMENT OF PROJECT

Manpower Requirements: WBSEDCL

WBSEDL has established a Project Implementation Unit to oversee the Project. The Unit will engage, throughout the Project the following personnel:

- PIU Head
- Personnel Manager
- Procurement Specialist
- Substation and Distribution Engineers
- Rural Electricity Engineers
- Chief Electrical Inspector
- Environmental Officer
- Social Officer
- Financial Management Specialist

Additional staffing may be needed during Project implementation. However, WBSEDL has a number of existing staffs who will provide support to the Project.

Manpower Requirements: GIS Substations

Based on prior experience, WBSEDL estimates that 50-60 workers are required under this component of the Project during construction period. The labor requirement will form part of the Supply and Installation bids solicited from contractors. WBSEDL's bidding document will specify a preference for local labor from the area which are identified in the Stakeholder Engagement Plan.

Manpower Requirements: Conversion of LVDS to HVDS

The typical manpower requirement for conversion of LVDS to HVDS including AB cabling is presented in Table 2.1. The manpower requirement for conversion of LVDS to HVDS including AB cabling will range from 50-80 workers during normal operations which can reach upto 150 workers during peak construction activities.



TABLE 2.1: TYPICAL MANPOWER REQUIREMENT FOR HVDS

S No	Category of Worker	Number	Days	Total Man days	
A.	DTR Dismantling & Shifting/Erection at New Location – 1 Set				
1	TKC Supervisory	2	2	4	
2	Skilled Manpower	3	2	6	
3	Un Skilled Manpower	12	2	24	
В.	New DTR Installation - 1 Set				
4	TKC Supervisory	2	2	4	
5	Skilled Manpower	3	2	6	
6	Un Skilled Manpower	12	2	24	
C.	Stringing of 1Km AB Cable – 11KV:				
7	TKC Supervisory	1	12	12	
8	Skilled Manpower	5	12	60	
9	Un Skilled Manpower	10	12	120	
D.	Stringing of 1Km AB Cable – 33KV:				
10	TKC Supervisory	2	12	24	
11	Skilled Manpower	5	12	60	
12	Un Skilled Manpower	10	12	120	

Manpower Requirements: Underground Cabling Network

The typical manpower requirement for underground cabling is presented in Table 2.1. The manpower requirement will range from 100-150 workers during normal operations which can reach upto 300 workers during peak construction activities.

TABLE 2.2: TYPICAL MANPOWER REQUIREMENT FOR UNDER GROUND CABLE LAYING (PER KM – 11KV 3 CORE 300 SQMM – SINGLE RUN)

S No	Category of Worker	Number	Days	Total Man days
A.	Open Cut Method In Soft Soil:			
1	TKC Supervisory	2	12	24
2	Skilled Manpower	40	12	480
3	Un Skilled Manpower	40	12	480
B.	HDD Method:			
4	TKC Supervisory	2	12	24
5	Skilled Manpower	8	12	96
6	Un Skilled Manpower	15	12	180
C.	Stringing of 1Km AB Cable – 11KV:			
7	TKC Supervisory	1	12	12
8	Skilled Manpower	5	12	60
9	Un Skilled Manpower	10	12	120



D.	Stringing of 1Km AB Cable – 33KV:			
10	TKC Supervisory	2	12	24
11	Skilled Manpower	5	12	60
12	Un Skilled Manpower	10	12	120
E.	E. DTR Dismantling & Shifting/Erection at New Location – 1 Set			
13	TKC Supervisory	2	2	4
14	Skilled Manpower	3	2	6
15	Un Skilled Manpower	12	2	24
F.	F. New DTR Installation - 1 Set			
16	TKC Supervisory	2	2	4
17	Skilled Manpower	3	2	6
18	Un Skilled Manpower	12	2	24

The influx of workers and followers may lead to adverse social and environmental impacts on local communities, especially if the communities are rural, remote or small. Such adverse impacts may include increased demand and competition for local social and health services, as well as for goods and services, which can lead to price hikes and crowding out of local consumers, increased volume of traffic and higher risk of accidents, increased demands on the ecosystem and natural resources, social conflicts within and between communities, increased risk of spread of communicable diseases including Covid-19 and increased rates of illicit behaviour and crime.

Such adverse impacts are usually amplified by local-level low capacity to manage and absorb the incoming labor force, and specifically when civil works are carried out in, or near, vulnerable communities and in other high-risk situations. While many of these potential impacts may be identified in a project's Environmental and Social Impact Assessment (ESIA), they may only become fully known once a contractor is appointed and decides on sourcing the required labor force.

This means that not all specific risks and impacts can be fully assessed prior to project implementation, and others may emerge as the project progresses. Thus, measures defined in the project Environmental and Social Management Plan (ESMP) to address such problems sometimes may be insufficient. It is therefore important to develop site-specific measures like Labour Management Procedure (LMP) before the contractor starts work and update them as necessary to reflect project developments. Overall, adequate monitoring and adaptive management of the potential impacts from labor influx are key to properly addressing them and mitigating risks. The LMP applies into all Project workers whether full-time, part-time, temporary, seasonal or migrant workers.



2.2 ASSESSMENT OF KEY POTENTIAL LABOR RISKS

The main labor risks associated with the project are assessed to be related to the work environment, associated risk of accidents and labor influx, if any. Based on current conditions in the sector it is assessed that the risk of child or forced labor is negligible, and already managed through national legislation and WBSEDCL corporate requirement.

The influx of migrant labour may have both negative and positive impacts on the nearby community and local environment. The labour may be accommodated in temporary campsite within the sub-project area which can have interface with the nearby community. However, the influx of migrant workers may lead to a transient increase of population in the immediate vicinity of the project area for a limited time. This may put pressure on the local resources such as roads, fuel for cooking, water etc. Hence, a framework has been designed to demonstrate the:

- Potential impacts associated with influx on the host population and receiving environment are minimized; and
- Provision of safe and healthy working conditions, and a comfortable environment for migrant labour, if any.

Labor influx: While a substantial number of jobs are likely to be created as part of the distribution line upgrade, UG cabling network and setting up of new GIS primarily during construction phase but no substantial labor influx are expected as most of the unskilled and semi-skilled labours would be engaged locally. WBSEDCL's existing operational procedure is to mandate and localize the economic benefits and only allow for outside, including expatriate labor, where there is a requirement for special skills. External workers, which will be few in numbers, may be accommodated at campsites in the area which has been prior practice by WBSEDCL in similar projects. There will be no dedicated camps established for worker accommodation in the project.

Specific requirements to manage risks associated with labor influx, if any related to interaction between project workers and local communities, such as communicable diseases including Covid-19 and gender-based violence, are managed through contractual requirements, code of conduct and training set out in this document.

Occupational Health and Safety: The risk related to the distribution network is associated with the risk of falling from height while installation of poles/DTRs as well as stringing of distribution line conductor, etc. There could also be a risk of electrocution during installation, testing and commissioning phase. WBSEDCL has existing corporate requirements for contractor training



and safety, records of which are inspected monthly and audited bi-annually. Occupational Health and Safety measures adopted are being reported in annual report of WBSEDCL.

Contractor/sub-contractor(s) shall ensure implementation of the following measures to minimize the potential negative impacts:

Cleanliness: Pest extermination, vector control and disinfection are to be carried out throughout the living facilities in compliance with local requirements and/or good practice.

Complaints and incident reporting: A formal Complaints Procedure will be implemented to ensure timely and transparent response to complaints as received from labour.

Labour education: The workforce will be sensitized to local social and cultural practices through provision of an induction course for all employees that stipulates expected behaviour.

Labour Compensation and Accommodation, if required: Contractor shall ensure that labourers are provided with benefits such as annual leave, weekly rest day, etc. Accommodation to be provided for the migrant construction labour, if any which cover facilities (including catering facilities, dining areas, washing and laundry facilities etc.) and supporting utilities.

Labour behaviour in campsite provided, if any: A Code of Behaviour governing appropriate behaviour in the accommodation facilities, if any to be kept in place and to be strictly enforced. The contractor shall ensure implementation of the "rules of engagement" between labourers living in campsite and community and shall be implemented by construction contractors for all engaged labourers.



3.0 OVERVIEW OF LABOR LEGISLATION

In this chapter, relevant national & state regulations and policies are assessed that guide the labour working conditions including occupational health and safety for the WBEDGMP activities, as well as relevant World Bank Environmental and Social Standards. The objective is to ensure that project activities and implementation processes are consistent with local laws and policies and World Bank Standards, and to identify any possible gaps in local legislation visavis World Bank standards.

3.1 NATIONAL POLICY & REGULATORY FRAMEWORK

The applicable acts, rules, and relevant policies in the context of the project workers working conditions and management of workers relationship are presented in Table 3.1. WBSEDCL will ensure that project activities implemented are consistent with provisions of such legal framework.

The prime National and State legislations which regulate the terms and conditions of employment in the projects includes, Factories Act, 1948, Payment of Wages Act, 1936, The Minimum Wages Act, 1948, Child Labour (Prohibition and Regulation) 1986, The Labours Act 1988, Workmen's Compensation Act, 1923, Contract Labour (Regulation and Abolition) Act, 1970, Equal Remuneration Act, 1979, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

The Employment Acts like Factories Act and Payment of Wages Act provides for the basic conditions of employment with a view of improving the status of employees in this project. This Acts makes it mandatory for employers to furnish employees with written particulars of employment stating, hours of work, wages, leave entitlements, job description, grievance procedure, benefits if any etc. It further mandates the Ministry responsible to issue Wages Regulations on a regular basis which deals with worker's terms and conditions of each particular industry. It is in this legislation where you will find provisions regulating;

- Contracts of employment
- Leave entitlements, i.e. annual leave, sick leave, maternity leave and compassionate leave
- The protection of wages (prohibition against unlawful deductions)
- Retrenchment procedures
- Fair and unfair reasons for termination of employment



The Factories Act, 1948 on the other hand is the main Act which provides for the collective negotiation of terms and conditions of employment in the workplace (i.e. negotiations between employers and trade unions and the dispute resolution mechanism).

The Minimum Wages Act, 1948 deals specifically with the minimum wages and basic terms and conditions of employment in virtually all sections of economic activity in WBSEDCL, be it in retail, manufacturing, agriculture or building and construction industry.

WBSEDCL requires Contractors to comply with the most current Wages Regulations Order for Building and Construction as issued by the Ministry from time to time.

The Factory Act, 1948 provides for the safety and health of persons at work and at the workplace and for the protection of persons other than persons at the workplace against hazards to safety and health arising out of or in connection with the activities of persons in the workplace and to provide for other matters incidental thereto. This Act entrust the employer with the obligation to ensure the safety and health of all its employees, and also to mitigate risks of exposure to any hazards in the workplace.

The legislation makes it mandatory for employers to provide personal protective clothing or equipment to employees exposed to wet, dusty, noisy or any conditions that might expose the employees to harsh or dangerous conditions. Employees are to be trained to perform their work in order to avoid exposure to danger or injury and to be informed of any known hazards or diseases associated with the work they do.

TABLE 3.1: NATIONAL/STATE POLICY AND REGULATORY PROVISIONS – LABOUR WORKING CONDITIONS AND OCCUPATIONAL HEALTH & SAFETY

Applicable Acts	Coverage Provisions
The Constitution of India	 As per Article 16 there shall be equality of opportunity for all in matters relating to employment. As per Article 23 there is prohibition of traffic in human being and forced labour. As per Article 24 no child below the age of 14 years shall be employed to work in any factory or engaged in any other hazardous employment. As per Article 39(d) there shall be equal



Applicable Acts	Coverage Provisions	
	 pay for equal work for both men and women. As per Article 39(e) provides restriction for abuse of health and strength of workers men, women and children. 	
The Minimum Wages Act 1948	The Act ensures minimum wages for each category of workers.	
The Industrial Employment (Standing Order) Act 1946	The Act to require employers in industrial establishments formally to define conditions of employment under them.	
The Child and Adolescent Labour (Prohibition and Regulation) Act 1986	Prohibits employment of children below 14 years age.	
The Factories Act, 1948	Ensures Health and safety considerations of workers.	
The Employees Compensation Act, 1923	Ensures fair compensation in case of injury by accidents during the course of employment.	
The Employees State Insurance Act, 1948	The Act provides for benefits to the employees in case of sickness, maternity and employment injuries.	
The Contract Labour (Regulation and Abolition) Act, 1970	Ensures basic welfare measures to be made available to the contract workers by the employer.	
The Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act, 1996	Ensures safety measures at construction work site and other welfare measures such as canteens, first-aid facilities, ambulance, housing accommodation for Workers near the Workplace etc.	



