1.1.1 SOP 1: Risk Management

Index No.	Head	Description
SOP_01.1	Purpose	To ensure EHS-related risks are managed in an effective manner and that EESL adopts a rigorous risk analysis process to
SOP_01. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, Solar Program Applicable to work sites throughout the country (Transportation, Warehouse, Local Storage, any Construction activity, and
SOP_01. 3	References	Guidance Note - IFC Available at: https://siteresources.worldbank.org/INTRANETENVIRONMENT/Resources/244351-1279901011064/Occ Accessed on November 2017. EHSS Manual
		The Health and Safety (Safety Signs and Signals) Regulations 1996 (http://www.hse.gov.uk/pUbns/priced/l64.pdf)
SOP_01. 4	Hazard Mapping / Assessment	Risk from various activities under Transportation, Warehouse, Local Storage, Construction Site, and Installation and mai Building and Grounds Conditions – floors, walls, ceilings, exits, stairs, walkways, ramps, platforms, driveways, aisles Chemicals – storage, handling, transportation, spills, disposals, amounts used, labelling, toxicity or other harmful effects, clothing and equipment, hazard communication requirement Electricity – equipment, switches, breakers, fuses, switch-boxes, junctions, special fixtures, circuits, insulation, extension compliance Evacuation Plan – establish and practice procedures for an emergency evacuation in response to a fire, chemical/biologic: procedures and routes, critical plant operations, employee accounting following an evacuation, rescue and medical duties Fire Prevention – extinguishers, alarms, sprinklers, smoking rules, exits, personnel assigned, separation of flammable ma fixtures in hazardous locations, waste disposal, training First Aid Program/Supplies – medical care facilities locations, posted emergency numbers, accessible first aid kits Hand and Power Tools – purchasing standards, inspection, storage, repair, maintenance, grounding, use, handling Heating and Ventilation – type, effectiveness, temperature, humidity, controls, natural and artificial ventilation, exhaustin Housekeeping Program – waste disposal, tools, objects, materials, leakage and spillage, cleaning methods, schedules, wo areas, remote areas, storage areas Lighting – type, intensity, controls, conditions, diffusion, location, glare and shadow control Machinery – points of operation, flywheels, gears, shafts, pulleys, key ways, belts, couplings, sprockets, chains, frames, c exhausting, feeding, oiling, adjusting, maintenance, lockout/tagout, grounding, work space, location, purchasing standard Maintenance – provide regular and preventive maintenance on all equipment used at the worksite, record all wor
		 properly care for and service the equipment Personnel – training, including hazard identification training; experience; methods of checking machines before use; type storage; work practices; methods for cleaning, oiling, adjusting machinery Processing, Receiving, Shipping, and Storage – equipment, job planning, layout, heights, floor loads, projection of material training for material-handling equipment Provide Personal Protective Equipment (PPE) – type size maintenance repair age storage assignment of responsibility
		training in care and use, rules of use, method of assignment
SOP_01. 5	Incident Categorization (may be Classification/ levels)	 Transportation – motor venicle sarety, seat belts, venicle maintenance, safe driver programs Classification of Risk based on the significance and frequency of occurrence: Risk management processes, including identification and evaluation, at EESL and EESL operations shall meet requireme Assessment and Management of Social and Environmental Risks and Impacts. This includes: having an effective management system in place appropriate to the nature and scale of EESL operations and comr and impacts; identifying and evaluation of risks within the area of influence of EESL operations; Identifying risks related to all stages of the operation lifecycle including pre-construction, construction, operation the identification process will be consistent with international good practice and will determine the appropriate at consideration of emissions of greenhouse gases and potential transboundary effects (e.g. pollution of air or interr process; development of an action plan; Establishing and managing a programme of mitigation and performance improvement measures and actions that risks and impacts
SOP_01. 6	Suitability and Intended use of the activity, tool or material	Applies to: (i) all activities as identified in SOP 01.4 ii) all emergency cases predicted during hazard mapping

make informed and proactive decisions
d Installation and maintenance activities)
cupationalHealth.pdf
intenance:
, warning signs, supervision, training, protective
ns, tools, motors, grounding, national electric code
al incident, bomb threat; include escape
s, ways to report emergencies aterials and dangerous operations, explosion-proof
ng ork
controls, lighting for tools and equipment, brakes,
med on the machinery and train personnel to
e of clothing to be worn; use of guards; tool
ials, material handling and storage methods,
y, purchasing methods, standards observed,
ents of the IFC Performance Standard 1 –
mensurate with the level of its sustainability risks
ns, and decommissioning or closure. The scope of nd relevant methods and assessment tools; national waterways) during the identification
address the identified social and environmental
ement or verify monitoring activities; and g basis.

Index No.	Head	Description
SOP_01. 7	General Operating Procedures and Best Practices	 Most of the procedures suggested in current SOPs will fall in this Each EESL operation shall ensure that it complies with the requirements of this standard. Performance against the require periodically, documented and, where required, reported to EESL. The evaluation of performance shall include, as a mini Stakeholders/ sub-contractors have been identified and engaged with; Both corporate and programs EHS risk registers are in place and these have been reviewed and updated; EHS Manager at the operation level has been assigned with ultimate responsibility and accountability for EHS r Risk assessments are conducted, documented, available and accessible; Risk assessments are reviewed by competent personnel; An action plan is in place to implement control measures where these have been identified; Hazards, Risks and control measures have been communicated to affected personnel;
SOP_01. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices
SOP_01.9	Compliance to regulations/permits	Fire NOC, Building Permit, Trade License, Requirements under Disaster Management Plan and other permits depends on
SOP 01.10	Safety Precautions	Implementation of recommendations as under Disaster Management Plan (DMP) / as applicable
SOP_01. 11	Emergency Preparedness and Response (including PPE/First aid)	Ensure the availability of first Aid Kits on Site and in Inspection Vehicles Contact List of Health units, Rescue Vehicles within easy reach of all sites
SOP_01. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	NA
		 Problem of the series of the se
		Image: Corrosive material Image:

rements of this Standard shall be assessed imum, confirmation that:

isk management issues;

site location

orage, PPEs, Restricted areas etc.:

Index No.	Head	Description
SOP_01. 14	Details on competent users	This SOP is to be used by EESL site teams for all projects, Regional Manager and Contractors, vehicle operators, distribut
SOP_01. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction Site
SOP_01. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Reg Contact Details, as applicable from time to time), EHSS Officials:
SOP_01. 17	Inspection Procedures and Documentation Required	 Internal Audit (Monthly): (Risk Assessment Reports on Site) Site engineer, Contractor - Interview with site employees, D on site. The disaster management report shall be prepared and made available on site, as applicable. The training to the enwell aware about the potential risks during the activity DOCUMENTS: (i) Risk Assessment Report, Disaster Management Plan, Emergency Response Plan and Protocols (ii) List of subcontractor address, telephone number, and name of contact person, (iii) Training Records (iv) mock-drill plans and records v) Record
SOP_01. 18	Disposal of scraps and process wastes	As per above procedures & agreed Contract Conditions Suitable receptacles shall be kept on site with signages, without hindrance to movement or traffic; for segregated storage of Materials
SOP_01. 19	Site management	 HOUSEKEEPING STANDARDS (Cover all the aspects as per checklist in SOP_01.4) A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its final inspection. B. Protection and Control: 1. Fire Protection (a) Store volatile waste removed during final cleaning in covered metal conta with local, state and central regulations. (b) Gasoline and fuel oil storage facilities shall be located offsite and maintained regulations. 2. Pollution Control: Conduct clean up and disposal operations as required by local, state and central regulations. C. Cleaning Materials: 1. Use only cleaning materials recommended by manufacturer on surfaces to be cleaned., 2. Use cl recommended by the cleaning material manufacturer. D. Scope of Final Clean-Up: 1. General (a). Use experienced workers or professional cleaners for final cleaning activities, rejects and wastes; 2. Remove grease, dirt, dust, stains, labels, fingerprints and other foreign materials from interior and er marred surfaces to match surfaces to adjacent finishes, 4. Clean surfaces of equipment; remove excess lubrication. 5. Clean foreign matter and debris from footpaths, drainage systems and dispose in appropriate points suggested by the local body waste containment at disposal points 7. Remove waste, debris and surplus materials from site. Clean grounds; remove stai areas and sweep clean. Rake clean other exterior surfaces.
SOP_01. 20	Info and Instructions to be passed on to Communities	 To Alert on various equipment, sharps, wires abandoned on site To be aware of the risks associated with project activities Special issues in case of emergencies Suggested Grievance Reporting Mechanisms, To be aware of assembly points and emergency response protocols to be followed.
SOP_01.21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website, Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017 Version 3: This version, updated for new program on February 19 2021

ion and installation teams

s for Contractors Personnel, drivers, labours on

gional Managers, Site Supervisors (to Give

Discussions on risk assessment reports availability nployees and contractors are provided and they are

ors and major material suppliers including s of communication with external agency

of different types of wastes and construction

respective contract work immediately before

ainers and remove from premises in accordance in full compliance with local, state and central

leaning materials only on surfaces and as

, (b) Maintain clean work spaces without sharps, xterior surfaces, 3. Repair, patch and touch up an light fixtures and lamps., 6. Remove waste, in closed/covered containers. Ensure proper ins, spills and foreign substances from paved

1.1.2 SOP 2: Waste Management

Index No.	Head	Description
SOP_02. 1	Purpose	To set out a procedure for disposal of waste from transportation, warehousing, installation and maintenance, and site based sound manner by complying with regulatory requirements.
SOP_02. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to installation/work sites, warehouses, operation and transportation vehicles throughout the country
SOP_02. 3	References	 CPCB Guidelines/Rules on hazardous waste/ e-waste/ solid waste/ Construction & Demolition Waste/ Batteries Waste m for Management of Hazardous and Other Wastes Available at: <u>https://cpcb.nic.in/rules/, https://cpcb.nic.in/rules-2/, https://cpcb.nic.in/e-waste/, https://cpcb.nic.in/displaypdf.php?id=d2FzdGUvQyZEX3J1bGVzXzIwMTYucGRm, https://cpcb.nic.in/uploads/hwmd/battery%20management%20&%20handling%20rules%202001.pdf and https://cpcb.nic Accessed on February 2021,</u> EHSS Manual
SOP_02. 4	Hazard Mapping / Assessment	Hazards from Handling of waste, transportation of waste, storage conditions, disposal protocols and regulations; Broken LED during transportation, Vehicle Accidents, Waste generation from faulty LED, maintenance of DG set, sewag Generation of Hazardous wastes (due to mercury/heavy metals/toxic gas content of old lamps), Generation of hazardous v rags, Generation of e-waste from broken/faulty/old LED lamps, Electric Meters, PV panels while replacement/installation at Solar sites, Waste Generation of end of life Lead Acid Batteries/other batteries at sites, Potential generation of excavate metals, cables, insulations, plastic, other demolished utilities if any, removal of parts of existing structures etc.
SOP_02. 5	Incident Categorization (may be Classification/ levels)	NA
SOP_02. 6	Suitability and Intended use of the activity, tool or material	Applicable to waste generations from i) Transportation, ii) Storage & handling (sites, stores, warehouse and kiosks), iii) comaintenance activities ((a) prevention; (b) minimization; (c) reuse, (d) recycling; (e) recovery, utilization including co-processing; (f) safe dispo
SOP_02. 7	General Operating Procedures and Best Practices	 A. Procedure for Key Waste Handling and Disposal The procedure for disposal of few key waste categories are described here. These are e-waste (dismantled street lights/rep However, it is the responsibility of the EHSS department/Regional heads/EHSS Officers to ensure that all applicable was manner. i) Collection, transportation, storage, and disposal of e-waste (dismantled street lights/replaced bubs/ replaced meters) The following procedure has been extracted from regulatory requirements, national and state level guidelines. The follow At the assembly point where the replacement of lights/meters/PV Panels is taking place, there must be designated luminaries and old/replaced e-wastes & batteries. The damaged and undamaged wastes should never be collected While transporting these wastes from the assembly points to the warehouse, it must be stored separately (covered materials. At the warehouse there must be designated area for storing different wastes (separate for hazardous materials), and wastes must be maintained. There must be adequate PPEs provided to the workers engaged in the collection, storage, loading and unloading w toxic materials. Warehouse must have adequate ventilation arrangement to prevent the accumulation of any toxic gases from the d There must be a legal agreement for the safe disposal or recycling of hazardous waste material between the vendo recycling/disposal units. The management must ensure that all the necessary records are maintained as per the applicable Waste Management Wastes (Management and Transboundary Movement) Rules, 2016, e-waste Management Rules 2016.
		 ii) Collection, transportation, storage, and disposal of used oil The following procedure has been extracted from regulatory requirements, national and state level guidelines. The follow Only authorized and trained personnel must remove used oil from the DG sets The used oil should be stored in separate containers, meant for the purpose. Storage in inappropriate containers sh The used oil should be stored in a cool, shady place, away from smoking areas, sources of ignition and fire

l activities under the programs in an environmental

nanagement as well as on Water Pollution - Rules

c.in/water-pollution/ respectively.

ge generation from warehouse/kiosks; waste in the form paint/ solvent container and , leakage/seepage of battery acids during handling ed soil, demolition waste, waste wood, waste

onstruction, iv) distribution, installation and

sal.))

blaced bulbs/ replaced meters) and used oil. tes/hazardous waste is disposed of in an authorized

ring steps must be followed: storage boxes/areas for collecting the damaged in the same area/box. manner) and should not be mixed with other waste d segregation between damaged and undamaged work to prevent the exposure of workers with the lamaged bulbs/tubes/etc. r and the SPCB authorized hazardous waste ent Rules including the Hazardous and other

ing steps must be followed:

ould be strictly avoided

Index No.	Head	Description
		 There must be a legal agreement for the safe disposal or recycling of hazardous waste material between the vendor recycling/disposal units. Only SPCB authorized vendors should transport the used oil from one location to another
		The management must ensure that all the necessary records are maintained as per the Hazardous and other Wastes (Mana 2016
		 <u>Measures to be taken in case of hazardous oil spill - T</u>he following measures must be taken in the case of a hazardous oil Assess the spill and categorize as major (>=500 ml) or minor (<500 ml). For minor spill, the following remedial action spills, external experts must be summoned with the help of EHSS department/representatives. Inform the site representative and EHS coordinator immediately. Cordon off the area (preferably using warning tape) and establish a no-smoking/fire zone in the vicinity Use appropriate Personal Protective Equipment and ensure that oil does not enter storm water drains, rivers or run If the spill has occurred on soft ground, dig the contaminated earth and refill with fresh earth. Bund the area of spill immediately using sand, cloth, or other appropriate material, as per availability on site. The used absorbent material (contaminated earth, cloth, cotton, or sand) should be treated as hazardous waste and
		B. Non-hazardous waste segregation
		In EESL's office and project operations, significant quantities of non-hazardous waste are also generated. This waste cor glass cover, plastic parts, broken glasses, wires, paper, food, cloth, packing materials etc. Due to the large scale of the pro- high and it needs to be disposed or recycled in an environmentally sound manner.
		i) Collection, Transportation, Storage, and Disposal of non-hazardous waste
		The following procedure has been extracted from regulatory requirements, national and state level guidelines and industr
		 be followed: At the assembly point, there must be separate and designated storage boxes for collecting different category of nor replacement process. Different category of wastes (e.g. Organic, Metallic, Plastic etc.) should not be mixed and sh generated at the site. The color of the boxes for storing hazardous and non-hazardous waste must be different, and workers must be awa
		 While transporting these materials from the assembly points to the warehouse, it must be stored separately to avoid At the warehouse there must be designated area for storing non-hazardous materials and ensure segregation betwe There must be adequate PPEs provided to the workers engaged in the collection, storage, loading and unloading w pieces/sharps present in the waste. There must be a legal agreement for the safe disposal or recycling of waste material (as applicable under various waste)
		 It should be ensured by the Regional EHS coordinator and labour contractor that no waste is being disposed at the must be brought back to the warehouse and then sent for the recycling or disposal via approved vendors.
		E-waste Ensure that e-waste generated by them is channelized to authorized collection centre (s) or registered dismantler (s) or reservices provided by the producers;
		Maintain records of e-waste generated by them in Form 2 (e-waste Management rules 2016), as applicable;
		 BATTERIES WASTE MANAGEMENT Ensure that used batteries are disposed of only through dealer/manufacturer/registered recycler/importer/recondition File half-yearly return in Form VIII to the SPCB (as applicable)
		 <u>Handling Batteries and Managing Waste Batteries</u> Use of Lead acid batteries may pose major source of toxic and hazardous substances. They contain sulphuric acid toxic. Damaged Lead-acid Batteries shall be removed and stored safely. Batteries should be checked for any leakages during routine maintenance. Leaking batteries shall be drained and a
		 In case of any spillage, remedial action to be taken in consultation with site authorities with immediate information should be used and exposure to dust as well as vapor should be prevented. Spills (Acids) should be neutralized as controlled. The area should be cleaned, and the clean-up residues should be disposed off in a safe manner. Intact or drained batteries shall be stored indoors avoiding heat and rain. Waste Batteries shall be sent for recycling.

r and the SPCB authorized hazardous waste

agement and Transboundary Movement) Rules,

l spill: ons can be implemented by the site team. For major

into the sea.

be disposed in the applicable manner.

nsists of the metal body parts of luminaries, roject, the quantity of the waste generated is

try best practices. The following steps must

n-hazardous waste generated during the hould not be mixed with the hazardous waste

are to store the replaced items in the correct boxes. id any mixing at the warehouse. een different types of wastes. work to prevent the injuries from the broken

waste management rules) between the vendor and

assembly point. Entire waste generated at the site

ecycler (s) or is returned to the pick-up or take back

ioned or at the designated collection centres.

that is corrosive and lead plates that are highly

acid to be stored in containers safely. on. The area should be barricaded, appropriate PPEs possible, and the spread of spill should be

ng in registered recycling units.

Index No.	Head	Description
SOP_02.8	Use, Storage of Tools and Records Maintenance	Records to be maintained at Regional Office of EESL and site offices, Submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices
SOP_02.9	Compliance to regulations/permits	All permits and regulations for generation, handling, transportation and disposal of waste
SOP_02.10	Safety Precautions	Handling of waste, transportation of waste, storage conditions, disposal protocols and regulations
SOP_02. 11	Emergency Preparedness and Response (including PPE/First aid)	Ensure the availability of first Aid Kits on Site and in Inspection Vehicles Contact List of Health units, Rescue Vehicles within easy reach
SOP_02. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	NA
SOP_02. 13	Signage systems and symbols or coding	Health Hazard Flame Exclamation • Carcinogen • Mufagenicity • Reproducts Toxicity • Repr
SOP_02. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors, waste transportation and disposal contractors
SOP_02. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Procedures, Discussions & format instructions for Con
SOP_02. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Re Details, as applicable from time to time), EHSS Officials:
SOP_02. 17	Inspection Procedures and Documentation Required	Internal Audit (Monthly): (Waste Generation Log on site) Site engineer, Contractor – Interview/Interaction with site emp management records and reports availability on site. The waste management report availability on site. The training to the are well aware about the potential risks during the handling and storage and transportation protocols for various types of responsibilities; DOCUMENTS: (i) Waste classification report, Waste generation reports, Disaster Management Plan, Emergency Response Plan and Prot Dealers selected by Local Body and major material suppliers including address, telephone number, and name of contact p Total number of luminaries/batteries/electronic items replaced at the assembly point/site and the number of luminaries ge SPCB authorization for Hazardous waste generation, storage, & disposal, vi) Total quantity of waste stored in the warehot for reuse, recycle and disposal, categorized as per type of waste, vii) Records of the work permit issued by the EHS coord disposed hazardous waste and appropriate forms maintained in line with relevant waste management rules., ix) Annual re Half-yearly return in Form VIII to the SPCB, xi) E-waste generation record in Form 2, xii) Agreement with the PCB auth unit, xiii) Records of the injuries to the workers during the waste segregation, storage, loading and unloading process.

ctors;

tractors Personnel,

egional Managers, Site Supervisors (to Give Contact

bloyees, Discussions on waste generation and e employees and contractors are provided and they wastes and disposal requirements and

tocols (ii) List of subcontractors, Local Body, Scrap person, (iii) Training Records; iv) Daily/Periodic etting damaged during the changing process, v) ouse on each day and the percentage of waste sent dinator issued at the site, viii) Manifest (Form-13) of eturn (Form-iv) to SPCB by 30th June each year x) horized hazardous waste recycling/ reuse/ disposing

Index No.	Head	Description
SOP_02. 18	Disposal of scraps and process wastes	Waste Generation Records, Waste Segregation, Storage, and Disposal Plan (agency names and schedule of disposal)
SOP_02. 19	Site management	 HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its final inspection. B. Protection and Control: waste storage/treatment as per waste management plan/applicable rules. C. Pollution Control: Containment at storage locations, Spill prevention and clean-up plan. D. Scope of Final Disposal (solid/e-waste/hazardous/C&D wastes): to authorized agency/designated agency as per waste not storage agency agency/designated agency as per waste not storage agency agency/designated agency/de
SOP_02. 20	Info and Instructions to be passed on to communities	 To collect/handle, segregate, store, classify, transport, dispose the waste To ensure dedicated storage location for various types of waste Storage conditions and control measures for pollution prevention Final disposal plan / methodology
SOP_02. 21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website, Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017 Version 3: This version, updated on Feb. 19, 2021

respective contract work immediately before

management plan and institutional mechanism.

1.1.3 SOP 3: Fire and Emergency Procedures

SOP 03	Fire and Emergency Procedures	
Index No:	Head	Description
SOP_03.1	Purpose	To set out a procedure to establish the procedures to ensure safety of EESL operations from fire incidences
SOP_03. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable for installation work sites, warehouse and transportation vehicles throughout the country
SOP_03. 3	References	Guidance Note - IFC Available at: https://siteresources.worldbank.org/INTRANETENVIRONMENT/Resources/244351-1279901011064/Occ Accessed on November 2017; - EHSS Manual;
SOP_03. 4	Hazard Mapping / Assessment	Fire risk during Transportation, warehousing, temporary storage at kiosks, installation and maintenance activities and also of waste, and storage sites; Injury due to the accidental fire event; handling of broken lamps, Fire risk due to storage of diesel for the back-up DG set
SOP_03. 5	Incident Categorization (may be Classification/ levels)	 Fires are classified in the following categories: Class A Fires: Involving combustible materials of organic nature, such as wood, paper, rubber and many plastics etc. where the cooling of fires. Class B Fires: Involving flammable liquids, petroleum products or the like, where a blanketing effect is essential Class C Fires: Involving flammable gases under pressure including liquefied gases, where it is necessary to inhibit the burning gas at fast vaporising liquid for extinguishers Class D Fires: Involving combustible metals, such as magnesium, aluminium, zinc, sodium, potassium, etc. when the burning metals are agents and in certain cases to carbon dioxide balogenated hydrocarbons and ordinary dry powders
SOP_03. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites, transportation vehicles, waste storage and transportation activity, installation and maintenance site
SOP_03.7	General Operating Procedures and Best Practices	Most of the procedures suggested in current SOPs will fall in this
SOP_03.8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices
SOP_03. 9	Compliance to regulations/permits	All permits and regulations: The following IS and BIS standards* and codes should be adhered: - 1641:1988 – Code of practice for fire safety of buildings (general): General principles of fire grading and classification - 2171:1999 – Specification for portable fire extinguishers, dry powder (cartridge type) - 2546:1974 – Specification for galvanized mild steel fire buckets - 2878:2004 – Fire extinguisher, carbon dioxide type (portable and trolley mounted) – specification - 4308:2003 – Dry chemical powder for fighting B and C class fires - specification - 7673:2004 – Firefighting equipment - 10204:2001 – Specification for portable fire extinguisher, mechanical foam type - 14609:1999 – Dry chemical powder fighting A, B, C class fires – specification - IS 2190:2010 – Selection, installation and maintenance of first aid fire extinguishers – code of practice - IS 15683: 2006 – Portable fire extinguishers – performance and construction
SOP_03.10	Safety Precautions	Detection and Prevention mechanism in place; Warehouse Plan - to keep the DG set fuel away from all electrical equipment and sockets, providing space for equipment emergency response procedures;

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from Handling of waste, transportation
effect of water is essential for extinction
t rate with an inert gas, powder or
reactive to water and water containing
3
as per Fire NOC obtained and