Applicable Acts	Coverage Provisions
The Payment of Wages Act, 1936	Ensures regular payment by laying down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
The Equal Remuneration Act, 1976	The Act provides for payment of equal wages for work of equal nature to men and women workers and not for making discrimination against Female employees.
The Payment of Bonus Act, 1965	The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages.
The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013	It ensures the protection of women from sexual harassment at workplace and prevention and redressal of complaints of sexual harassment.
The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013	The Act seeks to protect women from sexual harassment at their place of work and and for the prevention and redressal of complaints of sexual harassment.
The Bonded Labour System (Abolitions) Act, 1976	The Act provides for preventing the economic and physical exploitation of the weaker sections of the people.

3.2 WORLD BANK ENVIRONMENTAL & SOCIAL STANDARDS

The World Bank's Environmental & Social Standard ESS-2 on Labor and working condition requires promoting worker-management healthy relationship, developing strategies to improve working condition like fair treatment of workers and vulnerable groups that are involved in the project and preventing all forms of forced and child labors. This standard is applicable to project workers including full time, part time, temporary, contractual and migrant worker.



This standard helps to monitor health of the worker, working condition, hours of work and other necessary requirements including grievance mechanism and measures related to Occupational Health and Safety and shall be complied in accordance with ESS. WBSEDCL will ensure that project activities implemented are consistent with provisions of these ESS -2.

Table 3.2 presents comparison between objectives of World Bank's Environmental & Social Standard (ESS-2) and respective National and State Labour Regulations as well as gaps if any as per ESS 2 objectives and recommended actions.

TABLE 3.2: COMPARATIVE ASSESSMENT OF NATIONAL LABOUR REGULATIONS WITH WORLD BANK'S ENVIRONMENTAL & SOCIAL STANDARDS

ESF Objectives	National Requirements	Recommended Actions				
ESS 2 - Labor and Working Condition						
To provide every employee with written particulars of employment	The Industrial Employment (Standing Order) Act 1946 The Act to require employers in industrial establishments formally to define conditions of employment under them. The Schedule (sections 2(g) and 3(2)) makes it mandatory for the employer to give each of its employees a copy of the written particulars of employment.	Post award, the contractors will be required to furnish WBSEDCL with copies of the Written Particulars of all its employees or Contracts of employment.				
To promote safety and health at work.	The Constitution of India- As per Article 39(e) provides restriction for abuse of health and strength of workers men, women and children. The Factories Act, 1948 This Act provide for the safety and health of persons at work and at the workplace against hazards to safety and health arising out of or in connection with the activities of persons in the workplace and to provide for other matters incidental thereto.	Each contractor will be required to have a SHE Officer Contractors required to keep record of incidents and should be reported WBSEDCL will conduct induction talks to contractors regularly				



ESF Objectives	National Requirements	Recommended Actions
	- U/S 11-31 – entrusts the employer to ensure the health and safety of all its employees, and also to;	
	- Mitigate risks of exposure to danger of its workforce;	
	- Provide personal protective clothing or equipment to employees exposed to wet, dusty, noisy or any conditions that might expose the employees to harsh or dangerous conditions;	
	- To train its workers to perform their work in order to avoid exposure to danger or injury; and	
	- to inform employees of any known hazards or disease associated with the work.	
	The Contract Labour (Regulation and Abolition) Act, 1970	
	- The Act provides to regulate the employment of contract labour and for matters connected therewith	
	U/S 16-21 – entrusts the contractor to ensure the health and safety of all its employees, and also to	
	The Employees State Insurance Act, 1948	
	- The Act provides for benefits to the employees in case of sickness, maternity and employment injuries.	
	The Employee Compensation Act , 1923	
	The Act provides for the payment by certain classes of employers to their workmen of compensation for injury by	



ESF Objectives	National Requirements	Recommended Actions
	accident. - It provides for the compensation and medical treatment of workmen who suffer injury or contract diseases in the course of their employment (U/S 3).	
To promote the fair treatment, non-discrimination and equal opportunity of project workers.	The Constitution of India- As per Article 16 there shall be equality of opportunity for all in matters relating to employment. As per Article 39(d) there shall be equal pay for equal work for both men and women.	Contractors will be required to comply with national legislation when recruiting
	The Equal Remuneration Act, 1976 The Act provides for the payment of equal remuneration to men and women workers and for the prevention of discrimination, on the ground of sex, against women in the matter of employment and for matters connected therewith or incidental thereto.	
	U/S 4-5 – no employer shall, while making recruitment for the same work or work of a similar nature, [or in any condition of service subsequent to recruitment such as promotions, training or transfer,] make any discrimination against women except where the employment of women in such work is prohibited or restricted by or under any law for the time being in force U/S 10 – makes it an offence to	
	discriminate against any person as	



ESF Objectives	National Requirements	Recommended Actions
	envisaged in S 4-5. Such employer if found guilty shall be punishable with simple imprisonment for a term which may extend to one month or with fine which may extend to ten thousand rupees or with both.	
To prevent the use of all forms of forced labor	The Constitution of India- As per Article 23 there is prohibition of traffic in human being and forced labour.	Contractors will be required to comply with national legislation and as precautionary measure WBSEDCL will conduct an induction
	The Bonded Labour System (Abolition) Act, 1976 The Act provides for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of the weaker sections of the people and for matters connected therewith or incidental thereto	Random inspection will be done on a regular basis to ensure compliance
	U/S.4 – no person shall	
	(a) make any advance under, or in pursuance of, the bonded labour system, or	
	(b) compel any person to render any bonded labour or other form of forced labour.	
	U/S 16 – Whoever, compels any person to render any bonded labour shall be punishable with imprisonment for a term which may extend to three years and also with fine which may extend to two thousand rupees.	
	U/S 17- Whoever advances, any bonded debt shall be punishable with imprisonment for a term which may extend to three years and also with fine	



ESF Objectives	National Requirements	Recommended Actions
	which may extend to two thousand rupees.	
To prevent the use of all forms of child labour	The Constitution of India- As per Article 24 no child below the age of 14 years shall be employed to work in any factory or engaged in any other hazardous employment.	Contractor will be prohibited to employ child and adolescent labour If a contractor is found to have engaged any child and adolescent labour for the
	The Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 The Act prohibits the engagement of children in all occupations and to prohibit the engagement of adolescents in hazardous occupations and processes and the matters connected therewith or incidental thereto. U/S 3-3A Prohibits the employment of children & adolescents in any occupation and process. U/S 14 -Whoever employs any child or permits any child to work in contravention of the provisions of section 3 shall be punishable with imprisonment for a term which shall not be less than six months but which may extend to two years, or with fine which shall not be less than twenty thousand rupees but which may extend to fifty thousand rupees, or with both.	adolescent labour for the project work a formal case will be reported to the police and the contract will be terminated



4.0 LABOUR & WORKING CONDITIONS

4.1 WORKING CONDITIONS

The labour management procedures have been evolved in accordance with requirements of national regulations as well as ESS 2. The key elements of LMP includes-

4.1.1 Terms and Conditions of Employment

- Project Workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment at beginning of the working relationship.
- The information and documentation will set out their rights under national labour and employment law as mentioned in earlier chapter including their rights related to hours of work, wages, overtime, compensation and benefits.
- Project worker will paid on regular basis as per the contract daily/weekly/monthly.
- Deduction from payment of wages will only be made as per applicable regulations and employment terms and conditions with written information to concerned project workers.
- Project workers will be provided with adequate period of rest per week, annual holiday and sick, maternity and family leave as per applicable regulations.
- Project workers will be provided with adequate insurance policies for health and safety as per the Insurance Regulatory and Development Authority (IRDA) as well as labour laws.
- Where required Project worker will get written notice of termination of employment.
- All wages that have been earned, social security benefits, pension contributions and any
 other entitlement will be paid on or before termination of working relationship with
 project workers.

4.1.2 Non-discrimination and Equal Opportunity

 Project Workers will be employed only based on the principle of equal opportunity and fair treatment and there will be no discrimination with respect to any aspects of employment relationship such as recruitment and hiring, compensation (including wage and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement or disciplinary practices.



- Measures to prevent and address harassment, intimidation and/or exploitation would be taken as per applicable national regulations.
- Measures will be provided to address the vulnerability of specific groups of project workers such as women, people with disabilities, migrant worker.

4.1.3 Worker's Organisations

The national law recognizes workers' rights to form and to join workers' organisations to bargain collectively. The role of legally established workers' organisations and legitimate workers' representative will be respected, and they will be provided with information needed for meaningful negotiation in timely manner.

4.1.4 Child Labour and Forced Labour

- No child labour is proposed to be involved in proposed project considering the nature of work and activities under various components of Project
- No forced labour i.e. bonded labour, indentured labour, etc are proposed to be employed in connection with proposed project.

Contractors will keep records in accordance with specifications set out in this LMP. WBSEDCL may at any time require records to ensure that labour working conditions are met. The PIU will review records against actual at a minimum on a monthly basis and can require immediate remedial actions if warranted. A summary of issues and remedial actions will be included in quarterly reports to the World Bank.

4.2 CODE OF CONDUCT FOR PROJECT WORKERS

The code of conduct of workforce serves to establish the broad framework within which an action, or default by work force may be judged. Any action, or default, which conflicts with the code, is unacceptable. The description incorporates the necessary skills of labor worker as well as general labor duties and responsibilities specifically to avoid conflicts with the local population, transmission of diseases including Covid-19, any form of sexual harassment and violence, Personal Integrity and Discrimination.

Here are the five major duties and responsibilities that workforce should strictly follow in their work place.

4.2.1 Conflicts with the Local Peoples

To limit labor conflicts with local communities, managers must consider three interrelated factors: power inequality, perception gaps and cultural context. When these factors are



properly managed, they can reduce tensions between labors and their neighboring communities, thereby reducing opportunities for conflict. However to prevent any such situation, it is the duty of the labors to follow the code of conduct listed below:

- The workers shouldn't allow themselves to be influenced in the execution of their duties by any consideration other than the legitimate and reasonable interests of the respective labors.
- The workers are advised to refrain from unnecessary interactions with the local population. They are also advised to avoid conflicts and altercations with the locals at any cost.
- The workers should spend more time either at work place or their company provided residences. The workers should show respect towards local languages, culture and traditions and shouldn't make any derogatory remarks towards them either by words or actions even unintentionally.
- The workers show respect towards the local womenfolk.
- Restriction in use of local resources.

4.2.2 Transmission of Diseases including COVID-19

Although the right to consent to medical treatment is a fundamental individual human right, there are circumstances in which public health authorities may be justified in ordering the compulsory diagnosis and treatment of individuals. Public health laws should authorize compulsory treatment orders only in circumstances where the person in question is unable or unwilling to provide consent to a diagnostic procedure or treatment, and where their behavior creates a significant risk of transmission of a serious disease. However, to prevent any such situation, it is duty of the labor to follow the code of conduct listed below:

- The Workers should disclose complete information about their existing health conditions including any ailment prior to joining.
- The workers should inform the project manager to get their health checked as soon as
 possible if he/she witnesses any symptom of communicable disease and start treatment as
 soon as possible to avoid transmission to others.
- It is the duty of the worker to avoid being exposed to any communicable diseases wherever possible by taking care not to be in contact with affected people.
- The transient workers should adhere to national requirements and guidelines with respect to COVID-19. The preventive measures for transmission of COVID-19 and the infection of large numbers of people would be adopted in labor camp (Appendix 5).