SOP 03	Fire and Emergency Procedures	
Index No:	Head	Description
SOP_03. 11	Emergency Preparedness and Response (including PPE/First aid)	 Depending on the size of the facility, locality and type of work being undertaken, the requirement of firefighting equipment facilities to obtain No Objection Certification from the state or local Fire Department. This certification prescribes the apprinstalled at the facility. These could include: Fire hose reel Fire extinguishers Sand buckets Fire extinguishers are the most common type of firefighting equipment being installed at office facilities, warehouses and based on the type of fire hazard, as depicted below: Class A fires – Water, foam, ABC dry powder and halocarbons Class B fires – Foam, dry powder, clean agent and carbon dioxide Class D fires – Extinguishers with special dry powder for metal fires; Fire Prevention – extinguishers, alarms, sprinklers, smoking rules, exits, personnel assigned, separation of flammable mexplosion-proof fixtures in hazardous locations, waste disposal, training
SOP_03. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	 Placement of the extinguishers at appropriate locations and heights Identification of a fire safety team, comprising of security guards and fire marshals (typically employees comprising of E nominated people from other departments) Training and capacity building of fire safety team on the usage of fire extinguishers. External training must be sought for equipment Mock drills to train employees on emergency evacuation Regular inspection of fire extinguishers to identify leakage, discharge, breakage, etc. Refilling them wherever required

ent changes. It is essential for all propriate firefighting equipment to be

nd sales offices. They should be selected

aterials and dangerous operations,

EHSS department personnel at site and

r all security guards on the usage of these

SOP 03	Fire and Emergency Procedures	
Index No:	Head	Description
SOP_03.13	Signage systems and symbols or coding	Fire and Emergency
		Slide Door Slide Door Fire Break Emergency Emergency Emergency Emergency Emergency Use Stairs Left Right Glass Ambulance Access Access 2 Exit Exit 2 in Fire
		Fire Ladder Arrow Indicating Indicating You are Emergency Emergency Fire Fire Hydrant Arrow Arrow 2 Here Exit 3 Exit 4 Extinguisher
		Emergency Call 911 Fire Fire Alarm Fire Hose Fire Axe Fire Fighting Alarm Phone Phone 2 Extinguisher Call Point Equipment
		Fire Alarm Manual Smoke Fire Fire Air Vents Don't Go Don't use activating Detector Sprinkler Sprinkler 2 Conditioni Back the Elevator
		🛞 😪 🛞 🛞 🛞 🛞 🛞
		No Fire Radiation Non-ionisi Explosives Toxic Gas Medical Flammable Comburent Dangerous Hazard Radiation Waste Material Chemical
		Corrosive Noise Be Careful Harmful
		Material Suffocation Goods
SOP_03. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors, waste transportation and disposal contra
SOP_03. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction
SOP_03. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Re Give Contact Details, as applicable from time to time), EHSS Officials:
SOP_03. 17	Inspection Procedures and Documentation required	 The following general safety precautions must be ensured to avoid fire accidents: Smoke only in designated areas. Extinguish matches, tobacco products and place them in approved containers Close containers of flammable liquids when not in use Only operate equipment that you have been trained on. Before operating new equipment, read the instructions careful In case of emergency evacuation, do not panic or run. Do not use elevators. Use the staircase to evacuate and stand in the site EHSS coordinator or security supervisor to resume work In case you spot fire first, inform the site EHSS supervisor or security and sound the emergency alarm Follow the precautions issued by the local government in case of earthquake or other natural disasters
SOP_03. 18	Disposal of scraps and process wastes	Waste Generation Records, Waste Segregation, Storage, and Disposal Plan (agency names and schedule of disposal) sha flammable wastes from site (preferably within 1 hour of generation). Leave fire exits free of wastes
SOP_03. 19	Site management	 HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its before final inspection. B. Protection and Control: waste storage as per waste management plan C. the fire prevention and control measures as covered in SOP 03.11 and SOP 03.17;

actors;

ons for Contractors Personnel, egional Managers, Site Supervisors (to

Illy In the safe assembly area till instructed by

all be in place. Quick removal of

s respective contract work immediately

SOP 03	Fire and Emergency Procedures			
Index No:	Head Description			
		D. OHS Training to be part of the training provided to all workers		
SOP_03. 20	Info and Instructions to be passed on to communities	Fire risks from the facility, the evacuation plan, emergency information and signal types and meaning, emergency response		
SOP_03. 21	Amendment Record (Version No: Link)	Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017		
		Version 2: Previous version as updated during Nov, 2017;		
		Version 3: This version, updated on Feb 19, 2021		

se and control provisions on site;

1.1.4 SOP 4: Electric Safety

SOP 04	Electrical Safety			
Index No:	Head	Description		
SOP_04. 1	Purpose	To set out a procedure to establish the procedures to ensure safety of EESL operations from electrical risks (electrical haz		
SOP_04. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable mainly to installation and maintenance works on sites in SLNP, SMNP & Decentralized Solar program and p storage activities in all the applicable programs throughout the country.		
SOP_04. 3	References	 IFC - Environmental, Health, and Safety (EHS) Guidelines EHSS Manual; Controlling Electrical Hazards - OSHA 3075 The Health and Safety (Safety Signs and Signals) Regulations 1996 (http://www.hse.gov.uk/pUbns/priced/l64.pdf) 		
SOP_04. 4	Hazard Mapping / Assessment	Electric risk during installation and maintenance activities on site, from electrical installations in the warehouse and kiosl		
SOP_04. 5	Incident Categorization (may be Classification/ levels)	Burns, shocks and electrocution;		
SOP_04. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs;		
SOP_04. 7	General Operating Procedures and Best Practices	 Workers may get exposed to safety hazards from contact with live power lines during on-site work. The prevention and c lines/cables includes: Only trained/certified workers shall be allowed to install, maintain, or repair electrical equipment. Deactivate and properly ground live power cables before work is performed on, or in close proximity to the lines. Ensure that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standa transmission or distribution systems shall: Distinguish live parts from other parts of the electrical system. Determine the voltage of live parts. Understand the minimum approach distances outlined for specific live line voltages. Ensure proper use of special safety equipment and procedures when working near, or on, exposed energized parts of an evorker is properly insulated from the energized or conductive part even if properly trained unless: The worker is properly insulated from the energized part with gloves or other approved insulation; The energized part is properly insulated from the worker and any other conductive object; or The worker is properly isolated and insulated from any other conductive object (live-line work); Strict procedures for de-energizing and checking of electrical equipment shall be in place before any maintenance work electrical installations should be moved or insulated to minimize the hazardous effects; In order to protect workers from electric shock in case of a faulted circuit to conductive equipment, all non-curren together with a conductor of sufficient size. The impedance of the complet ground-fault circuit (phase conductor and bo sufficient flow of ground-fault current for fast operation of the proper circuit ground-fault circuit phase to the state to the interview of the electric utility company to report fallen electrical lines, § Stay wires during on-site activities. If working at heights		
SOP_04. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, Submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices		
SOP_04. 9	Compliance to regulations/permits	All permits and regulations: Indian Electricity Act 2003 Indian Electricity Rules 2005		

zards can cause burns, shocks and electrocution)

partly applicable to warehouse and temporary

ks;

control measures associated with live power

ards. Qualified or trained employees working on

n electrical system

x is conducted. If de-energizing is not possible,

nt carrying conductive components must be bonded onding conductor) should be low enough to ensure ntial for stray ground currents on solidly touch even if it is down or appears to be insulated. at least 10 feet (3 meters) away from overhead e presence of overhead wires. § Never operate nt to ensure that they are in good condition and free

SOP 04	DP 04 Electrical Safety			
Index No:	Head	Description Avoid working during rains, 'Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas), and education / public outreach to prevent public contact with potentially dangerous equipment; ·Grounding conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock - Detection and Prevention mechanism in place; Other precautions are mentioned in SOP 04.7;		
SOP_04. 10	Safety Precautions			
SOP_04. 11	Emergency Preparedness and Response (including PPE/First aid)	Employees who work directly with electricity should Use the personal protective equipment required for the jobs they per This equipment may include rubber insulating gloves, hoods, sleeves, matting, blankets, line hose, and industrial protective hazard. All help reduce the risk of electrical accidents.		
SOP_04. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Audit for faulty cables and electrical equipment; Conducting detailed identification and marking of all buried electrical w		
SOP_04. 13	Signage systems and symbols or coding	Buddy system for working at heights; Signages for public during the installation and maintenance plan; Image: signages for public during the installation and maintenance plan; Signs for marking obstacles and dangerous locations Image: signages for marking obstacles and dangerous locations Image: signages for marking obstacles and dangerous locations Image: signage for marking obstacles Image: signage for marking obstacle		
SOP_04. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors		
SOP_04. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction		
SOP_04.16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Re Contact Details, as applicable from time to time), EHSS Officials:		
SOP_04. 17	Inspection Procedures and Documentation required	Preventive maintenance at Warehouse/Kiosks; The inspection reports to be in place with Corrective actions and preventive		
SOP_04. 18	Disposal of scraps and process wastes	NA		



SOP 04	Electrical Safety	
Index No:	Head	Description
SOP_04. 19	Site management	 HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its final inspection; B. Protection and Control: risk areas demarcation, avoid; C. Prevention and control measures also in line with points as covered in SOP 03.11 and SOP 03.17; -Marking all energized electrical devices and lines with warning signs ·Locking out (de-charging and leaving open with a (warning sign placed on the lock) devices during service or maintenance ·Checking all electrical cords, cables, and hand power tools for frayed or exposed cords and following manufacturer reco voltage of the portable hand tools ·Double insulating / grounding all electrical equipment used in environments that are, or may become, wet; using equipmer circuits ·Protecting power cords and extension cords against damage from traffic by shielding or suspending above traffic areas ·Appropriate labelling of service rooms housing high voltage equipment ('electrical hazard') and where entry is controlle Siting, and Design); ·Establishing "No Approach" zones around or under high voltage power lines ·Rubber tired construction or other vehicles that come into direct contact with, or arcing between, high voltage wires may hours and have the tires replaced to prevent catastrophic tire and wheel assembly failure, potentially causing serious injurt ·Conducting detailed identification and marking of all buried electrical wiring prior to any excavation work
SOP_04. 20	Info and Instructions to be passed on to communities	Emergency response plan, electrical safety instructions on the cables, transformers sets and other installations outside the contact with these equipment, emergency information and signal types and meaning, emergency response and control pro-
SOP_04. 21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website, Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021

s respective contract work immediately before

a controlled locking device) and tagging-out

ommendations for maximum permitted operating

nent with ground fault interrupter (GFI) protected

ed or prohibited (see also Section 3 on Planning,

y need to be taken out of service for periods of 48 rry or death;

e site/work boundary where people can come in ovisions on site

1.1.5 SOP 5: Work at Height and Fall Prevention

SOP 05	Work at Height and Fall Prevention		
Index No:	Head	Description	
SOP_05.1	Purpose	To set out a procedure to prevent injury and property damage when conducting work at height.	
SOP_05. 2	Coverage: Program / Region	SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM (as case may be) Applicable mainly to installation and maintenance works on sites in SLNP program throughout the country;	
SOP_05. 3	References	IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual;	
SOP_05.4	Hazard Mapping / Assessment	Risk related to fall from height during installation and maintenance activities on site,	
SOP_05. 5	Incident Categorization (may be Classification/ levels)	High - due to potential risk involved	
SOP_05. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs for installations and maintenance	
SOP_05. 7	General Operating Procedures and Best Practices	The following precautions are to be taken: Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area Proper use of ladders and scaffolds by trained employees ·Use of fall prevention devices, including safety belt and lanyard hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or sel to fixed anchor point or horizontal life-lines ·Appropriate training in use, serviceability, and integrity of the necessary PPE ·Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall Prior to initiating work, the equipment and location must be verified for safety and appropriateness using the following step - For all work of more than 1 day in duration, a systematic verification of the satisfactory implementation of this procedure frequency appropriate the duration and risk of the task. - On completion of the work it must be formally verified by a Competent Person, that the work place has been left in a satis safely returned from the workplace. Note: 1.Many accidents occur because floor gratings have been removed and not replaced, or superfluous materials are left in ele Hazards 2.Any site, Poles, Towers where the work is to be executed should be ensured free from fall risks.	
SOP_05. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices	
SOP_05.9	Compliance to regulations/permits	The Public Liability Insurance Act, 1991, amended 1992 - for compensations to victims; February 2009, the National Policy on Safety, Health and Environment at Work Place; and other rules & regulations as app	
SOP_05. 10	Safety Precautions	Fall prevention and protection measures should be implemented whenever a worker is exposed to the hazard of falling mo into water or other liquid; into hazardous substances; or through an opening in a work surface. Fall prevention / protection measures may also be warranted on a case-specific basis when there are risks of falling from 1	

d travel limiting devices to prevent access to fall f retracting inertial fall arrest devices attached os must carried out by Competent Person, at a sfactory condition and that all persons have evated positions causing slip, trip and fall

blicable from time to time.

re than two meters; into operating machinery;

sser heights.