- Labors should take reasonable care for their own health and safety.
- Labors should take reasonable care that their acts or omissions do not adversely affect the health and safety of other persons, and
- Labors need to comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.
- The workers must avoid promiscuous behavior as this may expose them to serious communicable diseases such as HIV-AIDS. Adequate safety measures such as restriction on outsiders' entry into labor camp particularly in night be imposed.

4.2.3 Sexual Harassment and Violence

Prevention of harassment and violence in the workplace is both an international and national concern. It is internationally agreed that sexual harassment and violence is a form of gender discrimination and is recognized as a violation of human rights. Sexual harassment and violence at work can happen to any worker and by any worker at any workplace. Providing education and information about harassment and violence to all staff on a regular basis. The circulation of information, open communication and guidance is of particular importance in removing the taboo of silence, which often surrounds cases of sexual harassment. Information sessions, personnel meetings, office meetings, group discussion and problem-solving groups can prove very effective in this respect. Staff should also be informed of the best way of coping with aggression by means of guidelines and staff development programs on sexual harassment and violence at work.

- All supervisor and workers must understand their responsibility towards provide a safe work environment. It must be understood by the workers that sexual harassment doesn't only violates company's charter but also prohibited under applicable National Regulations.
- No worker should indulge in sexual harassment of other workers either by actions or by words.
- The workers should avoid videos, films or books with objectionable content.
- Any worker who is subject to sexual harassment either by actions or words must immediately bring the matter to the attention of his supervisor/manager as well as project manager.



4.2.4 Personal Integrity

Maintaining highest degree of integrity both in personal and professional conduct by each member of work force is a primary requirement for ensuring a conducive work environment. It results not only in enhanced job satisfaction but also reduces both the legal and moral liability associated with employment. More specifically, the workers must ensure the followings:

- Utmost honesty in both personal and professional dealings.
- Refrain from fraudulent behavior in both personal as well as professional matters
- Refrain from stealing and other nefarious activities.
- Non-disclosure of Company's confidential information.
- The workers shouldn't accept any gifts, favors or other considerations of anything more than token value, from any other party.

4.2.5 Discrimination

It is understood that workplaces are becoming increasingly diverse with people of different ethnicity, Nationality, Religion, Caste and Languages working together. And in view of this, it is important that workers should understand this diversity and respect the differences present in the workers' pool. Discrimination in any form will not be tolerated. All workers should be aware of:

- No worker should discriminate against other workers on any basis including that of Religion, Caste, Language, Nationality, Ethnicity etc.
- Nobody should refer to others' Religious, National, Ethnic and caste/language-based identities in derogatory language/terms.
- Nobody should pass comments/jokes etc on others' Religious/ National/ Ethnic/ Racial/ Caste/ Language based identities.



5.0 OCCUPATIONAL HEALTH & SAFETY PLAN

The Occupational Health & Safety (OHS)plan have been formulated in compliance with national and state regulations as well as World Bank's ESS 2 and applicable Environmental, Health and Safety Guidelines (EHSGs) and Good International Industry practice (GIIP).

5.1 OBJECTIVES OF OHS PLAN

Objectives of Occupational Health and Safety (OHS) Plan are as follows:

- To ensure compliance with applicable legal requirements and other requirements related to occupational health & safety aspects of implementation of project.
- To meet WBSEDCL expectations and to conduct all activities consistent with WBSEDCL applicable OHS Policies.
- > To prevent injury to anyone and to safeguard human lives, property and the environment.
- > To promote and establish the highest standards of safety to benefit WBSEDCL through prevention of accidents and thereby promote increased productivity, reduced schedule disruptions and mitigate the effects of any accidents/incidents.
- ➤ To increase safety consciousness and awareness among WBSEDCL employees and subcontractors by uplifting the safety standards and setting the trend in safety excellence through established goals and objectives, training programs, audits and motivations.
- ➤ WBSEDCL shall ensure that all of its personnel and sub-contractors engaged in these works commit to these same Quality & OHS principles and shall establish and utilize programs that ensure the requirements are achieved.
- > To comply with the ESMP and other safeguard requirements laid down in approved ESMF.
- > To comply with the applicable requirements as laid down in World Bank's ESS-2.

5.2 WBSEDCL's COMMITMENTS

5.2.1 Environment, Health & Safety Policy

WBSEDCL Management considers the health and safety of their employees, visitors, guests and neighbours together with protection of the environment as fundamental to achieving business excellence.



WBSEDCL is committed to achieve OHS-performance through:

- Compliance with applicable Environmental, Occupational Health, Safety legislations and regulations
- Providing safe and healthy environment for all employees including those employed by sub-contractor.
- Establishing of procedures to recognise, implement, evaluate and monitor OHSperformance.
- Continual improvement of OHS performance through set objectives and targets and prevent pollution.
- Periodical review to ensure that the policy continues to be relevant and appropriate to organisation.
- Safe up keep of all tools and plants and conservation of natural resources.
- Appropriate level of OHS training.

This policy is communicated to all employees and is made available to all interested parties.

We realise that our most valued assets are the employees and their health and safety is of utmost importance to our business.

Both the management and employees consider themselves as a team and are responsible for working together to accomplish the common goal of Safe, Healthy and Environmentally compliant workplace.

5.2.2 WBSEDCL's Vision, Mission, Values

VISION:

To be international's premier Power Distribution Company and "Be Ahead" of expectations of all its stakeholders

MISSION:

- To make our clients successful, while creating stake holder value, with uncompromising quality and safety standards.
- To create a culture that excites our people in pursuit of excellence through innovation, differentiation and continued learning.
- To uphold WBSEDCL's cherished value of contributing to the society to improve the quality of life.



VALUES:

- Good Corporate Citizenship
- Humility and willingness to learn
- Concern for all stakeholders
- Business with ethics
- Passion for excellence
- Teamwork

5.3 ACCOUNTABILITY FOR SAFETY

Safety is a fundamental to the operations of WBSEDCL and its primary objective is to have an accident free project execution. It is everyone's responsibility to understand the requirements for working safely and protecting themselves and others. To achieve this goal the following accountabilities are expressed, to assist all personnel in understanding their more specific responsibilities.

5.3.1 Management Responsibilities (At PIU Level)

- ▶ PIU Head: PIU Head and Regional/Divisional Manager of WBSEDCL are member of OHS Management Committee and responsible for review and implementation of OHS management in the respective sub-project areas under their control and provide necessary resources.
- ➤ OHS Coordinator: OHS-Coordinator ensures OHS system requirements are implemented and maintained while execution of the project:
 - Arrange for conducting system audits of all sites twice in a year.
 - Co-ordinate with project sites Safety Officer for OHS related issues.
 - Is responsible to oversee the implementation of applicable legal & other requirements.
 - Arrange for re-investigating serious / fatal accidents and suggest corrective actions.
 - Maintain OHS records.

5.3.2 Management Responsibilities at Site Level

* Regional/Divisional Manager: Regional/Divisional Manager is overall responsible for the OHS Management related to persons working in the project sites with him.



- RM with the help of DM Coordinator prepares sub-project specific safety instructions taking into consideration the local applicable legal requirements, in addition to the relevant portions of safety instructions of the WBSEDCL.
- RM will ensure that a site specific OHS committee is formed by Divisional Manager within 15 days of job starting.
- DM is responsible for the implementation of Environmental, Health & Safety requirements at the construction sub-project site under his charge:
- DM forms the site OHS committee involving workmen representatives and subcontractor's supervisors and organises for its functioning, as its chairman.
- DM provides the contractor the project specific instructions and Safety Instructions of the company and obtain an undertaking from the contractor for complying the same.
- DM ensures that the subcontractors follow the project specific instructions and relevant points of safety instructions. He ensures that all contractor workers are provided with personal protective equipment required and are trained in usage.
- DM ensures that OHS management procedures are followed and extends necessary support to the safety officer, in this regard.
- DM ensures that safety audits are conducted, and corrective actions are taken
- DM inspects the work at site at frequent intervals for observance of safe practices and alert the site personnel with respect to unsafe practices conducted.
- DM sends accident report in the prescribed form PIU and to the concerned statutory authorities, in case of reportable accident. Such incidences are to be informed to insurance authorities also.

5.4 GUIDELINES FOR SUBCONTARCTOR

5.4.1 General Guidelines

- All contractors shall ensure that WBSEDCL OHS standards & procedures along with OHSG and GIIP requirements shall be strictly adhered (Appendix 4).
- Subcontractor Management is expected to actively and adequately promote safe working performance on the part of their employees.
- Subcontractors must ensure that their employees are competent and qualified to carry out their specific tasks. Necessary documents pertaining to the qualifications and certification must be submitted for evaluation and approval from WBSEDCL OHS Departments.
- ❖ All necessary PPE's shall be provided by the contractor. All such items should comply with WBSEDCL specifications.
- All contractors should ensure that their workers have been given safety Induction by Safety officer.



- ❖ All subcontractors should ensure that the non-conformities found during the monthly audits by the SO are closed within the stipulated period.
- Subcontractor should arrange for all site facilities of their workers viz. First Aid, drinking water, toilets, waste bins on suitable location at the site.
- Subcontractor should deploy a qualified/experienced safety officer/supervisor at site who will work in close co-ordination with WBSEDCL's DM and will be responsible for implementation of safety norms at site. The credentials of the safety Officer/Supervisors must be submitted to the PIU-WBSEDCL for approval.
- Subcontractors should ensure that all the equipment's and tools and tackles (Crane, Hydra, slings, shackles etc.) being used at site is duly certified by competent authorities. A copy of these certificates should be submitted to PIU-WBSEDCLfor verification, approval and record.
- All subcontractors will be issued a copy of OCP's. All works should be carried out in compliance to them.
- All penalties (Whether worker or subcontractor) will be deducted from the bills of the subcontractor.
- All subcontractors are advised to follow any other guidelines given by PIU-WBSEDCL as per site specific requirements.

5.4.2 Specific Guidelines

Safety precautions to be adhered during Pole Transportation & Erection:

- Poles are unloaded at site near the work place. Hence, needs to be transported to actual place of work which may be as far as 5 km or as near as few meters.
- If the road is wide, then inter site pole transportation needs to be done using Hydra/ Crane. The pole should be lifted using two Sling. Even if one breaks the other will hold the pole from falling.
- During inter site transportation of poles, no one should be below the pole. Rather one supervisor should be ahead of the crane and one behind to stop any traffic or people moment at site, during transportation. This will avoid any chances of accident and will caution the people living nearby. The speed of the crane should not be more than 5 km/hr in inner roads. Transportation should be carried out during non-peak traffic hours to avoid traffic jam & inconvenience to public.
- It is essential to note that the bow of the crane/ hydra should not touch any live wire. If the existing electrical lines are low than shutdown needs to be arranged to avoid any chances of electrocution.



- Pole is to be unloaded slowly near the pit for erection.
- In case lanes are narrow and movement of crane / hydra is not possible for pole inter site transportation. In that extended trolley of around 3 to 4 meters with wheels to be employed for transportation. To prevent pole from falling the pole may be clamped with suitable wire/ rod. In case not clamped, pole may fall if road is bumpy and cause injury to the near by persons.
- The pit for pole erection should be in line with Technical Specification, the pole may be shifted to pit either through crane or through ropes of adequate strength from 3 or 4 sides. Till the pole is not properly installed in pit, the crane or supporting ropes should hold it tightly.
- The time between the pit is dug and pole is installed, the pit should not be left unattended. Barricading tape or barricading to be done to avoid someone falling into pit. In case, pole couldn't be erected at the end of the day. The pit should be backfilled upto ground level. All surplus material should be removed from site to maintain cleanliness and avoid any damage.
- During rainy season pit should not be dug as collapse of pit may take place.
- As per TS the pole may be backfilled with concrete, brick padding and normal soil. Till
 the pole is not backfilled completely upto the ground level the supporting rope or crane
 should hold it tightly.
- No work should be carried on the installed pole at least for 24 Hrs viz. settling time. If concreted, brick padding or normal soil filling the compaction should be done properly to avoid it falling down. The pole should be in upright position and not tilted.
- All people associated with pole erection should be wearing safety shoes, hard caps/ helmets, gloves and other necessary safe guards as deemed appropriate.

Safety precautions to be adhered during installation of steel structure and allied material on pole and its transportation:

- The steel structure, insulators needs to be transported separately to avoid damage. All steel structures should be painted/ galvanised prior to installation.
- Using ladder of adequate strength and size the worker needs to work on the pole as per TS to install V- Cross Arm, Channel, Pin Insulator, Dis Insulator, Earthing strip, etc.



- Channels, Angles. V Cross Arm should be installed at the position strictly as per TS. The steel structure should be secured with appropriate nut, bolts, washers etc. The fixtures should not be in tilted position.
- If work is going in an area which is electrified and lines are in vicinity then shutdown needs to be arranged to avoid any chances of electrocution.
- The person who climbs to pole should be using safety shoes, safety harness, gloves, hard helmet and allied PPE as deemed necessary.
- One person should be assisting him all the time for supply of material from ground using rope to lift the items.
- In case it rains then work should stop and commence only after rain has stopped.
- The assisting person at the ground should also wear PPE and he should be bit far away from pole, so that any falling object from does not fall on him and thus cause injury.
- Once work is completed, the worker should come down slowly using ladder facing the pole. The base of the ladder should be firmly held by his assistant.

Safety precautions to be adhered during stringing of conductor:

- Conductor drums are stored at site store. It may or may not be shifted to location of work as a whole. Depending upon the stringing to be carried out, the length of conductor may be cut and woven on small drums.
- In case lot of stringing is to be done, then the drum as a whole may be shifted. Depending upon the cable size, voltage the size of drum varies, it can be either wooden or steel drum.
- For drums to be shifted from store to place of work hydra /crane may be used.
- For inter site transportation the cable drum is hanged by crane / hydra using two sling through the centre of the cable drum. While shifting the drum supervisor should go ahead of crane to clear the way for transportation. The speed of the crane should not be more than 5 KMS/hr. Transportation should be carried out during non-peak traffic hours to avoid traffic jam & inconvenience to public.



- In case drum is too huge, in that case drum may be rolled slowly and movement should be controlled by gang of people if distance is less. Rolling is not allowed in steep climb or slope. But it is desirable to use crane/ hydra as much as possible.
- Prior to stringing of conductor, temporary stay to be used to avoid poles deflecting to large extent.
- If work is going in an area which is electrified and lines are in vicinity then shutdown needs to be arranged.
- Crane / Hydra may be employed for conductor stringing. During stringing adequate manpower to be deployed that it does not affect traffic movement.
- Person handling conductor should wear gloves to avoid cut/ abrasions due to conductor.
- Conductor should be connected properly with Disc & Pin Insulators. The person who is working at height should be wearing all deemed PPE as mentioned for steel structure erection on poles.
- Any unused material should be removed from site at the end of day. No material should be left at site to avoid any damage.
- Proper span to be maintained keeping into consideration the Working Load of Pole, height of pole, type of Insulators and their strength.
- Sag to be maintained to avoid the free flowing of traffic especially across the road.
- During stringing if tree branches are restricting to maintain proper clearance; in that case branches may be cut without damaging the tree. If there is lot of trees, re-routing may be done or underground cabling may be done for that particular span.
- If the existing conductor is nearby then it is important to maintain adequate phase to phase clearance & phase to earth clearance. Alternatively, poles of different sizes may be installed to maintain the gap or insulated conductor may be used for that span / feeder.

Safety precautions to be adhered during earthing:

• Earthing of pole, steel structure, DT's to be carried out as per TS.



- Prior to do earthing test pit may be made to ascertain no live cables, utilities like telephone, internet, water pipe lines exist below the proposed pit.
- If earth pit is done using augur machine, then the selection of dia of pit should be in line with that of earthing pipe.
- If earth pit is done manually using hand held tool, it is to ensure that handle pipe does not touch the overhead wires and thus cause electrocution.
- The earth pits should be completed with salt, charcoal, chemical earthing etc and completed before the end of the day. At no point, no pit should be left vacant to avoid any child or small animal falling into pit.
- The earth strip connected to the earth pipe should be at least 300 mm below the ground level so that the earth strip does not obstruct the movement of people. If the strip is above the ground level, the person can fall and get hurt.
- Welding required for connecting earth strip should be done properly using welding machine and the lead wire from the source to the welding machine should be in good condition without any cuts.

Safety precautions to be adhered during stringing of AB Cable:

- AB Cable drums are stored at site store. It may or may not be shifted to location of work
 as a whole. Depending upon the stringing to be carried out, the length of conductor may
 be cut and woven on small drums.
- In case lot of AB cable stringing is to be done, then the drum as a whole may be shifted. Depending upon the cable size, voltage the size of drum varies.
- For drums to be shifted from store to place of work hydra /crane may be used.
- For inter site transportation the cable drum is hanged by crane / hydra using two sling through the centre of the cable drum. While shifting the drum supervisor should go ahead of crane to clear the way for transportation. The speed of the crane should not be more than 5 KMS/hr. Transportation should be carried out during non-peak traffic hours to avoid traffic jam & inconvenience to public.



- In case drum is too huge, in that case drum may be rolled slowly and movement should be controlled by gang of people if distance is less. Rolling is not allowed in steep climb or slope. But it is desirable to use crane/ hydra as much as possible.
- Prior to stringing of AB Cable, temporary stay to be used to avoid poles deflecting to large extent.
- If work is going in an area which is electrified and lines are in vicinity then shutdown needs to be arranged.
- Crane / Hydra may be employed for AB Cable stringing. During stringing adequate manpower to be deployed that it does not affect traffic movement.
- Person handling conductor should wear gloves to avoid cut/ abrasions due to messenger wire.
- Messenger wire should be connected properly with Suspension & Disc Insulators. The
 person who is working at height should be wearing all deemed PPE as mentioned for
 steel structure erection on poles.
- Any unused material should be removed from site at the end of day. No material should be left at site to avoid any damage.
- Proper span to be maintained keeping into consideration the Working Load of Pole, height of pole, type of Insulators and their strength.
- Sag to be maintained to avoid the free flowing of traffic especially across the road.
- Termination of joints should be done at ground only. Since, the joints are primarily Heat Shrink Joint (HS), adequate safety measures are to be employed to prevent any kind of fire during heating of HS kits.
- Fire fighting extinguisher should be readily available at site to restrict any fire.



Safety precautions to be adhered during laying of XLPE Cable:

- UG XLPE Cable drums are stored at site store. It may or may not be shifted to location of work as a whole. Depending upon the stringing to be carried out, the length of conductor may be cut and woven on small drums.
- In case larger length of cable is to be laid, then the drum as a whole may be shifted. Depending upon the cable size, voltage the size of drum varies.
- For drums to be shifted from store to place of work hydra /crane may be used.
- For inter site transportation the cable drum is hanged by crane / hydra using two sling through the centre of the cable drum. While shifting the drum supervisor should go ahead of crane to clear the way for transportation. The speed of the crane should not be more than 5 KMS/hr. Transportation should be carried out during non-peak traffic hours to avoid traffic jam & inconvenience to public.
- In case drum is too huge, in that case drum may be rolled slowly and movement should be controlled by gang of people if distance is less. Rolling is not allowed in steep climb or slope. But it is desirable to use crane/ hydra as much as possible.
- Prior to laying the cable, test pit is to be made at certain intervals to ensure no
 existing utilities are below the proposed route. If observed that there are existing
 utilities then re-routing may be done or take approval prior to digging from the
 existing utilities.
- No way should gas pipeline, water pipe line be close to cable route. To avoid any serious damage to life & property.
- Once confirmed that there is no existing utility then trench may be dug along the proposed route. The depth of trench may be around 1.2 meter. The width of trench may vary depending upon the no. of cables to be laid.
- The proposed trench should be laid with 4 inches of sand for cushioning purpose.
- In case multiple cables are to be laid then the trench size should be broad enough to accommodate the cable. Adequate clearance between cables to ensure de rating of cables doesn't occur.



- In case of multiple cables of different ratings need to be installed. Then the highest rating should be placed at the bottom and the lowest rating at the top. The cables of different rating should be insulated by sand, normal soil & bricks/stone plate.
- Cable drum should be placed on rollers near the trench. Rollers & winches need to be employed for smooth pulling and laying of cables in trench and size of the cable.
- Once Cable is laid the cable should be straightened up in trench manually to avoid criss crossing of cables.
- If parallel cables are to be laid then at no point should overlap or criss cross each other. If necessary, in that case should be properly insulated.
- Near the tapping point & termination point cable should be laid in ground in multiple loop formation to have some extra cable for use, in case of damage to the cable and to avoid making joints in case of fault. The loop can be straightened up to take care of short length if any.
- If cable is to be joined in the trench then at that position the trench should be wide enough. Further the Straight through Joint (STJ) should be made in clean conditions away from dust, moisture etc. No way should two STJ be in parallel cable within a distance of 6 meters.
- Termination should be done properly and cable entry from ground and thereafter to pole should be through HDPE Pipe, GI pipe of adequate size. The point where cable enters the GI pipe should be covered with PVC outer sheath to avoid cuts due to sharp edges of GI pipe.
- Post laying of cable in ground it should be covered with 3 to 5 inches of sand then
 with soft soil and then covered with bricks from sideways, top or covered with stone
 plates or half cut PCC pipes for cable protection. Post erection of stone plates, cut
 pipes etc, back filling should be done with normal soil up to ground level and its level
 should be more than ground level as level may fall due to compaction post rain.
- If cable is to be laid across the road then Trenchless Boring Method (TBM) to be used, HDPE pipe used should be adequate to accommodate the cable.
- All along the cable route "Route markers" to be installed after every 30 meters and important junctions. "Straight Through Joint Markers" to be installed at STJ point.



 " As Built Drawing " to be submitted in Hard & soft multiple copies to client for their maintenance.

Safety precautions to be adhered during erection of pole mounted Distribution Transformers:

- The DT's need to be transferred to place of erection using Hydra by two sling method.
- Prior to installation, check DT for any oil leakage or broken bushing.
- DT to be installed only after DT base and supporting structure have been installed and secured properly.
- For DT to be installed under HVDS construction of H- Pole/Double pole is mandatory.
- The pole erected should be minimum 9/11 Mtr. The poles should be installed in pit using 100 % concreting.
- The centre to centre distance between poles should be enough to accommodate the width of DT.
- The adequate No. of stay sets should be used for pole mounted DT's. 3 or 4 earthing to be done as per TS. LA, GOAB & allied material to be installed as per TS. Jumpering using conductor or Cable to be done properly
- DT to be checked prior to commissioning Post energisation, DT to be checked by Electrical Inspector prior charging on full load.
- Service connection from LTDB box or through junction box to be properly secured.

Safety precautions to be adhered during erection of stay set /stud pole:

- Based on the site requirement stay set & stud poles need to be erected to give support to the line.
- For stay set to be erected trench is to be made as per TS with base/ anchor plate.
- Pit to be dug and same precautions to be followed as mentioned for pole pit digging. No pit should be left vacant overnight & unguarded.



Safety precautions to be adhered during taking of Permit to Work (PTW):

- Since the work is going on in area which is partly or fully electrified special care is to be taken to avoid getting electrocuted during execution of the job.
- If work is to be carried in an electrified area with live overhead conductor. Then shut down or permit to work (PTW) is to be obtained from the utility managing the power distribution.
- Shutdown may be required during transportation & erection of poles, conductor stringing, AB Cable stringing, steel structure installation on the poles, DT.
- Prior to taking shutdown the place where work is to be carried out needs to be clearly identified. So that shutdown can be availed for that particular section.
- In certain congested places there may be multiple feeder's criss crossing each other. Hence, Shutdown may be availed for all the feeders in the near vicinity to avoid any chances of mishaps.
- Shut down is to be applied a week or few days prior so that it can be notified to consumers living in the vicinity. Shutdown request should mention the date, time of shutdown viz. from... to... hrs along with the work to be carried out.
- Shutdown time should not be more than 5 hours at a stretch, to avoid in convenience to the consumer. Timings of shutdown should be in a manner that people are not affected.
- Shutdown should be taken in writing only and line should be disconnected from the Substation, if required the Panel for that feeder may be disconnected with a ply card mentioning it is for shutdown.
- Once shutdown is availed shorting of lines using metallic chains &earth rods to be carried out to ensure there is no back feed from Inverter or Genset from consumer premises and over all safety.
- During shutdown all PPE are to be used and it is mandatory. When work is completed, all the workforce at ground, all tool tackles are removed from the work



place. Supervisor has to go to S/s. clear off the shutdown in log book and system will be restored.