SOP 05	Work at Height and Fall Prevention	Description	
Index No:	Head		
SOP_05. 11	Emergency Preparedness and Response (including PPE/First aid)	 Install fall protection devices such as full body harnesses; Usage of the approved (type and rating) fall protection equipment is mandatory. Fall Protection Equipment must be inspected by the user & trained person daily. Double hook full body Safety harnesses that have been used in a fall arrest situation must be withdrawn from service and Records of the results of thorough examinations must be kept on site Lifelines fall arrestor used for the attachment of Double hook full body Safety harnesses must be: Horizontal lifelines must be made of steel rope 12 mm diameter (min) Installed at waist height or above Tensioned by use of a turnbuckle or similar Designed to support the maximum number of workers Securely anchored at both ends with triplicate wire rope clamps at points able to withstand the dynamic load generated by All lanyards must be made of flame resistant materials. Inertia reels may be used to enable more safe movement around comparisons. 	
SOP_05. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Monthly Safety Audits at installation site;	
SOP_05. 13	Signage systems and symbols or coding	Buddy system for working at heights; Signages for public during the installation and maintenance plan; Signs for marking obstacles and dangerous locations The state of the st	
SOP_05. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors	
SOP_05. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions Safety procedures for working at confined spaces, safety procedures for handling of hazardous materials; Use of suitable masks for reducing exposure to dust emissions and toxic fumes on site; Providing training to the workers for handling hazardous material and exposure to toxic gases	
SOP_05.16	Duties / Responsibilities	EESL: Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Regional Managers, Site S applicable from time to time), EHSS Officials	

nd not reused/issued until after a full examination.
by a fall l certain areas.
ons for Contractors Personnel,
e Supervisors (to Give Contact Details, as

SOP 05	Work at Height and Fall Prevention	
Index No:	Head	Description
SOP_05.17	Inspection Procedures and Documentation required	The inspection of procedures, PPEs, Usage and Trainings on site; Incident Reporting Records, Event Logs, PPE inventory, Work plan, Manpower details to be maintained by safety officer;
SOP_05. 18	Disposal of scraps and process wastes	NA
SOP_05. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its respective contract work immediately b final inspection; B. Protection and Control: risk areas demarcation, follow the safe work procedures and close out;
SOP_05. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provisions on site;
SOP_05. 21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website, Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021

espective contract work immediately before ons on site;

1.1.6 SOP 6: Portable Tools and Equipment

SOP 06	Portable Tools and Equipment		
Index No:	Head	Description	
SOP_06. 1	Purpose	To describe the steps while using, maintaining and storing portable tools and portable equipment	
SOP_06. 2	Coverage: Program / Region	SLNP, SMNP, Decentralized Solar and UJALA Applicable for all activities throughout the country;	
SOP_06. 3	References	 IS/ISO 6789 (2003): Assembly tools for screws and nuts – Hand torque tools – Requirements and test methods for deal and recalibration procedure IS 841:1983 – Specification for steel hammers IS 844:1979 (Part 1, 2 & 3) – Technical supply conditions, dimensions, dimensions for screw drivers for recessed here is 2027:1992 – Spanners and sockets – width across flats IS 6131:1980 – Technical requirements for hand operated wrenches (spanners) and sockets IS 6586:1989 – Claw hammers – specification IS 9065: 1979 – Specification for Aluminum hammers IS 12453:1988 – Specification for nut drivers EHSS Manual 	
SOP_06. 4	Hazard Mapping / Assessment	Hazards during the use of tools and equipment;	
SOP_06. 5	Incident Categorization (may be Classification/ levels)	Medium to High - due to various types of tools and equipment involved	
SOP_06. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs;	
SOP_06. 7	General Operating Procedures and Best Practices	 All tools and equipment will be maintained in good working condition and have current certificates & calibration as requ Equipment and tools used on site (by EESL employees or contractors) will be inspected on a daily basis by the site super Equipment and tools approved by the supervisor on a daily basis can only be used Any tool or equipment that is found to be unsafe or not in safe working condition must immediately be set aside for servi Only the right tools should be used for the job Users of tools must have received training on the tools they are meant to use. The training has to be provided by the super Tools and equipment must be disconnected prior to service or maintenance Contractors and sub-contractors (irrespective of levels of sub-contracting) must take ownership of the hand tools provide of the tools 	
SOP_06. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices; PPEs and Tools associated with the procedures to be stored at Site Offices	
SOP_06.9	Compliance to regulations/permits	The Public Liability Insurance Act, 1991, amended 1992 - for compensations to victims; February 2009, the National Policy on Safety, Health and Environment at Work Place;	

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ice, repair or replacement

ervisor or safety in charge of that programme

ed by them and be responsible for the safe upkeep

SOP 06	Portable Tools and Equipment				
Index No:	Head	Description			
SOP_06. 10	Safety Precautions	 Personal protective equipment approved for the selected hand tools must be used while operating with the hand tools All portable electrically powered tools need to be grounded and insulated to prevent electrical shock Power tools should not be lifted or carried using its cord Pocket knives, utility knives, swiss knives or any other self-assembled tools shall not be used for stripping wires All fuel powered tools shall be stopped and disconnected at the time of refueling, servicing and maintaining Safety goggles with side shields should be used to prevent eye injuries from particles/pieces Sharp edges of the tools should be covered with appropriate material prior to storage Tools should not be modified informally, extended, sharpened or twisted in an unauthorized manner While drilling, cutting, striking or breaking, it should be ensured that any electrical wiring in the vicinity, especially wiring 			
		not live -Special safety requirements while using striking tools or hammers: o Always hit with a striking face of the hammer o Do not modify the hammer on your own o Ensure that if the hammer head is loose, please set it aside and use an alternate hammer o Choose the appropriate hammers for drilling nails or strike steel or concrete chisels o The striking face must not be cracked or mushroomed, as there is a likelihood of the hammer chipping, leading to small p			
SOP_06. 11	Emergency Preparedness and Response (including PPE/First aid)	First Aid Program/Supplies – Medical care facilities locations, posted emergency numbers, accessible first aid kits; Provide Personal Protective Equipment (PPE) – type, size, maintenance, repair, age, storage, assignment of responsibility, purchasing methods, standards observed, training in care and use, rules of use, method of assignment;			
SOP_06. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Monthly Safety Audits at installation site;			
SOP_06. 13	Signage systems and symbols or coding	Signage system to be in place for storage of tools, usage areas, list of Dos and Don'ts at work areas, markings on tools/equ			
SOP_06. 14	Details on competent users	This SOP is to be used by EESL site teams, safety officer, Regional Manager and Contractors			
SOP_06.15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction			
SOP_06.16	Duties / Responsibilities	EESL: Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Regional Managers, Site from time to time), EHSS Officials			
SOP_06. 17	Inspection Procedures and Documentation required	The inspection of procedures, PPEs, Usage and Trainings on site; Incident Reporting Records, Event Logs, PPE inventory, Work plan, Manpower details to be maintained by safety officer;			
SOP_06. 18	Disposal of scraps and process wastes	NA			
SOP_06. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its r inspection; B. Protection and Control: risk areas demarcation and follow the safe work procedures			
SOP_06. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provision			
SOP_06. 21	Amendment Record (Version No:, Link/Info)	 Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021 			

og that can come in contact with the hand tool is
particles moving around the place
nment
phiene
s for Contractors Personnel,
Supervisors (to Give Contact Details, as applicable
espective contract work immediately before final
ns on site:

1.1.7 SOP 7: Traffic Safety

SOP 07	Traffic Safety		
Index No:	Head	Description	
SOP_07. 1	Purpose	To set out a procedure to be adopted by the site management team to ensure the safe and efficient movement of traffic and construction sites.	
SOP_07. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to vehicles at installation work sites, warehouse and transportation vehicles throughout the country	
SOP_07.3	References	IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual;	
SOP_07.4	Hazard Mapping / Assessment	Hazard to workplace from heavy vehicles and access roads traffic, hazard to community	
SOP_07.5	Incident Categorization (may be Classification/ levels)	High	
SOP_07. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs - During transportation, loading-unloading at warehouse/storage kiosks and also installation/maintenance sites;	
SOP_07. 7	General Operating Procedures and Best Practices	 I) Traffic at Construction Site: All construction workers should be provided with high visibility jackets with reflective tapp or either above or under right-of-way. The conspicuity of workmen at all times shall be increased so as to protect from spe Warn the road user clearly and sufficiently in advance. Provide safe and clearly marked buffer and work zones Provide adequate measures that control driver behaviour through project's operational zones. Traffic nanagement plans shall include provision for traffic diversion and selection of alternative routes for transport of e out road widening before commencement of works to accommodate the extra load The primary traffic control devices used in work zones shall include signs, delineators, barricades, cones, pylons, pavemet 2) Traffic on Roads: In EESL operations, there are projects which require workers to undertake work on/beside roads where roads, street roads and roads in commercial and residential areas. Therefore, it is extremely important to follow this SOP for on roads Traffic cones of 500mm, 750mm and 1000mm high and 300mm to 500mm in diameter or in square shape at base and are have retro-reflectorized red and white band shall be used wherever required. Drums about 800mm to 1000mm high and 300mm in diameter can be used either as channelizing or warning devices. The being formidable objects and therefore command the respect of drivers. Full hight fence, barriers, barricades etc. shall be erected around the site in order to prevent the working area from the ris movement. In the same way barricades rote. the road users from the dager due to equipment and other temporary struct. All barricade register in site. The contractor shall not undertake loading and unloading at carriageways obstructing the free flow of vehicular traffic and contractor applying the excuse of work execution. The contractor shall nesure the cleanliness of roads and footpaths by deploying pro	

also to ensure the safety of workmen at

the traffic of construction vehicles at the

es as most of viaduct /tunnelling and station works eeding vehicular traffic.

quipment. If necessary, the contractor shall carry

nt markings and flashing lights.

re traffic flow is ongoing. This could include main or reducing traffic related accidents while working

often made of plastic or rubber and normally

ese are highly visible, give the appearance of

k of accidents due to speedy vehicular tures falling off from height. I condition and also Barricade in-charge

l encroachment of existing roads by the

actor shall have to ensure proper sweeping, ing disposal of sewerage.

SOP 07	Traffic Safety			
Index No:	Head	Description		
SOP_07.8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices; PPEs and Tools associated with the procedures to be stored at Site Offices		
SOP_07. 9	Compliance to regulations/permits	The motor vehicle act 1988 and its amendments till date; The National Road Safety Policy; Vehicle Safety Standards; and other relevant/local rules and regulations at concerned areas; The Public Liability Insurance Act, 1991, amended 1992 - for compensations to victims; February 2009, the National Policy on Safety, Health and Environment at Work Place; Pollution Under Control Certificate; Vehicle Maintenance Plan with Manufacturer Authorized Service Stations receipts,		
SOP_07. 10	Safety Precautions	 General Safety: driving safety, traffic rules, vehicle maintenance routine, community areas, accident preventions measur vehicles, construction vehicles with speed restrictions and work procedures, trained drivers for each activity; Traffic Management: Traffic management plans shall include provision for traffic diversion and selection of alternative routes for transport of e out road widening before commencement of works to accommodate the extra load The primary traffic control devices used in work zones shall include signs, delineators, barricades, cones, pylons, paveme 		
SOP_07.11	Emergency Preparedness and Response (including PPE/First aid)	Accident response plan, first aid procedures, rescue operations plan, data of nearest hospitals on the vehicle route (Contact Coverage)		
SOP_07. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Monthly Safety Audits of vehicle contractors and drivers; PUC Check of vehicles; Drivers trainings schedule and vehicle		
SOP_07. 13	Signage systems and symbols or coding	Signages for vehicle parking, moving, no-parking areas, traffic flow direction, work-in-progress instructions, congestion ar Management Plan: showing vehicular movement, parking space for vehicle to avoid honking and idling Signs for marking o Signs for marking o		
SOP_07.14	Details on competent users	This SOP is to be used by EESL site teams and Contractors,		
SOP_07. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction Provide Training for Drivers: trainings to drivers on precautions to be taken while driving near the sensitive areas (school, zones etc.), Vehicle to operate avoiding night time operation near residential areas and traffic congestion time on busy rout		

ares by speed limits and lane restrictions for heavy equipment. If necessary, the contractor shall carry ent markings and flashing lights. t Details, Emergency Numbers, Insurance maintenance program; reas, signal system for traffic control; Warehouse ns for Contractors Personnel, residential area, eco-sensitive areas, no-honking tes