• The duty of taking & restoring shutdown should be done by the rank of an engineer.

Environmental precautions to be adhered during project execution:

- As much as possible the project should no way create any environmental hazard.
- No feeders to be carried out through forest areas, if essential then XLPE cable may be laid.
- Cutting of trees should be avoided, if required proper clearance from the competent department may be obtained.
- To maintain proper electrical clearance and to avoid any fire due to short circuit, covered conductor may be used wherever applicable.
- On DT's HT Bushing, LT Bushing, LA and other live parts may be insulated using Heat Shrinkable (HS) Kits. This will prevent electrocution of birds.
- Bentonite chemical earthing may be avoided in agricultural fields. Conventional or non bentonite earthing may be done.

5.4.3 Safety Officer

As mentioned in earlier section Safety Officer engaged by contractor/ sub-contractor will be primarily responsible for facilitating the implementation of OHS Management of construction project site. He assists DM in the formation of Site OHS Committee and its functioning:

- Safety Officer is responsible for implementation of all the site specific instructions and OHS manual requirements and will prepare emergency preparedness and response specific to the project site.
- Safety Officer visits worksite daily and maintain a diary in which his observations with respect to OHS performance will be entered, including the instructions given by him at the site.
- Safety Officer inspects the condition of PPE prior to issue and after usage at regular intervals.
- Safety Officer ensures that sufficient awareness is created by display of safety posters, slogans etc.



- Safety Officer conducts safety audits along with workmen representative at least once in a month and his observations will be recorded and a copy will be given to DM for necessary action.
- Safety Officer conducts investigation / enquiry into the accidents dangerous occurrences.
- Safety Officer sends weekly/monthly/near miss/accident reports to the DM Coordinator and the management
- WBSEDCL OHS personnel will participate in Hazard Identification/Risk Assessment to ensure all precautions are being taken to ensure the Safety and well-being of employees is protected and to eliminate personnel injury and damage to property, and encourage the participation of labour force representatives
- Toolbox Talks will be conducted at all work locations prior to commencement of any work. A separate Toolbox Talk will be conducted before start-up of any specific works.

5.4.4 Site Engineer

Site Engineers are directly responsible for the implementation of the safety norms at site and to ensure all their personnel understand and comply with OHS procedures that relate to their job activities.

- Directly responsible for maintaining safe working conditions, utilization of safe practices, the safety of personnel under their control and the safety of others affected by the activities of their personnel.
- To ensure that safety induction has been given to the site personnel working under them on first day by the Safety Officer.
- To inform Safety Officer regarding any new activity being started in their area and to ensure that Toolbox Talks prior to the start of the particular work has been conducted by the Safety Officer.
- Participate in the investigation of all near miss incident and accidents, to ensure timely action may be taken to prevent recurrence.
- Provide continuous site inspection in his area of responsibility to identify and correct any unsafe conditions.
- Toolbox Talks will be conducted at all work locations prior to commencement of any work. A separate Toolbox Talk will be conducted before start up of any specific works.



5.5 TRAINING

Paramount to having an effective safety program is the knowledge and corresponding training required to enable personnel to work safely. It is WBSEDCL's responsibility to ensure that all personnel have sufficient knowledge.

- ❖ WBSEDCL shall ensure that all new recruits & subcontractors attend the mandatory OHS induction at WBSEDCL prior to their deployment at worksite.
- ❖ All WBSEDCL personnel shall attend mandatory trainings/briefing on OHS, Fire & Environmental Awareness prior to enter/work at subproject site.
- WBSEDCL shall ensure that appropriate OHS Trainings/Awareness applicable to subproject be provided/given to WBSEDCL employees & subcontractor personnel for skill enhancement. Training Matrix will be maintained
- WBSEDCL shall ensure that certificates for training have been obtained prior to work on site.
- ❖ WBSEDCL shall provide a competent person as translator when needed and evaluate comprehension through a series of questions and answers

5.6 ENVIRONMENTAL, HEALTH & SAFETY MEETINGS

- ❖ WBSEDCL OHS Personnel and subcontractor's OHS representative will conduct coordination meetings to discuss topics pertinent to the nature of the present activities on site.
- ❖ A weekly General OHS Meeting to improve the level of communication between management and site personnel shall be held. The objective of these meetings is to increase the safety awareness of the hazards, which are constantly present and to promote a keenness to put into practice the essential actions that are necessary to eliminate or control these hazards. The relevant Foreman/ Supervisor/ Safety Supervisor and OHS Manager will attend. Schedule of this meeting to be informed to the Clint for their presence and for any suggestion regarding improvement of site safety.
- Minutes of meeting shall be taken and shall record those in attendance.

5.7 INCENTIVE SCHEME

For the motivation of site staff and contractor workmen, WBSEDCL will organize and celebrate specific days like safety day, environment day, etc. On that day Safety Officer will do program with quiz and essay competitions and award will be given to the performers.



Penalty clauses

To enforce workforce regarding implementation of OHS norms at site penalty clauses will be applicable. This shall be managed by WBSEDCL's RM & DM on whose decision it shall be binding.

5.8 TOOLBOX TALKS

- It is mandatory for all Supervisors/ Foremen to conduct and deliver a daily toolbox talk at work locations within their respective area prior to commencement of daily work assignments (Appendix 3).
- Supervisors/ Foremen shall ensure that the potential hazards of the task and specific safety requirements required when executing the tasks are clearly understood and briefed to all the personnel involved and ensure that safe working procedures are strictly followed.
- ❖ A Toolbox Talk checklist shall be provided by OHS officer and must be properly filled in by Supervisors/ Foremen.
- Employees assigned for Specific works shall sign the attendance sheet after completion of toolbox talks and this shall be attached with the work permit.

Following may be included in "Tool Box Talks" as and when applicable (not exhaustive):

- Emergency Procedures
- Muster points/ alarms
- ❖ PPE
- Site Safety Regulations
- Housekeeping
- Fire Prevention
- Safe Working Practices
- Employees Safety Responsibility
- Eye Protection
- Tools
- Short Cuts
- Confined Space Safety
- Near Miss
- Cylinders
- Scaffolding
- Preventing Accidents
- Deep Excavations
- Restricted Areas Working
- Permit To Work (PTW)
- Lifting



- Rigging
- Manual Material Handling
- Pressure tests
- Electrical Safety

5.9 AUDIT/INSPECTION

OHS Site Inspection/Performance Site Monitoring/ Audit Programme / Schedule

- PIU-WBSEDCL will conduct an internal system audit at least once in a year. A detailed program for the same will be sent to all sites prior to the audit.
- WBSEDCL Safety Officer shall conduct a periodic OHS Audit Programme/OHS Performance Site Monitoring in accordance with WBSEDCL standards. The findings shall be forwarded to the PIU-WBSEDCL and RMs. WBSEDCL's Project SO shall follow-up all outstanding items. Corrective actions shall be implemented. Copy of OHS Audit/OHS Performance Site Monitoring Report shall be retained by the PIU-WBSEDCL.
- Findings of the daily OHS Supervisors inspections are logged in individual field books and daily inspection sheets. OHS Supervisors check daily and ensure that all deficiencies that have been noted are corrected / rectified promptly. OHS Manager shall ensure likewise that appropriate rectification is religiously done in coordination with the Project Management Team.
- Periodic OHS Inspection /Walk Around shall be organized by WBSEDCL. Deficiency notices
 are utilized and issued per group/ discipline to ensure rectifications are made. Concerned
 personnel are notified of any deviation with corresponding recommended corrective
 actions. PIU shall follow up to ensure safe continuation of the construction activities.
- WBSEDCL OHS Manager shall carry-out a regular site visit in which spot inspection/walk around may be carried-out. Findings will be documented & issued to sub-project OHS Manager for rectification.

5.10 DOCUMENTATION

WBSEDCL shall evolve a comprehensive, planned and documented system for implementation and monitoring of the OHS requirements of WBEDGMP. The monitoring for implementation shall be done by regular inspections and compliance to the observations thereof (Appendix 2). WBSEDCL Contractor shall get similar OHS requirements implemented at his sub-contractor(s) work site / office. However, compliance of OHS requirements shall be the responsibility of the WBSEDCL. Any review / Client shall not absolve contractor of his responsibility / liability in relation to all OHS requirements.



5.11 IMPLEMENTATION & MONITORING

WBSEDCL shall be fully responsible for planning, reporting, implementing and monitoring all OHS requirements and compliance of all laws and statutory requirements. The Contractor shall also ensure that the OHS requirements are clearly understood and faithfully implemented at all levels at site.

5.11.1 Awareness

WBSEDCL shall promote and develop consciousness about Health, Safety and Environment among all personnel working for the Contractor. Regular awareness programmes and fabrication shop / work site meetings shall be arranged on OHS activities to cover hazards involved in various operations during construction.

5.11.2 Intoxication & Drugs

WBSEDCL shall ensure that his staff members & workers (permanent as well casual) shall not be in a state of intoxication during working hours and shall abide by any law relating to consumption & possession of intoxicating drinks or drugs in force. Awareness about local laws on this issue shall form part of the Induction Training.

5.11.3 Housekeeping

WBSEDCL shall ensure that a high degree of housekeeping is maintained and shall ensure the followings:

- All surplus earth and debris are removed / disposed-off from the working areas to designated location(s).
- Unused / surplus cables, steel items and steel scrap lying scattered at different places within the working areas are removed to identify location(s).
- All wooden scrap, empty wooden cable drums and other combustible packing material, shall be removed from work place to identified location(s).
- Roads shall be kept clear and materials like poles, steel, sand, boulders, concrete, chips and bricks etc., shall not be allowed on the roads to obstruct free movement of men and machineries.
- Poles, pipes and piping materials shall be stacked properly for erection.
- Water logging on roads shall not be allowed.
- No parking of trucks / trolleys, cranes and trailers etc. shall be allowed on roads, which may obstruct the traffic movement.
- Utmost care shall be taken to ensure over all cleanliness and proper upkeep of the working areas.



- Trucks carrying sand, earth and pulverized materials etc. shall be covered while moving within the plant area / or these materials shall be transported with top surface wet.
- The contractor shall ensure that the atmosphere in plant area and on roads is free from particulate matter like dust, sand, etc. by keeping the top surface wet for case in breathing.
- At least two exists for any unit area shall be assured at all times

5.12 FIRE PROTECTION / PREVENTION

A fire watch shall be assigned during the execution of hot work activity as necessary & required. Fire watch personnel shall be trained and certified by OHS officer of WBSEDCL, proof of training and certification shall be provided. Fire watch personnel will be identified by wearing Red overalls and safety helmets. WBSEDCL shall ensure that necessary fire preventive measures are being implemented.

Fire-fighting equipment such as extinguishers (Refer **Appendix - 6** for Details), fire hose and fire blanket shall be made available.

- Work involving welding, burning or use of open flames.
- All the entrance and emergency exits of the buildings.
- On all equipment having diesel or gasoline engines.
- At all fuel and combustible materials storage areas.
- All fire extinguishers are to be inspected prior to project execution.

5.13 EMERGENCY PROCEDURES

WBSEDCL shall follow & respond in any unlikely emergency event in compliance to the Principals Evacuation Procedure. WBSEDCL shall ensure that all its staff and personnel are fully familiar with the use and location of the essential emergency equipment such as fire extinguishers, fire exits, muster points and plant alarms. The typical contents of such procedure are:

- Muster station allocations
- Emergency duties and responsibilities
- Instruction to the phone operators
- Emergency actions to be taken
- Emergency assembly areas
- Provisions of medical and environmental emergencies
- Training and drills



This Procedure will be clearly emphasized & cascaded from top Management down to the workers during Site Induction Training:

Contact Details, Location of First Centre and Location of fire extinguishers shall be displayed on prominent places at the site and should be informed to all workers in the tool Box Talks.

The Emergency Preparedness procedure shall be reviewed by DM/SO at least every six months.

An onsite emergency response team may be established. External emergency services will be utilized to support the emergency response team, as their responsibility will be to stabilize the emergency until external assistance arrives.

FIRE EXPLOSION

In Case any project worker notice a fire does the following:

- Rush to the spot and take charge of the rescue and control work.
- Be concerned about his/her safety and that of others
- Shout, "Fire Fire", raise an alarm and call for help from colleagues
- If the fire is small, attempt it to extinguish by using the nearest fire extinguishers available, without undue personal risk
- At the same time, inform fire station and DM/SO. While reporting state:

Your name

What happened?

Location of Incident

- Instruct security staff to cordon off the affected area and guide the fire brigade personnel to the exact location of the fire and render all possible assistance to them.
- Keep all spectators and non essential employees away from fire.
- If required, switch off the electrical supply, taking adequate care
- Try to remove flammable / dangerous materials lying in the vicinity
- If explosive type materials are involved immediately evacuate all personnel
- Count number of people involved and organize rescue of any trapped personnel with the help of the fire brigade.
- Make no comments. Refer all inquiries to the company Project Manage.

EARTHQUAKE

If project workers are inside the office building when an earthquake occurs:

- Stay under until the shaking stops.
- Stay away from windows, large panels of glass, ceiling tiles, file cabinets, book cases, heavy furniture, electrical equipment and appliances.
- Crawl under a desk or sturdy table and hold onto it. If it moves, move with it.



- Move to a clear area from unbalanced/ unsupported / partly erected structure / equipment's / buildings and electrical wires and poles that may fall.
- Stay clear of falling objects and find a place duck, cover and hold on.
- Stay near an interior wall and protect head with arm.

GAS/TOXIC RELEASE

- Try to identify the source of leak, if possible.
- Find out facts about:
 - ✓ Precise location
 - ✓ Material involved & quantity
 - ✓ Wind directions
- Warn people in the vicinity/neighbouring environment.
- Inform seniors
- Inform fire station. Instruct main gate to blow emergency siren.
- Take charge of the site and direct efforts to contain and control the leak by getting
 isolating valve closed, specific machinery is switched off. If leak Isolation is not possible;
 arrange transfer of materials into another tank of low level and pressure.
- Get the movement of vehicles away from the source and cordon off the area.
- Use a wet cloth to cover your nose in case of breathing difficulty and move away from the source of toxic release.
- Do not touch or walk over the spilled liquid.
- Rush the affected persons to hospital and arrange medical care.

BOMB THREATS

When a bomb threat is received for the first time:

- Local police, fire or bomb disposal authorities will be immediately notified.
- The project or office shall be evacuated immediately.
- Evacuation will be made of all personnel on the project or in the office.
- A personnel count should be made to ensure that all are present and accounted for
- Do not allow anyone except authorized personnel to re-enter the area.
- If necessary to stop or detour traffic away from the affected area, utilize local police or Flagman.
- A search of the premises will be made by the appropriate authorities. No company supervisory personnel or other employees shall be involved in the search.
- Notify other business people or residents who may be endangered by the threat.
- Appoint one person as the company spokesperson.



- Allow no photograph on site.
- Make no comments.
- Notify the company's local office immediately.
- Assist the authorities with information and in every other possible ways to anyone Without danger.
- If a suspicious article is found do not touch it. Inform the appropriate authorities to Handle the situation.
- Enter the premises only after careful evaluation of the circumstances, (to be made by the Company's senior management in consultation with appropriate law enforcement authorities) and permission of local management.

Contagious Diseases

- Bar all entry to visitors
- Inform Medical Regulatory bodies about the incident immediately
- Isolate the area from Personnel Movement except those related to Medical Relief
- Declare Emergency Situation if required
- Control Mob / onlookers
- Mobilize Medical teams, Medical Supplies, Movement Vehicles, Associated Hospitals / Labs
- Ensure Electricity supply and Communication
- Ensure Essential supply of Medical Team
- Inform Relatives of the affected people and arrange their travel as required
- Check for communication to interested parties including neighbours and statutory and regulatory bodies
- Open Helpline at affected site
- Upon deciding shifting affected persons to identified hospitals, shift the personnel
- Deploy assistance teams at the hospitals as required
- OHS coordinator shall report formally both internally and to statutory and regulatory bodies about the incident
- Handle Media and External communication as per policies
- Prepare Report of the situation

Electric Shocks

- Isolate the affected circuit from electric supply
- Provide first-aid to the injured for
 - ✓ Shock
 - ✓ Burns
 - ✓ Temporary breathlessness
- Declare Emergency Situation if required
- Control Mob / onlookers



- Depending on the nature of injury, decide to shift the patient to the Medical assistance or request Medical assistance on-site through ambulance
- Install sign boards on the affected circuits
- Repair, Rectify and Restore the healthiness of the circuit involved
- If required, informed statutory and regulatory bodies for any checks and validations before using the affected facility.
- Update records for further analysis for corrective and preventive action

Fall from Height

- Provide First-Aid to the injured personnel
- Isolate area from operations
- Declare Emergency Situation if required
- Control Mob / onlookers
- Mobilize support and shift injured to medical room
- Arrange for taking injured home after Out-patient treatment
- If necessary, admit injured to the hospital. Coordinate patient / Hospital Needs
- Inform statutory and regulatory bodies as needed
- Rectify and check for healthiness of the area
- Restore site condition to safe normal situation
- Prepare Report of the situation
- Handle Media and External communication as per policies
- Update records for further analysis for corrective and preventive action

Hit by Moving Vehicles

- Provide First-Aid to the injured personnel
- Isolate area\vehicle from operations
- Control Mob / onlookers
- Mobilize support and shift injured to medical room/Hospital
- Arrange for taking injured home after Out-patient treatment
- If necessary, admit injured to the hospital. Coordinate patient / Hospital Needs

5.14 FIRST AID FACILITIES

WBSEDCL shall provide First Aid Boxes at every site equipped with basic First Aid Medicines (Refer **Appendix – 7** for Details) on site for its employees and workmen. This First Aid shall be manned by a qualified First Aider as required. Inventory of Medicines shall be carried out on a monthly basis and a register will be maintained.



6.0 GRIEVANCE MECHANISM

In any working environment it is essential for both employers and employees to be fully conversant with all aspects of disciplinary processes, the grievance handling procedures and the legal requirements and rights involved. In implementing an effective dispute management system consideration must be given to the disputes resulting from the following:

- Disciplinary action
- Individual grievances
- Collective grievances and negotiation of collective grievances

This section deals with the Grievance Redressal Mechanism, the Grievance Redressal Cell and the legal options available to the various stakeholders.

6.1 GRIEVANCE REDRESSAL SYSTEM OF WBSEDCL

A 3-tier grievance redressal mechanism is already in place at WBSEDCL.

1st tier at Customer Care Centre (CCC) Level: At CCC level, any consumer can lodge the complaint at either through WBSEDCL web portal (wbsedcl.in) or docket his complain at toll free number or lodge the complaint directly at CCC. For grievance redressal, there is one dedicated person at junior engineer position at CCC level to look after/document all the grievances. It is the responsibility of Station Manager to redress the same within 21 days.

2nd tier at Regional Level: If the consumer is not satisfied at CCC level or CCC is not empowered to take decision, it can go / refer to the next tier i.e. Regional Grievance Redressal Officer (RGRO). RGRO is designated Officer at the rank of Divisional Engineer. RGRO will decide within 45 day (45-21 =24 days). If grievance is not settled even at this tier, then consumer/RGRO may refer it to the next tier.

3rd tier at Corporate Level: At this level, grievance is looked after by Customer Relationship Management (CRM) Cell. Chief Engineer of CRM Cell is the Chief Grievance Redressal Officer of WBSEDCL and will decide within 60 days (60-45=15 days). Normally, such grievances are addressed by hearing (at all three levels) followed by reasoned order.

In order to strengthen the existing 3-tier grievance redressal mechanism of WBSEDCL toeffectively address grievances related to ESMP implementation including labour working condition and OHS issues, two additional bodies are proposed to be established; Project Steering Committee (PSC) at the corporate level and Grievance Redressal Committees (GRCs) at the sub-project sites.



6.1.1 Project Steering Committee

The established PSC for WBEDGMP under the chairmanship of Additional Chief Engineer (Distribution) of WBSEDCL, shall be used to monitor and review the progress of implementation of ESMP of each sub-project including labour working condition and OHS issues. Additional Chief Engineer (Distribution) WBSEDCL, will be convener of this Committee.

This Committee should meet every quarter to review the progress made in the implementation of the ESMP of each sub-project and to solve any grievances of the APs including labour working condition and OHS issues. This Committee will also provide policy related direction to the Grievance Redressal Cell and the participating departments with regard to ESMF.

6.1.2 Grievance Redressal Committee

The Grievance Redressal Committee (GRC) will be established at each sub-project site under the chairmanship of Divisional/Regional Manager, WBSEDCL for redressal of grievances of the APs as well as project workers. Designated Divisional Manager of concerned region shall be the convener of this Committee. At the sub-project level, the ESMP Implementing Agency (IA) i.e. contractor will provide support to this Committee. Block/Sub-division/District level head of all participating departments will be members along with a representative of APs, Project Worker and local NGOs/CBOs, if any.

The proposed PSC and GRCs would be aligned with the existing grievance redressal mechanism of WBSEDCL for easy access and timely redressal of any grievance of the Project Worker, APs and other local people.

It is proposed that the Project Worker first register the grievances with the IA (Appendix 8 Part A). After receipt of grievance, the IA should take them to the Committee (GRC) to take up the matter during the next immediate meeting and initiate measures for redressal. No grievance can be kept pending for more than a month which means the Committee has to meet every month (Appendix 8 Part B and C). Implementation of the redressal rests with the PIU. In case the aggrieved party is not satisfied with the proposed redressal measures, it can approach the PSC. If the aggrieved party is not satisfied with the decision of PSC, it can approach the court of law.

6.2 COURT OF LAW

The Project Worker who are not satisfied with the decision/mechanism has the freedom to move court of law at any stage for redressal of their complaint. In case it is referred to court, the above referred GRM shall cease to take cognizance of complaint.