SOP 07	Traffic Safety	
Index No:	Head	Description
SOP_07.16	Duties / Responsibilities	EESL: Unit Head (SLNP, UJALA, SMNP, DECENTRALIZED SOLAR PROGRAM); Respective Regional Managers, Site Supervisors (Give Contact Details), E Officials, Traffic controller;
SOP_07. 17	Inspection Procedures and Documentation required	Vehicle inspection for emissions, maintenance records, traffic routes, selection of optimized routes by transportation vehicle, fuel consumption trends; Vehicle records, Registrations, Insurance, Driver details, PUC records
SOP_07. 18	Disposal of scraps and process wastes	NA
SOP_07.19	Site management	NA
SOP_07. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provisions on site;
SOP_07. 21	Amendment Record (Version No:, Link/Info)	 Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021

te Supervisors (Give Contact Details), EHSS

1.1.8 SOP 8: Personal Protective Equipment

Personal Protective Equipment (PPEs)	
Head	Description
Purpose	To set out a procedure to describe the requirements of Personal Protective Equipment (PPE) for the on-site operations. The purpose of this Standard is to describe the requirements of Personal Protective Equipment (PPE) for the on-site operation person at work which protects them against one or more risks to their health and safety.
Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to vehicles at installation work sites, warehouse and transportation vehicles throughout the country
References	 IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual; - OSHA Personal Protective Equipment (PPE) Standards - OSHA Safety and Health Topic "Personal Protective Equipment" - OSHA Technical Manual, Section VIII: Personal Protective Equipment - NIOSH Safety and Health Topic: "Protective Clothing and Ensembles" - OSHA 29 CFR 1926.1050Stairways and Ladders - OSHA Non Mandatory Compliance Guidelines for Hazard - Assessment and Personal Protective Equipment Selection 1910 Subpart I App B - NIOSH Personal Protective Equipment Checklist
Hazard Mapping / Assessment	At all workplaces (Installation sites, warehouse and kiosks and waste handling on vehicles) Hazard assessment shall be con- required for general hazards associated with UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM; PPEs shall based hazards as well
Incident Categorization (may be Classification/ levels)	High
Suitability and intended use of the activity, tool or material.	 Applicable to all sites under the programs; To be able to choose the right type of PPE, the hazards involved in the task or work environment shall be carefully considered the individual. The following factors should be considered when assessing the suitability of PPE: Is the PPE appropriate for the risk involved and conditions at the place where exposure may occur? e.g. goggles are not sue. Does the PPE prevent or adequately control the risks involved without increasing the overall risk? e.g. gloves should not be increased risk of entanglement Can the PPE be adjusted to fit the wearer correctly? e.g. if a person wears glasses, ear defenders may not provide a proper - Has the state of health of those using it been taken into account? What are the needs of the job and the demands it places on the wearer? How long will the PPE need to be worn? What are communication? If more than one item of PPE is being worn, are they compatible? For example, does a particular type of respirator make it
General Operating Procedures and Best Practices	 Safety requires proper planning of work, proper usage of safety tools, exercise of good judgment and intelligent supervision accidents are preventable. Working unsafely such as throwing materials or tools, at another worker should be prohibited. The safety devices and special tools: Safety Helmets, Gloves; Safety Belts; Well supported ladders; Hand Tools kit; Safety Shoes Personal protective equipment is available for different purposes and to protect various functions of the human body. It is extype. The following PPE have been suggested keeping EESL's operations in mind: Hearing Protection: There are three main types of hearing protection: earmuffs/defenders, which completely cover the earplugs, which are inserted into the ear canal, Semi-inserts (also called canal-caps), which cover the entrance to the ear of Hearing protection must be worn by anyone who is likely to be exposed to noise at or above the Exposure Action Level set 2005.
	Personal Protective Equipment (PPEs) Head Purpose Coverage: Program / Region References Incident Categorization (may be Classification/ levels) Suitability and intended use of the activity, tool or material. General Operating Procedures and Best Practices

ons. PPEs are intended to be worn or held by a

nducted separately. In addition to the PPEs l be chosen to take care of special location / activity

red by EESL. PPE must also meet the needs of

uitable when full-face protection is required be worn when using a pillar drill, due to the

seal to protect against noise hazards

the requirements for visibility and

difficult for eye protection to fit properly?

n. Experience proves that majority of the he following are the minimum requirements of

ssential to pick the appropriate PPE for the hazard

ear, canal. by The Control of Noise at Work Regulations

SOP 08	Personal Protective Equipment (PPEs)	
Index No:	Head	Description
		 -industrial safety helmets (hard hats), which are designed to protect against materials falling from height and swinging objec - industrial scalp protectors (bump caps), which are designed to protect from knocking against stationary objects - caps/hair nets, which protect against entanglement Tasks where head protection may be required include: - construction, · building repair, · work in excavations and tunnels, · work with bolt driving tools - driving motorcycles and all-terrain vehicles, etc. Turban-wearing Sikhs are exempt from the requirement to wear hard hats
		 3) Eye protection There are several types of eye protection: -safety spectacles: these are similar to regular glasses but have a tougher lens. They can include side shields for additional p eye shields: a frame-less one-piece moulded lens, often worn over normal prescription glasses safety goggles: these are made with flexible plastic frames and an elastic headband face shields: heavier and bulkier than other type of eye protector, face shields protect the face, but do not fully enclose the gases. Tasks where eye protection may be required include: handling hazardous substances where there is a risk of splashing
		- work with power driven tools where materials are likely to be propelled
		 4) Foot protection There are a number of types of safety footwear: - safety boots or shoes. Normally have steel toe-caps but can have other safety features (e.g. steel mid-soles, slip resistant s - Wellington boots, which can be supplied with steel toe-caps - anti-static and conductive footwear. These protect against the build-up of static electricity. Tasks where foot protection building repair, manual handling where there is a risk of heavy objects falling on the feet, work in extremely hot or cold envise a risk of slipping that cannot be avoided or controlled by other measures, attention must be given to the slip resistance of sworn.
		 5) Hand and arm protection: Hand and arm protection comes in a variety of forms, including: gloves and gauntlets (leather, nitrile, latex, plastic coated, chain mail, etc.) - wrist cuffs and armlets, e.g. used in glass cutting and handling - barrier cream may sometimes be used, where gloves cannot practicably be used. Tasks where hand and arm protection ma abrasive, sharp or pointed objects, work with vibrating equipment such as pneumatic drills and chainsaws, construction and hazardous substances (e.g. bodily fluids) and work with hot or cold materials.
		 6) Body protection: Types of body protection include: overalls, aprons and coveralls (protection against hazardous substances) clothing for cold, heat and bad weather high visibility clothing (e.g. jackets, vests) harnesses back supports life jackets.
		 7) Respiratory protection There are two main types of respiratory protective equipment: respirators that filter contaminated air or clean it as it is breathed in respirators that supply clean air from an independent source.
		Work with harmful dusts, fumes, vapours can require respiratory protective equipment. Tasks where respiratory protection substances, work in areas where large amounts of nuisance dust is present, work that creates dust (e.g. disc cutters) Special Tools:
		 Well protected Hand tools Well supported ladders for Work at height
1		

cts

s on construction sites by virtue of The

protection.

ne eyes so do not protect against dusts, mists or

soles, insulation against heat and cold)

on may be required include: construction, demolition, nvironments, work with chemicals and forestry. If there soles and replacement before the tread pattern is overly

ay be required include: the manual handling of d outdoor work, work with chemicals and other

n may be required include; work with harmful

SOP 08	Personal Protective Equipment (PPEs)				
Index No:	Head	Description			
		Objective	Workplace Hazards	Suggested PPE	Table: Summary of Recommended PPEs according to Hazard Reference: International Finance Corporation (IFC). 2007. En
		Eye and face protection	Flying particles, molten metal, liquid chemicals, gases or vapors, light radiation.	Safety Glasses with side-shields, protective shades, etc.	Available at : https://www.ifc.org/wps/wcm/connect/9aef2880 Occupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPI Accessed on: 30 November 2017
		Head protection	Falling objects, inadequate height clearance, and overhead power cords.	Plastic Helmets with top and side impact protection.	Table 2.7.1. Summary of Recommended PPEs according to H
		Hearing protection	Noise, ultra-sound.	Hearing protectors (ear plugs or ear muffs).	
		Foot protection	Falling or rolling objects, pointed objects. Corrosive or hot liquids.	Safety shoes and boots for protection against moving & talling objects, liquids and chemicals.	
		Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures.	Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.	
		Respirator protection	 Dust, fogs, fumes, mists, gases, smokes, vapors. 	Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.	
			Oxygen deficiency	Portable or supplied air (fixed lines). On-site rescue equipment.	
		Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and laceration.	Insulating clothing, body suits, aprons etc. of appropriate materials.	
				2) (ž.	
	maintenance	 An effective sy manufacturer's n Maintenance m repairs must only The costs assoc Worn out or ine Employer shall Storage for PPE It is very impor Where PPE is p footwear or cloth to the Client in d Accommodatio Storage should 	stem of maintenance naintenance schedul ay include; cleaning be carried out by c iated with the main effective PPEs shall maintain additional tant to appropriately provided, adequate s ning). PPEs and Too uplicate n may be simple (e. be adequate to prote	e of PPE is essential to e (including recommer g, examination, replace ompetent personnel. tenance of PPE are the be replaced at the earli spares (at least 10 pero y store PPE to ensure th torage facilities for PPI ls associated with the p g. pegs for safety helm ect the PPE from conta	make sure the equipment continues to provide the degree of prot aded replacement periods and shelf lives) must always be followed ment, repair and testing. The wearer may be able carry out simple responsibility of the EESL/ contractor. est. cent of actual required stock) on site. hey can be used for a long time E must be provided for when it is not in use, unless the employee procedures to be stored at Site Offices. Records to be maintained ets) and it need not be fixed (e.g. a case for safety glasses or a co mination, loss, damage, damp or sunlight.
SOP_08. 9	Compliance to regulations/permits	Each EESL oper periodically, doc - Correct usage o - EHS officers ar - The EHS mana - Awareness shal	ation shall ensure th umented and, where of PPE for different the aware of the hazan ger has the ultimate I be created among	at it complies with the e required, reported to I types of work carried o rds related to the work responsibility for action the workers and the co	requirements of this Standard. Performance against the requirem EESL. The evaluation of performance shall include, as a minimum on the sites. and same is conveyed to the contractors. on tracking and close-out; ntractors via daily tool box meetings.

nvironmental, Health, and Safety (EHS) Guidelines 0488559a983acd36a6515bb18/2%2B PERES

lazard

otection for which it is designed. Therefore, the ved. le maintenance (e.g. cleaning), but more intricate

e may take PPE away from the workplace (e.g. at Regional Office of EESL and site offices, submitted

ontainer in a vehicle).

nents of this Standard shall be assessed im, confirmation that:

SOP 08	Personal Protective Equipment (PPEs)	
Index No:	Head	Description
SOP_08. 10	Safety Precautions	 Boots (outer), chemical-resistant steel toe and shank. Boot-covers, outer, chemical-resistant (disposable). Hard hat. Escape mask. Face shield. Level D - A work uniform affording minimal protection: used for nuisance contamination only Coveralls Gloves Boots/shoes, chemical-resistant steel toe and shank Boots, outer, chemical-resistant (disposable) Safety glasses or chemical splash goggles Hard hat Escape mask. Face shield
SOP_08. 11	Emergency Preparedness and Response (including PPE/First aid)	 First aid box containing antiseptic liquid and cream, bandage, cotton, painkiller pills. Quick to access On-call medical aid and transport to nearby hospital; Display of emergency numbers on site Trained First Aid Providers among works
SOP_08. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Monthly safety audit to ensure adequate PPEs are in place, training programs on PPE usage, Training to First Aid Providers If your workers refuse to wear the required PPE, they should be re-deployed to a less dangerous job or area, or if necessary should be at least as serious as other rule breaking. Contractual terms and conditions should treat failure to follow reasonable misconduct
SOP_08. 13	Signage systems and symbols or coding	Signages at workplace about suitable PPEs to wear, signages at PPE Storage areas THIS PROTECTIVE EQUIPMENT Were approximate the source of the approximate to the approximate t
SOP_08. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors
SOP_08. 15	Training needs	Initial training and engagement of workers on workers shall include (i) Consultation on the best PPEs (ii) Education on why Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions provided, employees must be provided with adequate information, instruction and/or training on its use. The extent of infor the complexity and performance of the kit. Information and instruction should cover: - the risk(s) present and why the PPE is needed - the operation (including demonstration), performance and limitations of the equipment

s and PPE maintenance records

disciplined. Disobeying safety instructions ble Health & Safety instructions as potential gross



v it's needed (iii) Given input on its use

s for Contractors Personnel where PPE is rmation, instruction and/or training will vary with