APPENDIX 1: WRITTEN PARTICULARS OF EMPLOYMENT(As Required Under Section 22 of The Employment Act)

SECOND SCHEDULE

(WRITTEN PARTICULARS OF EMPLOYMENT)
(Regulation)

1.	Name of Employer					
2.	Name of Employee					
3.	Date Employment began					
4.	Wage and Method of Calculation					
5.	Interval at which wages are paid					
6.	Normal Hours of work					
7.	Short description of employee's work					
8.	Probation Period					
9.	Annual Holiday Entitlement					
10.	. Paid Public Holiday					
11.	. Payment during sickness					
12.	. Maternity Leave (if employee female)					
13.	Nursing Break Entitlement (for female employee)					
14.	Notice employee entitled to receive					
15.	Notice employer required to give					
16.	Pension Schedule, Provident Fund Gratuity Schedule etc. (if any, other tan SNPF)					
17.	. Any other matter either party wishes to include					
Nat	*					
NOL	tes:					
(a)	An employee is free to join a trade union or staff associ address of the Trade Union or Staff Association is:	ation, which is recognized by the undertaking. The				
(b)	The grievance procedure and disciplinary procedure in this undertaking requires to be followed when a grievance arises or disciplinary action that needs to be taken.					
(c)	When any heading is inapplicable enter NIL.					
Emp	ployer's signature Witness	Employee's signature Witness				
Date	te	Date				



APPENDIX 2: MONTHLY OHS ITEM CHECKLIST

ide	nce on each SHE item.	•	eflected b	,	,
‡	SHE items	Available	Activity	Evidence	Comment
1	Exposure to SHE Policies				
2	Valid Working Contract				
3	Current Employee List				
4	Confirmation Letter & copy of ID (per employee)				
5	Understanding of Resources, roles, responsibilities & authority				
6	Inductions - all contractor staff				
7	HIRA & Reporting; Incidents, accidents & near misses				
8	Appointment letters for Safety Officer				
9	SHE Certificates; Safety Officer				
0	SHE Certificates; 1st Aider				
1	Mandatory Qualifications – as per the evaluation form				
.2	Vehicles; CoF, Bluebook, Daily inspection sheet, Driver Permit				
.3	Current Evaluation form				
4	PPE: Branded & Properly worn at all times				
.5	Internal Communication; minutes showing meetings				
6	NCR's Received and closed				
.7	Environment Management Aspects				
.8	First Aid Kit: availability and usage of the form				
9	Fire extinguisher; valid				
0	Any other				



APPENDIX – 3: SAFETY TOOLBOX MEETING (ATTENDANCE)

	SAFETY TOOLBOX MEETING							
TOOLDOVTODICS	(Attendance)							
TOOLBOXTOPICS:								
Supervisors/Foremen/In-Cha	arge:							
Field Discipline:								
Name	Position	Signature						
Signature:	Signature:	Signature:						
Foreman:	Safety Officer:	Supervisor/Sptd:						



APPENDIX 4: CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
(A) EXCAVATION	Failing into pit	Personal Injury	Provide guard rails / barricade with warning signal
Pit Excavation up to 1.0 – 1.5 M	Earth Collapse	SuffocationBreathlessnessBuried	 Provide suitable size of shoring and strutting, if required. Keep soil heaps away from the edge equivalent to 1.5 m or depth of pit whichever is more. Don't allow vehicles to operate too close to excavated areas. Maintain at least 2m distance from edge of cut. Maintain sufficient angle of repose. Provide suitable and stable slope as per the condition of Soil.
	 Contact with burie electric cables Gas / Oil Pipelines 	➢ Electrocutiond ➤ Explosion	 Obtain permission from competent authorities, prior to excavation, if required. Locate the position of buried utilities by referring to plant drawings. Start digging manually to locate the exact position of buried utilities and thereafter use mechanical means. Do work with Safety and proper supervision.
Pilling Work	Failure of pile-drivin equipmen	~	Inspect Piling rigs and pulley blocks before the beginning of each shift.
	Noise pollution	Can cause irritation and psychological imbalance	Use personal protective equipments like ear plugs, muffs, etc.,
	Extruding rods /	Can hurt people	Barricade the area and install sign boards



ACTIVITY		TYPE OF HAZARD	EF	FECT OF HAZARD		PREVENTIVE MEASURES
	(casing			λ	Provide first-aid
	1	Working in the vicinity of "Live- Electricity"	A	Can cause electrocution / Asphyxiation	AAAAAA	Keep sufficient distance from Live-Electricity as per IS code. Obtaining shut down, earthing rods use and hanging appropriate signage at switch to prevent switching on while work is in progress. Provide artificial / rescue breathing to the injured.
(B) CONCRETING		Air Pollution by cement		May affect Respiratory System	A	Wear respirators or cover mouth and nose with wet cloth.
		Handling of ingredients	>	Hands may get injured		Use gloves and other PPE.
		Earthling of electrical mixers, vibrators, etc. not done.	A	Can cause electrocution / asphyxiation	A	Ensure earthing of equipments and proper functioning of electrical circuit before commencement of work.
		Falling of materials from height.	A	Persons may get injured	A A A	Use hard hats Remove surplus material immediately from work place. Ensure lighting arrangements during night hours.
		Continuous pouring by same gang	λ	Cause tiredness of workers and may lead to accident.	AA	Insist on shift pattern Provide adequate rest to workers between subsequent pours.
		Revolving of concrete mixer / vibrators	A	Parts of body of clothes may get entrapped	AAA	Allow only mixers with Hooper. Provide safety cages around moving motors. Ensure proper mechanical locking of vibrator.
Superstructure) >	Same as above plus Deflection in props or	>	Shuttering / props may collapse and prove fatal.	A	Avoid excessive stacking on shuttering material. Check the design and strength of shuttering material before



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	shuttering material		commencement of work. Rectify immediately the deflection noted during concreting.
	Passage to work place.	Improperly tied and designed props/planks may collapse	 Ensure the stability and strength of passage before commencement of work. Do not overload and stand under the passage.
(C) REINFORCE- MENT	Curtailment and binding of rods	Persons may get injured	Use PPE like gloves, shoes, helmets, etc.,Avoid usage of shift tools.
	Carrying of rods for short distances / at heights	Workers may get injured their hands and shoulders	 Provide suitable pads on shoulders and use safety gloves. Tie up rods in easily lifetable bundles. Ensure proper staging.
	Checking of clear distance/ cover with hands	Rods may cut or injure the fingers.	Use measuring devices like tape, measuring rods, etc.,
	Hitting projected rods and standing	Persons may get injured and fell down	 Use safety shoes and avoid standing unnecessarily on cantilever rods. Avoid wearing of loose clothes.
	Falling of material from height	May prove fatal	 Use helmets Do not throw any material, tools or equipment from the height. Tool- kit bag to be used.
	Transportati on of rods by trucks / trailers	Protruded rods may hit the persons	 Use red flags / lights at the ends Do not protrude the rods in front of or by the side of driver's cabin. Do not extend the rods 1/3rd of deck length or 1.5m whichever is less.
(D) WELDING AND GAS CUTTING	Welding radiates invisible ultraviolet	Radiation can damage eyes and skin	 Use specified shielding devices and other PPE of correct specifications. Avoid throated tungsten electrodes for GTAW(Gas



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	and infrared rays		Tungsten Arc Welding)
	Improper placement of oxygen and acetylene cylinders	Explosion may occur	 Move out any leaking cylinder Keep cylinders in vertical position Use trolley for transportation of cylinders and chain them Use flashback arrestors.
	Leakage / cuts in hoses	May cause fire	 Purge regulators immediately and then turn off. Never use grease or oil on oxygen line connections and copper fittings on acetylene lines. Inspect regularly gas carrying hoses. Always use red hose for acetylene and other fuel gases and black for oxygen.
	Opening up of cylinder	Cylinder may burst	 Always stand back from the regulator while opening the cylinder. Turn valve slowly to avoid bursting. Cover the lug terminals to prevent short circuiting.
	 Welding of tanks, container or pipes storing flammable liquids 	Explosion may occur	 Empty & purge them before welding Never attach the ground cable to tanks, container or pipe storing flammable liquids Never use LPG for gas cutting.
(E) ELECTRICAL INSTALLATION AND USAGE.	Short circuiting	Can cause Electrocution of Fire	 Use rubberized hand gloves and other PPE Don't lay wires under carpets, mats or door ways. Allow only licensed electricians to perform on electrical facilities. Use one socket for one appliance. Ensure usage of only fully



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			insulated wires or cables.
			Don't place bare wire ends in a
			socket.
			Ensure earthing of machineries
			and equipments.
			Do not use damaged cords and
			avoid temporary connections.
			Use spark-proof / flame proof type
			field distribution boxes.
			Do not allow open / bare
			connections.
			Provide all connections through
			ELCB
			> Protect electrical cables /
			equipments from water and naked flames.
			Check all connections before
			energizing.
	Overloading	Bursting of	Display voltage and current ratings
	of Electrical	system can	prominently with "Danger" signs.
	System	occur which	Ensure approved cable size,
		leads to fire	voltage grade and type.
			Switch off the electrical utilities
			when not in use.
			Do not allow unauthorized
			connections.
			Ensure proper grid wise
			distribution of Power.
	Improper	Can cause	Do not lay unarmoured cable
	lying of	electrocution	directly on ground wall, roof of
	overhead	and prove fatal.	trees.
	and		Maintain at least 3m distance from
	undergroun		HT cables
	d		All temporary cables should be laid
	transmissio		at least 750 mm below ground on
	n lines /		100 mm fine sand overlying by
	cables.		brick soling. Providing proper sleeves at
			Providing proper sleeves at crossings / intersections.
			Provide cable route markers
			riovide cable foute flidikers



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			indicating the type and depth of cables at intervals not exceeding 30m and at the diversions / termination.
(F) FIRE- PREVENTION AND PROTECTION	Small fires can become big ones and may spread to	Cause burn injuries and may prove fatal.	 In case a fire breaks out, press fire alarm system and shout "Fire, "Fire". Keep buckets full of sand and water / fire extinguishing
	the surrounding		equipment near hazardous locations
	areas.		Confine smoking to "Smoking Zones" only.
			Train people for using specific type of firefighting equipment under different classes of fire.
			Keep fire doors / shutters, passages and exit doors unobstructed.
			 Maintain good housekeeping and first-aid boxes (for details refer Appendix-6)
			Don't obstruct assess to Fire extinguishers.
			Do not use elevators for evacuation during fire.
			 Lightening arrestors for elevated structure
	Improper selection of Fire	It may not extinguish the fire	Ensure usage of correct fire extinguisher meant for the specified fire (for details refer
	extinguisher		Appendix-5). Do not attempt to extinguish Oil and electric fires with water. Use foam cylinders / CO ₂ /sand or
	> Improper	Same as above	earth. Maintain safe distance of
	storage of highly		flammable substances from source of ignition.
	inflammabl		> Restrict the distribution of



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	e substances		flammable materials to only min. necessary amount. Construct specifically designed fuel storage facilities. Keep chemicals in cool and dry place away from heat. Ensure adequate ventilation. Before welding operation, remove or shield the flammable material properly. Store flammable materials in stable racks, correctly labelled.
	 Short circuiting of electrical system 	Same as aboveCan causeElectrocution	 Wipe off the spills immediately. Don't lay wires under carpets, mats or door ways. Use one socket for one appliance. Use only fully insulated wires or cables. Do not allow open / bare connections. Provide all connections through ELCB Ensure earthing of machineries and equipments.
(G) VEHICULAR MOVEMENT	Crossing the speed limits (Rash driving)	➤ Personal injury	 Obey speed limits and traffic rules strictly Always expect the unexpected and be a defensive driver. Use seat belts / helmets. Blow horn at intersections and during overtaking operations. Maintain the vehicle in good condition. Do not overtake on curves, bridges and slopes.
	Adverse weather condition	Same as above.	 Read the road ahead and ride to the left Keep the wind screen and lights clean Do not turn at speed.



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES				
			Recognize the hazard, understanding the defence and act correctly in time.				
	Consuming alcohol before and	Same as above	Alcohol and driving do not mix well. Either choose alcohol or driving.				
	during the driving		If you have a choice between hitting a fixed object or an on-				
	operation		coming vehicle hit the fixed object. Quit the steering at once and become a passenger. Otherwise				
			take sufficient rest and then drive. Do not force the driver to drive fast and round the clock.				
			Do not day dream while driving.				
	Falling objects / Mechanical	May prove fatal	Ensure effective braking system, adequate visibility for the drives,				
	failure		reverse warning alarm. Proper maintenance of the vehicle as per manufacturer instructions.				
			A pressure relief device shall be provided having a set pressure not higher than the test pressure plus the lesser of 345 K Pa (50 psi) or 10% of the test pressure.				
			The gas used as test fluid, if not air, shall be non-flammable and nontoxic.				
(1) WORKING AT HEIGHTS	Person can fall down	May sustain severe injuries	Provide guard rails / barricade at the work place.				
		or prove fatal	Use PPE like full body harness, life line, helmets, Fall arrestor, safety shoes, etc.,				
			 Obtain a permit before starting the work at height above 3 meters. 				
			Tie/weld working platform with fixed support.				
	>	May hit the	Keep the work place neat and				



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
		scrap / material stacked at the ground or in between.	clean Remove the scrap immediately.
	Material can fall down	May hit the workers working at lower levels and prove fatal	 Same as above plus Do not throw or drop materials or equipment from height. i.e., do not bomb materials All tools to be carried in a tool-kit Bag.
(H) CONFINED SPACES	Suffocation / drowning	Unconsciousnes s death	 ➤ Use respiratory devices, if reqd. ➤ Avoid overcrowding inside a confined space. ➤ Provide Exhaust fans for ventilation ➤ Do not wear loose clothes, neck ties etc., ➤ Fulfil conditions of the permit. ➤ Check for presence of hydrocarbons, O₂ level. ➤ Obtain work permit before entering a confined space. ➤ Ensure that the connected piping of the equipment which is to be opened is pressure free, fluid has been drained, vents are open and piping is positively isolated by a
	 Presence of foul smell and toxic substances 	Inhalation can pose threat to life	blind flange. Same as above plus Check for hydrocarbon and Aromatic compounds before entering a confined space Depute one person outside the confined space for continuous monitoring and for extending help in case of an emergency.
	➤ Ignition / flame can cause fire.	Person may sustain burn injuries or explosion may	 Keep fire extinguishers at a hand distance Remove surplus material and scrap immediately.