SOP 08	Personal Protective Equipment (PPEs)	
Index No:	Head	Description
		- use and storage (including how to put it on, how to adjust and remove it)
		- any user maintenance that can be carried out (e.g. hygiene/cleaning procedures)
		- factors that can affect the performance of the equipment (e.g. working conditions, personal factors, defects and damage)
		- how to recognize defects in PPE and arrangements for reporting them
		- where to obtain replacement PPE.
		In addition to initial training, refresher training may be required from time to time. Supervisor checks on the use of PPE ma
		required.
SOP_08. 16	Duties / Responsibilities	EESL: Unit Head - SLNP; Respective Regional Managers, Site Supervisors (Give Contact Details), EHSS Officials;
		The workers shall ensure that PPE provided is properly used.
		- PPE must be worn and used in accordance with the instructions provided to them
		- workers must take all reasonable steps to ensure that PPE is returned to the accommodation provided for it after it has been
		from the workplace e.g. footwear or clothing)
		- PPE must be examined before use, § any loss or obvious defect must be immediately reported to their supervisor, § emplo
		provided to them and not carry out any maintenance unless trained and authorized.
		While the responsibility of implementing the procedure lies on all EESL personnel, employees of the vendor, contractor and
		responsibilities have been allotted, keeping the significance of the standard in mind.
		1) EHSS department and Regional Teams
		Apart from the responsibility of implementing the entire EHSS manual and SOPs, the EHSS team has the following specific
		- Must ensure that appropriate PPEs are used for different types of work carried on the sites., § Should be aware of the haza
		the contractors.
		- Shall conduct surprise site inspections to assure the compliance with the appropriate use of PPEs., § Has the ultimate respo
		2) EHS Officer of Contractor
		Apart from the responsibility of implementing the entire EHSS manual and SOPs, the EHSS officer of the vendor/contracto
		responsibilities for this SOP
		- EHS officer must ensure that appropriate PPEs are used for different types of work carried on the sites., § EHS officer sho
		Awareness shall be created among the workers and the contractors via daily tool box meetings. 8 Must ensure that PPEs u
		not passed.
		- In case of non-compliance, the report should be made to EHS officer of EESL (Regional Team to ensure)., § Conduct regu
		appropriate use of PPEs
		3) Workers
		All workers have a duty to:
		- Follow instructions from EHS officer of contractor/ EESL.,
		- In case of any problem related to their PPE, workers should immediately inform to the EHS officer of contractor and get re
		worker to request new PPE§ Follow trainings and instructions (unless they think that would be unsafe, in which case they sl
SOP_08. 17	Inspection Procedures and Documentation required	The inspection reports to be in place with Corrective actions and preventive actions taken;
SOP_08. 18	Disposal of scraps and process wastes	There should be special suitably labelled storage receptacles on site and labor camps to dispose-off worn out or PPEs or Use
		(Receptacles themselves should not be an impediment to safety and should be kept away from circulation areas and emerge

ay help determine when refresher training is

en used (unless the employee may take PPE away byees must take reasonable care for any PPE

d their supply chain actors, specific

c responsibilities for this SOP rds related to the work and same is conveyed to

onsibility for action tracking and close-out;

or/sub-contractor has the following specific

ould be aware of the hazards related to the work and

used by workers are in good condition and expiry date is

alar checks twice a day to ensure compliance with the

eplacement. There should be facility on site for the hould seek further instructions before continuing)

and Throw PPEs ency ingress/egress)

SOP 08	Personal Protective Equipment (PPEs)	
Index No:	Head	Description
SOP_08. 19	Site management	HOUSEKEEPING STANDARDS
		A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its re
		inspection; No PPE shall be left around unattended at site in such a manner that it hampers the general work or community
		B. Protection and Control: risk areas demarcation, avoid;
		C. It is very important to appropriately store PPE to ensure they can be used for a long time
		- Where PPE is provided, adequate storage facilities for PPE must be provided for when it is not in use, unless the employed
		footwear or clothing).
		- Accommodation may be simple (e.g. pegs for safety helmets) and it need not be fixed (e.g. a case for safety glasses or a co
		- Storage should be adequate to protect the PPE from contamination, loss, damage, damp or sunlight.
SOP_08. 20	Info and Instructions to be passed on to	- Immediate host communities shall be informed about the type of hazards assessed for the site and the type of PPEs sugges
	communities	- Communities shall be advised top follow PPE protocols and use suitable PPEs while traversing near the work sites. They s
		suitable PPEs and where to access / buy these.
SOP_08. 21	Amendment Record (Version No:, Link/Info	b) Version 1: EHSS Manual of EESL, Available at EESL Website
		Accessed on October 2017
		Version 2: Previous version as updated during Nov, 2017;
		Version 3: This version, updated on Feb 19, 2021

espective contract work immediately before final safety.

e may take PPE away from the workplace (e.g.

ontainer in a vehicle).

sted for workers. shall be provided with the information on

1.1.9 SOP 9: Work Permit system

SOP 09	Work Permit system		
Index No:	Head	Description	
SOP_09. 1	Purpose	To ensure that a safe system of work has been defined for the task so that work may be accomplished in a legal, safe environ	
SOP_09. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to vehicles at installation work sites, warehouse and transportation vehicles throughout the country. It applies to demolition as well as non-routine high-risk process activities like electrical maintenance, and any non-routine activity in a h hazardous waste collection and storage area.	
SOP_09. 3	References	 - IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual; 	
SOP_09. 4	Hazard Mapping / Assessment	Hazard from working without authorization, working without training, the operation procedures of each equipment, unautho	
SOP_09. 5	Incident Categorisation (may be Classification/ levels)	High	
SOP_09. 6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs for specialized & non-routine works, as applicable from time to time.	
SOP_09. 7	General Operating Procedures and Best Practices	 Only persons who have been trained and authorised shall issue, authorize or accept Work Permit (WP). Only work, which is specified on the WP, shall be undertaken. For jobs of long duration, as far as practicable, the WP shall cover only a particular phase of the task at a time, that ca within the duration mentioned in the Permit. If work requires isolation across operating boundaries, a separate isolation WP shall be issued as evidence that the tast. The period of validity for a WP in defined areas within a site shall be the estimated time for the completion of the job, during which the Issuer / Eng. Officer is present at site. Work beyond this period shall be re-authorised by the respectijob location. An Acceptor needing to continue with the job into the next shift/period must be asked to contact the Issuing Plant in the extended provided that no change has taken place in the conditions stipulated in the permit. The permit issued on a particular day may be extended, if required, only for the shifts on that particular day. For work on the next day(s) a fresh permit shall be issued. In accepting a WP the Acceptor must: a) understand the isolations/preparations made c) visit the Site with the issuer/cogineering officer if necessary d) sign the permit and retain the first COPY Special hot work precautions: Special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) should be implemented if weld established welding work stations, including 'Hot Work Permits, stand-by fire extinguishers, stand-by fire watch, and maintai welding or hot cutting has terminated. Special procedures are required for hot work on tanks or vessels that have contained for onfined space: is one that also contains physical or atmospheric hazards that could trap or engulf the per enclosed or open structures or locations. Serious injury or fatality can result from inadequate preparation	

nmentally acceptable and efficient way.

all installation, storage, construction, igh-risk area like fuel storage area or

rized access to site;

in be fully specified and to be completed

k can proceed.

, but no more than 8 hours or the period ive Reliever(s) after re-assessment of the

he next shift and ensure the validity is

extending beyond the day and to continue

ling or hot cutting is undertaken outside ining the fire watch for up to one hour after lammable materials

erson. Confined spaces can occur in space or in attempting a rescue from a re, to the degree feasible, the existence and for venting, monitoring, and rescue cy and rescue operations. - Prior to entry

SOP 09	Work Permit system	
Index No:	Head	Description
		 The atmosphere within the confined space should be tested to assure the oxygen content is between 19.5 percent and 23 perc gas or vapor does not exceed 25 percent of its respective Lower Explosive Limit (LEL). If the atmospheric conditions are not met, the confined space should be ventilated until the target safe atmosphere is achie appropriate and additional PPE. Safety precautions should include Self Contained Breathing Apparatus (SCBA), life lines, the confined space, with rescue and first aid equipment readily available.
		Before workers are required to enter a permit-required confined space, adequate and appropriate training in confined space has necessary PPE, as well as the serviceability and integrity of the PPE should be verified. Further, adequate and appropriate reshould be in place before the worker enters the confined space.
		Lone and Isolated Workers A lone and isolated worker is a worker out of verbal and line of sight communication with a supervisor, other workers, or of assistance, for continuous periods exceeding one hour. The worker is therefore at increased risk should an accident or injury perform work under lone or isolated circumstances, Standard Operating Procedures (SOPs) should be developed and implem are in place before the worker starts work. SOPs should establish, at a minimum, verbal contact with the worker at least once capability for summoning emergency aid. If the worker is potentially exposed to highly toxic or corrosive chemicals, emerge be equipped with audible and visible alarms to summon aid whenever the eye-wash or shower is activated by the worker an
SOP_09. 8	Use, Storage of Tools and Records maintenance	 Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices
SOP_09. 9	Compliance to regulations/permits	As identified from time to time.
SOP_09. 10	Safety Precautions	 Fall prevention and protection measures should be implemented whenever a worker is exposed to the hazard of falling momentum machinery; into water or other liquid; into hazardous substances; or through an opening in a work surface. Fall prevention / protection measures may also be warranted on a case-specific basis when there are risks of falling from least the substance of th
SOP_09. 11	Emergency Preparedness and Response (including PPE/First aid)	 First aid box containing antiseptic liquid and cream, bandage, cotton, painkiller pills. Quick to access On-call medical aid and transport to nearby hospital; Display of emergency numbers on site Trained First Aid Providers among works, - PPEs for specialized job.
SOP_09. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	System Audit for checking effectiveness of the WP system It is very essential to understand the effectiveness of the work permit system and this can be achieved through regular system - The Site Safety representative or EHSS department shall conduct formal audit of WP system covering all defined areas at appropriateness and full compliance to all provisions of this Standard. - The audit shall be carried out using a checklist developed based on this Standard. Formal audit reports shall be prepared ar - The EHSS department head and project head shall personally carry out random checks of Work permits records.
SOP_09.13	Signage systems and symbols or coding	Signages various work permit requirements at certain location of workplace;
SOP_09. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors;
SOP_09.15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions

ent, and that the presence of any flammable

ved, or entry is only to be undertaken with , and safety watch workers stationed outside

azard control, atmospheric testing, use of the escue and / or recovery plans and equipment

ther persons capable of providing aid and occur. Where workers may be required to hented to ensure all PPE and safety measures be every hour, and ensure the worker has a gency eye-wash and shower facilities should d without intervention by the worker.

re than two meters; into operating

esser heights.

m audits. site, at least once in a month, to confirm its

nd appropriate corrective actions identified

for Contractors Personnel,

SOP 09	Work Permit system			
Index No:	Head	Description		
		 Responsibility for implementing the work permit system: While the responsibility of implementing the procedure lies on all contractor and their supply chain actors, specific responsibilities have been allotted, keeping the significance of the standard 1) Project head/in-charge/owner The project owner will have the following specific responsibilities Nominate managers (department or functional heads) who have authority to appoint persons who may issue or accept WP i Define the plant area boundaries within which their teams will issue WP Issue a register of any specific tasks exempted from this procedure in their areas of responsibility, after consultation with the managers Carry out random checks on WP issued 		
		 2) Vendor/Contractor Safety Representative The EHSS officer or the safety representative of the vendor/contractor should Be responsible for imparting the training on WP system and upkeep of the training packages. The training packages must be Conduct internal system audits on WP at least once two months and report findings to the management team at site. 		
		 3) Issuer of the Work permit should: Be responsible for determining the nature and extent of the job to be carried out, possible hazards and the necessary pretaken prior to issuing the permit, Ensure that necessary isolations are carried out, Provide acceptor with necessary Method Statements / Risk Assessments (where applicable) Take assistance of maintenance manager/officer in carrying out above responsibilities in case of an engineering job, § I precautionary measures are taken prior to authorizing the permit., For jobs directly under charge of the Issuer, the Issuer of WP shall: a) Select competent people for the job b) Be responsible for explaining the safe Work Method to the persons carrying out the job provide them with proper tools c) Be overall responsible for the job. 		
SOD 00.16		 4) Acceptor (& the Contractor Supervisor) of the Work Permit The acceptor of the work permit should Assist the issuer / maintenance officer in hazard identification and developing Method Statement (if required) Provide the issuer / maintenance officer the names of all persons carrying out the job Be responsible for explaining fully to his subordinates the nature of the hazards involved in carrying out the task and any may be in the area Ensure that the nature and extent of the work does not differ from that described in the permit and that all persons under labeled. 		
SOP_09.16 SOP_09.17	Inspection Procedures and Documentation	The fulfillment of the requirements during issuing work permit to be checked from time to time. The details of Work Permit		
SOP_09. 18	Disposal of scraps and process wastes	NA		
SOP_09. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its r final inspection; B. Protection and Control: risk areas demarcation, avoid		
SOP_09. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provision		
SOP_09. 21	Amendment Record (Version No, Link)	Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021		

l EESL personnel, employees of the vendor, l in mind.

in their areas of responsibility

he Safety representative and concerned

e based on this Standard.

recautionary measures to be

Ensure that necessary

s / PPE

y precautions necessary to protect others who his control understand the precautions that issued to be maintained.

respective contract work immediately before

ons on site;

1.1.10 SOP 10: Safe Lifting Operations

SOP 10	Safe Lifting Operations					
Index No:	Head	Description				
SOP_10. 1	Purpose	To ensure effective management on Lifting Operation and Lifting Accessories to minimize risk due to the material handling				
SOP_10. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to vehicles at installation work sites, warehouse and transportation vehicles throughout the country. It applies to a well as non-routine high-risk process activities like electrical maintenance, and any non-routine activity in high risk areas like and storage area				
SOP_10. 3	References	IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual;				
SOP_10. 4	Hazard Mapping / Assessment	Hazard from lifting operations				
SOP_10. 5	Incident Categorisation (may be Classification/ levels)	High				
SOP_10. 6	Suitability and Intended use of the activity, tool or material	 Applicable to all sites under the programs Any custom-made lifting device must be: Designed by a qualified person Designed with a safety factor of 5 Proof tested to 125% of rated capacity Marked with the rated capacity Certified by a competent body Inspected every 6 months 				
SOP_10. 7	General Operating Procedures and Best Practices	 1) Category of Lifting Operations: Lifting operations are categorized as routine operations if they involve the following: Regular shop floor material movement Fork-lift trucks in a warehouse Construction site hoist Mobile elevated work platform (MEWP) used for general maintenance A vehicle tail lift; 2) A risk assessment must be prepared for all lifting operations. For routine lifting operations an initial risk assessment and lifting plan is required but need not be repeated i.e. generic rist However, they must be subject to regular documented reviews (at least annually) to ensure that they are still valid. Every lifting operation is planned and controlled by the concerned supervisor who ensures that safe procedures are under lifting operation include the following: a) Identification of lifting operations to be performed and load characteristics; determine the load characteristics e.g. size. b) Making ample allowances for unknown factors, and determine the available capacity of the equipment being used difficult, safe load indicators of weighing devices must be fitted. It is equally important to rig the load so that it is state below the hook, the load will shift. Identification and positioning of equipment to be used: a) Determine lifting equipment position i.e. where it is to be sited to make the lift b) Determine suitability of ground to ensure equipment stability i.e. is the ground sufficiently competent to support t equipment and the load 				
SOP_10. 8	Use, Storage of Tools and Records maintenance	Records of testing of Lifting Tools and Accessories Safety and preventive Training Records. Records to be maintained at Regional Office of EESL and site offices, Submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices				

operation.

all installation, storage, construction, demolition as ke fuel storage area or hazardous waste collection

isk assessments and lifting plans may be used.

rtaken. Factors to be considered when planning

weight, centre of gravity, stability, and physical

d. In cases where the assessment of load weight is able. Unless the centre of gravity of the load is

the predicted ground loading imposed by the lifting

SOP 10	Safe Lifting Operations						
Index No:	Head Description						
		Handling and Storage of lifting devices: Proper handling of lifting devices is essential to ensure long-term usability of the equipment - Wire ropes must never be allowed to lie on the ground for any length of time or on damp or wet surface, rusty steel or nea clean dry place; wire rope slings must be cleaned after use, inspected and hung on pegs to prevent corrosion and kinking - Lifting accessories must be stored in conditions that do not lead to damage or deterioration.					
SOP_10. 9	Compliance to regulations/permits	As identified from time to time.					
SOP_10. 10	Safety Precautions	 Hire of Lifting Equipment and Services The following precautions must be taken while hiring equipment for lifting operations All mobile cranes and lifting equipment brought onto Site must have valid test certificates to demonstrate they have been in If lifting equipment of services are to be hired / purchased, responsibilities for supply of equipment, personnel and docume Slings must be hung up to prevent damage Chain blocks, turn buckles, chains and similar tackle should be hung up and Lightly oiled All rope must be kept away from flame cutting and electric welding operations Avoid contact between any sling and solvents and chemicals. Suitable precautions should be taken to prevent any sharp edges of loads coming into contact with slings Lifts utilizing cranes, hoists, or other mechanical lifting devices will not commence unless: An assessment of the lift has been completed and the lift method and equipment; Rigging of the load is carried out by a competent person; Lifting devices and equipment has been certified for use within the last six (6) months (at a minimum); Load does not exceed dynamic and/or static capacities of the lifting equipment; Any safety devices installed on lifting equipment are operational; All lifting devices and equipment have been visually examined before each lift by a competent person. 					
SOP_10. 11	Emergency Preparedness and Response (including PPE/First aid)	 Install fall protection devices such as full body harnesses; Usage of the approved (type and rating) fall protection equipment is mandatory. Fall Protection Equipment must be inspected by the user & trained person daily. Double hook full body Safety harnesses that have been used in a fall arrest situation must be withdrawn from service and n Records of the results of thorough examinations must be kept on site Lifelines fall arrestor used for the attachment of Double hook full body Safety harnesses must be: Horizontal lifelines must be made of steel rope 12 mm diameter (min), Installed at waist height or above Tensioned by use of a turnbuckle or similar, Designed to support the maximum number of workers Securely anchored at both ends with triplicate wire rope clamps at points able to withstand the dynamic load generated by a All lanyards must be made of flame resistant materials. Inertia reels may be used to enable more safe movement around cere 					
SOP_10. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Inspection every 3 months					
SOP_10. 13	Signage systems and symbols or coding	Signages for public during the installation and maintenance plan;					
SOP_10. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors					
SOP_10. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions					
SOP_10. 16	Duties / Responsibilities	While the responsibility of implementing the procedure lies on all EESL personnel, employees of the vendor, contractor and have been allotted, keeping the significance of the standard in mind. 1) Project head/in-charge/owner Ensures that the procedure is followed during Lifting Operation					

corrosive substances. They must be stored in a
spected before being allowed to operate on site. ntation must be agreed in the contract.
n;
ot reused/issued until after a full examination.
tall tain areas.
For Contractors Personnel,
their supply chain actors, specific responsibilities

SOP 10	Safe Lifting Operations					
Index No:	Head	Description				
		 2) EHSS Representative 2) EHSS Representative Apart from the responsibility of implementing the entire EHSS manual and SOPs, the following specific responsibilities shoteness that only trained personnel are engaged. Conducts awareness programme for the personnel engaged on such jobs Monitor and audit implementation of this procedure 				
		 3) Operational Managers / Maintenance Managers - Responsible for proper deployment of trained personnel. - Ensure proper lifting accessories are present. 				
		4) Competent Person Responsible for periodic checking of lifting tools and accessories as per legal requirement.				
		 5) Employees engaged in lifting operations must: Never put any part of their body under a suspended load, Never ride a load while it is being lifted, Be aware of suspended loads, signals of the operators and any lifting equipment supports, Use lifting equipment as instructed and report any defects 				
SOP_10. 17	Inspection Procedures and Documentation required	 Any new equipment that has not been used before are accompanied by a test certificate/declaration of conformity, we thorough examination (not more than 12 months previously) and specifying the Safe Working Load, prior to first us A thorough examination is to be performed following the repair or replacement of a structural component. All other lifting Equipment must undergo a thorough examination at least every 12 months. For passenger lift in Ad passenger lift is safe to use and that it receives periodic thorough examinations and inspections, in accordance with 14. Lifting accessories / attachments must be visually inspected on each occasion before use. 				
SOP_10. 18	Disposal of scraps and process wastes	NA				
SOP_10. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its res inspection; B. Protection and Control: risk areas demarcation, avoid				
SOP_10. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provision				
SOP_10. 21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021				

ould be undertaken

which confirms that the equipment has undergone a se.

dministrative Building, it is ensured that the local regulations.

spective contract work immediately before final

ns on site;

1.1.11 SOP 11: Safety Audit Procedure

SOP 11	Safety Audit Procedure					
Index No:	Head	Description				
		To describe safety audit for EESL onsite operations and for its office				
SOP_11.1	Purpose					
SOP_11. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to offices, vehicles at installation work sites, warehouse and transportation vehicles throughout the country.				
SOP_11. 3	References	IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual; OSHA Safety Audit Checklist - British Standards Institutions (BSI) – Occupational Health and Safety management System - International Organization for Standardization – Guidelines for auditing quality system and Environmental Management S - Workplace Regulations 1992				
SOP_11. 4	Hazard Mapping / Assessment	Hazard from unsafe procedures, Injury due to the accidental fire event; handing of broken lamps, Fire risk due to storage of due to storage of old LED/Other lamps which has potential for toxic release due to heavy metal and other hazardous materia				
SOP_11.5	Incident Categorisation (may be Classification/ levels)	High				
SOP_11.6	Suitability and Intended use of the activity, tool or material	Applicable to all sites under the programs;				
SOP_11. 7	General Operating Procedures and Best Practices	 Audit Types: Safety audit shall be done to ensure safety of workers and EESL employees. Two types of safety audit can lead to internal Audit External Audit Audit Requirements: The following requirements should be adhered to The EHS Officer shall ensure that periodic safety audits are conducted to verify that the system is working as planned and and targets. The Safety audits will be completed in accordance with the checklist attached. Auditors will conduct the safety audits using the audit guidelines. Auditors will record audit findings using notes, the internal audit report, and safety audit work sheet forms as appropriate. Each area supervisor will review audit findings: Develop corrective action or rebuttal to non-conformances. Implement response actions within one week of their submittal, unless circumstances specified in writing prevent such response actions reports. Summarize and present the results of the safety audits to management on a quarterly basis at the Management Review Boa Collect and file safety audit reports. Prior to an on-site audit, an auditor is to obtain copies of all documented procedures and training records and arrange a pre Each member of an audit team will meet once they have each completed their assigned audit task to compile all notes and a file safety officer will meet with the area supervisor to hand over the audit report and answer any questions he or she may 				
SOP_11. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, Submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices				
SOP_11. 9	Compliance to regulations/permits	NA				
SOP_11. 10	Safety Precautions	NA				
SOP_11.11	Emergency Preparedness and Response (including PPE/First aid)	NA				
SOP_11.12	Usage monitoring procedures (or protocol for replacement / refurbishment)	r Monitor the corrective actions; Monitor the effectiveness of the audit procedures Use Annex A: Inspection Checklist provided in EHSS: SOP 11				

System

diesel for the back-up DG set; Fire and hazards al content;

be conducted:

l is facilitating achievement of the EESL objectives

ponse.

ard meeting.

e-audit interview with the area supervisor. complete an audit report. v have at that time.

SOP 11	Safety Audit Procedure	
Index No:	Head	Description
SOP_11. 13	Signage systems and symbols or coding	NA
SOP_11. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors
SOP_11.15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions
SOP_11. 16	Duties / Responsibilities	 EHSS department EHS officer shall conduct safety audit for on-site operations every month and document it properly. EESL employees shall conduct monthly office inspection and findings shall be escalated to the higher management. EHS officer shall ensure that findings of both office inspection and on-site operations shall be followed and mitigated through the second statement of the second statement.
		 2) EHS Officer of Contractor - EHS officer of contractor shall conduct safety audit daily and document it. Immediate actions shall be taken for the finding - Every day before start of work, EHS officer shall ensure that findings of previous day are closed. - In case of any critical finding, EHS officer of contractor shall immediately inform EHS officer of EESL.
SOP_11. 17	Inspection Procedures and Documentation required	Inspection procedures for auditing methods and results; Inspection of corrective actions;
SOP_11. 18	Disposal of scraps and process wastes	NA
SOP_11. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its re- inspection; B. Protection and Control: risk areas demarcation, avoid;
SOP_11. 20	Info and Instructions to be passed on to communities	NA
SOP_11. 21	Amendment Record (Version No:, Link/Info)	Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021

for Contractors Personnel,
ugh appropriate measures.
8.
spective contract work immediately before final