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
(I) HANDLING AND LIFTING EQUIPMENTS	Failure of load lifting and moving equipments	Can cause accident and prove fatal.	 Do not smoke inside a confined space Do not allow gas cylinders inside a confined space Use low voltage (24V) lamps for lighting Use tools with air motors for electric tools with max. Voltage of 24V. Remove all equipments at the end of the day. Avoid standing under the lifted load and within the operating radius of cranes. Check periodically oil, brakes, gears, horns, and tyre pressure of all moving machinery Check quality, size and condition of all chain pulley blocks, slings, Uclamps, D-Shackles, wire ropes etc., Allow crane to move only on hard, firm and levelled ground. Allow lifting slings as short as possible and check gunny packing's at the friction points Do not allow crane to tilt its boom
			 while moving. Install Safe Load Indicator Ensure certificate by applicable authority.
	Overloading of lifting equipments	Same as above	 Safe lifting capacity of derricks and winches written on them shall be got verified. The max. Safe working load shall be marked on all lifting equipments. Check the weight of columns and other heavy items painted on them and accordingly decide



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			 about the crane capacity, boom and angle of erection. Allow only trained operators and riggers during crane operation.
	Overhead electrical wires	Can cause electrocution and fire	 Do not allow boom or other parts of crane to come within 3m reach of overhead HT cables Hook and load being lifted shall preferably remain in full visibility of crane operators.
(J) SCAFFOLDING FORM WORK AND LADDERS	Person can fall down	Person May sustain severe injuries sand prove fatal.	 Provide guard rails for working at height Face ladder while climbing and use both hands. Ladders shall extend about 1m above landing for easy access and tying up purpose. Do not place ladders against movable objects and maintain base at ¼ unit of the working length of the ladder. Suspended scaffolds shall not be less than 500mm wide and tied properly with ropes. No loose planks shall be allowed. Use PPE, like helmets, safety shoes, etc.,
	Failure of scaffolding material	Same as above	 Inspect visually all scaffolding materials for stability and anchoring with permanent structures. Design scaffold for maximum load bearing capacity, use firm and rigid base for strong support. Connecting fixed anchor from walls and foundation base must be ensured. Clamps and coupling must be tightened adequately. Don't overload the scaffolds.



ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			Do not splice short ladders to make a longer one. Vertical ladders shall not exceed 6m.
	Material can fall down	Persons working at lower level get injured.	 Remove excess material and scrap immediately Carry the tools in a tool-kit bag only Provide safety nets.
(K) STRUCTURAL WORKS	Personal negligence and danger of fall	Can cause injury or casualty	 Do not take rest inside rooms built for welding machines or electrical distribution system. Avoid walking on beams at height. Wear helmet with chin strap and full body harness while working at height. Use hand gloves and goggles during grinding operations. Cover or mark the sharp and projected edges. Do not stand within the operating radius of cranes.
	Lifting / slipping of material	➤ Same as above	 Do not stand under the lifted load Stack properly all the materials. Avoid slippage during handling. Control longer pieces lifted up by cranes from both ends. Remove loose materials from height. Ensure tightening of all nuts and bolts.



APPENDIX 5: RISK & IMPCAT AND & MITIGATION MEASURES FOR TRANSMISSION OF COVID-19

Activity	Risks and Impacts	Mitigation Measures
Transient and expat workforce	Workers that are mobilized from abroad or returning from abroad become vectors for transmission of disease to construction projects. Workers that travel from other regions may also provide a vector for passing infection onto work sites.	Expats or transient workers should adhere to national requirements and guidelines with respect to COVID-19. Expats or transient workers coming from countries/regions with cases of the virus: Should not return if displaying symptoms Should self-isolate for 14 days following their return For self-isolation, workers should be provided with a single room that is well-ventilated (i.e., with open windows and an open door). If a single room is not available for each worker, adequate space should be provided to maintain a distance of at least 1 m between workers sharing a room. Workers in isolation should limit their movements in shared space, for example through timed use of shared spaces (such as kitchens and bathrooms) with cleaning prior to and after use of the facilities. Visitors should not be allowed until the worker has shown no signs and symptoms for 14 days, and the number of staff involved in caring for those in isolation should be kept to a minimum. Healthcare professionals and cleaners should visit each day (wearing the appropriate PPE and observing hygiene requirements and make appropriate arrangements for supplying food and water to the kitchens for the workers in isolation. Further information is provided by WHO in Home care for patients with suspected novel coronavirus (COVID-19).
Labor camps	Close working and living conditions of workforce may create conditions for the easy transmission of	Develop contingency plans with arrangements for accommodation, care and treatment for: • Workers self-isolating • Workers displaying symptoms • Getting adequate supplies of water, food and supplies



COVID-19 and the infection of large numbers of people.

Contingency plans also should consider arrangements for the storage and disposal arrangements for medical waste, which may increase in volume and which can remain infectious for several days (depending upon the material).

Ensure medical facilities are stocked with adequate supplies of medical PPE, as a minimum:

- ✓ Gowns, aprons
- ✓ Medical masks and some respirators (N95 or FFP2)
- ✓ Gloves (medical, and heavy duty for cleaners)
- ✓ Eye protection (goggles or face screens)

Medical staff at the facilities should be trained and be kept up to date on WHO advice and recommendations on the specifics of COVID19

The medical staff/management should run awareness campaigns and posters on site advising workers:

- how to avoid disease spread (cough/sneeze in crook of elbow; keep 1m or more away, sneeze/cough in tissue and immediately through tissue away, avoid spitting, observe good hygiene)
- the need to regularly wash hands with soap and water many times per day
- to self-isolate if they think they may have come in contact with the virus
- to self-isolate if they start to display any symptoms, but alert and seek medical advice

Wash stations should be provided regularly throughout site, with a supply of clean water, liquid soap and paper towels (for hand drying), with a waste bin (for used paper towels) that is regularly emptied.

Wash stations should be provided wherever there is a toilet, canteen/food and drinking water, or sleeping accommodation, at waste stations, at stores and at communal facilities. Where wash stations can not be provided (for example at remote locations), alcohol-based hand rub should be provided.



Enhanced cleaning arrangements should be put in place, to include regular and deep cleaning using disinfectant of catering facilities/canteens/food/drink facilities, latrines/toilets/showers, communal areas, including door handles, floors and all surfaces that are touched regularly (ensure cleaning staff have adequate PPE when cleaning consultation rooms and facilities used to treat infected patients)

Worker accommodation that meets or exceeds IFC/EBRD worker accommodation requirements (e.g. in terms of floor type, proximity/no of workers, no 'hot bedding', drinking water, washing, bathroom facilities etc.) will be in good state for keeping clean and hygienic, and for cleaning to minimize spread of infection.

To minimize pressure on PPE resources: WHO advice on the effectiveness and use of PPE by general public should be followed to ensure that the supplies are not exhausted through ineffective use — this is equally important on construction sites.

Other measures (such as working water sprinkling systems at crushers and stock piles, covered wagons, water suppression or surfacing of haul roads etc.) should be used for dust suppression on site before relying upon the use of dust masks (which could unnecessarily reduce the availability of N95/FFP2 masks for use by medical staff performing some duties)



APPENDIX 6:TYPE OF FIRES VIS-À-VIS FIRE EXTINGUISHERS

Fire / Fire Extinguisher	Water	Foam	CO ₂	Dry Powder	Multi- Purpose (ABC)
Originated from paper, clothes, wood	E	Е	Can control minor surface fires	Can control minor surface fires	E
Inflammable liquids like alcohol, diesel, petrol, edible oils, bitumen	G	E	E	E	E
Originated from gases like LPG, CNG, H ₂	G	G	E	Е	E
Electrical fires	G	G	Е	Е	Е

LEGEND: E : CAN BE USED

G : NOT TO BE USED



APPENDIX 7: LIST OF CONTENTS OF FIRST AID BOX

A.		For establishments in which the number of contract labour employed does						
		not exceed fifty, each first aid box shall contain the following equipment:						
	I.	6 small sterilized dressings.						
	ii.	3 medium size sterilized dressings.						
	iii.	3 large size sterilized dressings.						
	iv.	3 large sterilized burn dressings.						
	٧.	1 (30 ml) bottle containing a two percent alcoholic solution or iodine.						
	vi.	1 (30 ml) bottle containing savelatile having the dose and mode of administration indicated on the label.						
	vii.	1 snake bite lancet						
	viii	1 (30 gms) bottle of potassium permanganate crystals.						
	ix.	1 pair scissors.						
	x.	1 copy of the first aid leaflet issued by the Director General, Factory Advise						
		Service and Labour Institute, Government of Nepal						
	xi.	Ointment for burns.						
	xii.	A bottle of suitable surgical antiseptic solution.						
	Xiii	Note Book						
	Xiv	Cotton Wool						
B.		For establishments in which the number of contract labour exceeds fifty,						
		each first aid box shall contain the following equipment:						
	I.	12 small sterilized dressings.						
	ii.	6 medium size sterilized dressings.						
	iii.	6 large size sterilized dressings.						
	iv.	6 large size burn dressings.						
	٧.	6 (15 gms) packets sterilized cotton wool.						
	vi.	1 (60 ml) bottle containing a two percent alcoholic solution of iodine.						
	vii.	1 (60 ml) bottle containing savelatile having the dose and mode of						
		administration indicated on the label.						
	viii	1 roll of adhesive plaster.						
	ix.	A snake bite lancet						
	Χ	1 (30 gms) bottle of potassium permanganate crystals.						
	xi.	1 pair scissors.						
	xii.	1 copy of the first aid leaflet issued by the Director General, Factory Advise						
		Service and Labour Institute, Government of Nepal						
	xiii	Ointment for burns.						
	xiv	A bottle of suitable surgical antiseptic solution.						



APPENDIX 8: PART A - GRIEVANCE FORM

Complainant Name	
Contact Details	Address
	Contact No.:
Location of Complaint	
Details of Complaints	
Directions	
Confidentially Requested	Yes No
Signature of Complainant	Date:
Reference No.:	For official use only
Date Received:	For official use only
Complaint taken by:	For official use only
Complaint assigned	For official use only
Date of complaint Acknowledged:	For official use only
Complaint referred to	For official use only



PART B: FORMAT FOR GRIEVANCE REDRESSAL MECHANISM REGISTER

SI. No.	Name of the Complainant	Unique complaint number	Address & Contact No.	Gist of the Complaint	Forwarded to whom	Whether grievance redressed or not	If yes, Gist of disposal	If rejected, gist of reasons	If not attended reasons

PART C: MONTHLY STATUS REPORT ON GRIEVANCE REDRESSAL

SI. No.	Name of the unit	No. of pending complaints at the end of previous month	No. of complaint received during the month	Action initiated during the month	Completed during the month	No. of complaint s pending at end of month	No. of grievance redressed	No. of dismissal	Total	Remarks