SOP 11	Safety Audit Procedure							
Index No:	Head	Descript	ion					
SOP 11 – Annex A	Annexure A							
		Anne	ex A –Office Inspection Checklist				Fie	eld Visit
		This o	hecklist shall be completed by the EHS Officer; however, consideration should be	given t	to		5.4 Emergency Exit signs fu	Inctionin
		bring	ing a 'second set of eyes' on each audit.				5.5 Are office Emergency at	nd Contir
			Field Visit Review Ouestions	Yes	No	N/a		in contin
		10	HOUSEKEEPING					A
		1.1	Is the overall condition of the area neat/items not out where they present a hazard?				Date of Inspection:	Au
		1.2	Are cabinet tops free of stored items?				Office H&S Coordinator	
		1.3	Are heavier items are stored at bottoms of shelves or at "thigh height" where they can be more easily lifted?				Signature: Office Head Signature:	
		1.4	Are aisleways and emergency exits are free of obstruction?				<u> </u>	~
		1.5	Are floors are free of slip/trip hazards?				Other observations / Auditor's !	Notes / I
		1.6	Are cabinets/shelves are secure/anchored to prevent tipping or falling materials?				observations):	
		2.0	ELECTRICAL SAFETY					
		2.1	Are electrical plugs, outlets, and cords are in good condition and are not missing covers, taped or broken?				<u> </u>	
		2.2	If "power strips" are used, they are not overloaded or "daisy-chained?" (e.g., a power strip plugged into another power strip)					А
		3.0	FIRE SAFETY				Finding	
		3.1	Fire exits and escape routes are clear/free of obstruction.				(Please provide checklist ref.)	
		3.2	Has a fire drill been conducted (documented) this calendar year? If so, what was the date?					
		3.3	If space heaters are used, they are safely located (at least 12") away from combustible materials?					
		3.4	All portable fire extinguishers have been inspected (accessible and fully charged) and inspection documented?					
		4.0	ERGONOMICS/MATERIAL HANDLING					
		4.1	Are obvious ergonomic hazards (awkward postures) observed?					
		4.2	Dollies/carts are available for handling/moving heavy loads?					
		5.0	EMERGENCY PREPAREDNESS					
		5.1	Does the receptionist have a list of currently trained first responders? Is an					
		F 2	An adequate number trained in first aid/GPR (guidance 1 trained per 20 stari)					
		5.2	An office "evacuation" man is prominently nosted and includes emergency					
		5.5	phone numbers?					

t Review Questions			Y	es	No	N/a
ing properly?						
tingency plans availabl	le/post	ed and up to o	late?			2
udit Overview and A	pprova	al				
Office:						
' Photos / Additional c	ommer	nts (including	positive			
Audit Findings Actio	n Dlan					
Audit Findings Actio	n Plan					-
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget (date
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	date
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Ta	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Ta	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late
Audit Findings Actio Corrective Action	n Plan	Responsi	ble	Tai	rget o	late

1.1.12 SOP 12: Criteria for Selection of Warehouses

SOP 12	Criteria for Selection of warehouses	
Index No:	Head	Description
SOP_12. 1	Purpose	to describe the environment, health, safety and social aspects to be considered while selected temporary and permanent projection
SOP_12. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to warehouse selection throughout the country.
SOP_12. 3	References	IFC - Environmental, Health, and Safety (EHS) Guidelines - EHSS Manual; - The Warehouse (Development and Regulation) Act, 2007 - National Building Code of India, Part 4 (Fire and life safety)
SOP_12.4	Hazard Mapping / Assessment	Hazard from warehouse operations, Environmental sensitivities in the vicinity of selected site as per Table 5.3 and Table 5.4
SOP_12.5	Incident Categorisation (may be Classification/ levels)	High
SOP_12. 6 SOP_12. 7	Suitability and Intended use of the activity, tool or material General Operating Procedures and Best Practices	 Applicable to all warehouse locations under the programs; The warehouse should be constructed as per Bureau of Indian Standards The warehouse should have adequate number of firefighting extinguishers of appropriate type, fire buckets with sand and v Warehouse shall ensure that addresses and telephone numbers of Fire Station, Police Station and warehouseman shall be diemergency, the concerned authorities may be contacted without any delay Wherever material handling equipment are used the warehouse in charge shall maintain a list of equipment which require the same statement of the same shall be different or the same shall be different or the same shall be different or the same statement of the s
		 least once in a year by the approved calibration laboratories/institutions. A separate registrar for such equipment with details warehouses. A certificate of calibration for a particular equipment indicating the name of the calibrating agency, date of calimaintained in the file for records. In case of in house calibration, details of calibration procedure, error between standard proshould be maintained The warehouse in charge and other staff of the warehouse should get training on the basic principles and general procedure official from time to time shall ensure that all the firefighting equipment and devices installed in the premises are in working should be maintained in the warehouse and mock firefighting drills at frequent intervals should be carried out. Warehouses should have at least two separate entry/exit doors for evacuation of personnel in case of emergency. Both the downlocked at all times.
		 Adequate ventilation, along with emergency lights should be provided in the warehouse, § All warehouses must have an erprominent places inside and outside the warehouse: The warehouse in charge may choose to have different size depending upon span of warehouse for optimum space utilizati Stack plan shall be prepared in such a manner that the stacks shall not obstruct light and free flow of air into godowns. Bes covers for curative treatment. A minimum of 0.75 m wide space between stacks, 0.6 m between wall and stack and 1.20 m between door points as haulag purpose.
		 Stacking of commodities in bags / containers / packages shall be done in the identified stacks on a suitable available dunna wooden crates, poly pallets, etc. Stacks shall be built in straight line uniformly within the stack area earmarked by stack lines. Stack card with necessary entries shall be provided on every stack on haulage alleyways side Stack lines. Each stack shall be identified by drawing a 5cm width stack line in yellow or white colour on all four sides of the floor of t Each stack shall be given stack number neatly painted on the floor / wall / pillar in front of each stack.
SOP_12. 8	Use, Storage of Tools and Records maintenance	Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices

ect/company warehouses

of ESMF

water.

lisplayed at conspicuous places so that in case of

calibration. The equipment would be calibrated at s of calibrations would be maintained in the ibration, validity of calibration etc. should be ocedure of calibration and equipment reading

e of fire fighting in a warehouse. Warehouse g condition. A separate register to this effect

pors should open from inside to out and should be

nergency evacuation plan which is displayed at

ion. sides, the stacks may be covered with fumigation

ge alleyway shall be provided for operational

age material viz, bamboo mats, polythene sheet,

the godown as per stack plan.

SOP 12	Criteria for Selection of warehouses						
Index No:	Head	Description					
SOP_12. 9	Compliance to regulations/permits	Compliance depends on the site selection. The local regulations, NOCs, building permits, Fire NOC, Trade license needs be followed;					
SOP_12. 10	Safety Precautions	Fire safety, accident safety;					
SOP_12. 11	Emergency Preparedness and Response (including PPE/First aid)	 Whenever there is a disaster, the warehouseman shall proceed as under: In case of fire, the following steps would be taken immediately: Put out the fire by using appropriate fire extinguishers / fire buckets Take steps to avoid loss of other adjacent stocks by removing it from burning stock. Call Fire Brigade, § In case of flood, cyclone, arrange for draining out of water and take necessary help of local civil authot Arrange photographs of the incidents on the same day For the fire, theft, burglary and misappropriation, lodge a FIR with the local Police Station and obtain a copy on prescribed Inform the details of the incident to the Insurer (In case Goods are insured by more than one Insurance company to the Lea Carryout the activity of salvaging and segregation of the damaged stocks. Communicate following to Insurance Companies / their surveyor to claim the loss on prescribed Claim Form: •Copy of initial intimation, Copy of FIR, Brief Incident Record •Location of the Godown / Site •Details of loss (This shall be based on valuation of the Goods as per records of the warehouse minus disposal of damaged evidences). •Copy of the insurance policy. •Photographs of the incident. •Newspaper cutting, if any •Certification of Fire Brigade, Police, other local author 					
SOP_12. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Annual safety audit					
SOP_12. 13	Signage systems and symbols or coding	NA					
SOP_12. 14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors					
SOP_12. 15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions					
SOP_12. 16	Duties / Responsibilities (with contact details)	EESL: Unit Head – SLNP/SMNP/UJALA/SOLAR; Respective Regional Managers, Site Supervisors (Give Contact Details)					
SOP_12. 17	Inspection Procedures and Documentation required	Preventive maintenance at Warehouse/Kiosks; The inspection reports to be in place with Corrective actions and preventive a					
SOP_12. 18	Disposal of scraps and process wastes	NA					
SOP_12. 19	Site management	HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its resinspection; B. Protection and Control: risk areas demarcation, avoid;					
SOP_12. 20	Info and Instructions to be passed on to communities	Emergency response plan, emergency information and signal types and meaning, emergency response and control provision					
SOP_12. 21	Amendment Record (Version No: Link)	 Version 1: EHSS Manual of EESL, Available at EESL Website Accessed on October 2017 Version 2: Previous version as updated during Nov, 2017; Version 3: This version, updated on Feb 19, 2021 					

be obtained and compliance under which needs to
rities.
format of Police Department. d Insurer)
l goods and expenses of salvaging with necessary
for Contractors Personnel,
, EHSS Officials
actions taken;
spective contract work immediately before final
s on site;

SOP 13	SPECIAL CONDITIONS OF USE OF NEW GENERATION HEAVY EQUIPMENTS		
Index No:	Head	Description	
SOP_13. 1 SOP_13. 2	Purpose Coverage: Program / Region	Ensure the operations carried out using New Generation Heavy Equipment and Vehicles are safe for the workers and the con UJALA (warehouse / transport related), SLNP, SMNP and Decentralized Solar (site work including lifting operations, site of drain maintenance if required); Applicable to work sites throughout the country	
SOP_13.3	References	OSHA Safety and Health Regulations for Construction, Part No; 1926, Motor Vehicles, Mechanized Equipment, and Mari https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10767 Accessed on November 2017	
SOP_13. 4	Hazard Mapping / Assessment	High Hazard to Communities A job hazard analysis (JHA) must be prepared for these operations. The written document reminds the operator of hazards as teaching tool during job training.	
SOP_13. 5	Incident Categorization (may be Classification/ levels)	High	
SOP_13. 6	Suitability and Intended use of the activity, tool or material	These protocols apply to: (i) all heavy equipment used including vehicles, cranes, desilting / dewatering equipment before, d and operations	
SOP_13. 7	General Operating Procedures and Best Practices	 All equipment left unattended at night, adjacent to a highway in normal use, or adjacent to construction areas where work is reflectors, or obarricades equipped with appropriate lights or reflectors, to identify the location of the equipment. A safety tire rack, cage, or equivalent protection shall be provided and used when inflating, mounting, or dismounting tires locking rings or similar devices. Heavy machinery, equipment, or parts thereof, which are suspended or held aloft by use of slings, hoists, or jacks shall be so r shifting before employees are permitted to work under or between them. Bulldozer and scraper blades, end-loader buckets either fully lowered or blocked when being repaired or when not in use. All controls shall be in a neutral position, with the r performed requires otherwise. Whenever the equipment is parked, the parking brake shall be set. Equipment parked on inclines shall have the wheels chood. The use, care and charging of all batteries shall conform to the requirements set out in the equipment /vehicle instruction m a All ead plass shall be safety glass, or equivalent, that introduces no visible distortion affecting the safe operation of any ma All ead plass thall comply with the following requirements when working or being moved in the except where electrical distribution and transmission lines have been deenergized and visibly grounded at point of work or w attachment to the equipment or machinery, have been rected to prevent physical contact with the lines: For lines rated 50 kV or below, minimum clearance between the lines and any part of the crane or load shall be 10 feet; For lines rated over 50 kV, minimum clearance between the lines and any part of the crane or load shall be 10 feet; In transit with no load and boom lowered, the equipment clearance shall be a minimum of 4 feet for voltages less than 50 k including 345 kV, and 16 feet for voltages up to and including 750 kV; Whenever visibility conditions w	
SOP_13. 8	Use, Storage of Tools and Records maintenance	 Usage, Accident and Near Miss - Records to be maintained at Regional Office of EESL and site offices, submitted to the C PPEs and Tools associated with the procedures to be stored at easily accessible locales near Site 	

1.1.13 SOP 13: Special Conditions of Use of New Generation Heavy Equipment and Vehicles

nmunities

clearing, support in construction, dewatering and

e Operations

ssociated with equipment use and also serves as a

luring construction or for installation, maintenance

s in progress, shall have appropriate lights or

installed on split rims, or rims equipped with

substantially blocked or cribbed to prevent falling s, dump bodies, and similar equipment, shall be notors stopped and brakes set, unless work being

- cked and the parking brake set.
- nanual
- chine covered by this subpart.
- vicinity of power lines or energized transmitters, where insulating barriers, not a part of or an

inch for each 1 kV over 50 kV, or twice the

V, and 10 feet for voltages over 50 kV, up to and

with at least two headlights and two taillights in

hicles shall be equipped with an adequate audible

. Vehicles operating in areas or under conditions

e a cab shield and/or canopy adequate to protect

lient in duplicate

SOP 13	SPECIAL CONDITIONS OF USE OF NEW GENERATION HEAVY EQUIPMENTS		
Index No:	Head	Description	
SOP_13. 9	Compliance to regulations/permits	- All permits and regulations for Transporting the heavy equipment / machinery to site, work on site during traffic conditions Works to be complied with	
SOP_13. 10	Safety Precautions	 Pre-inspection discussion with site team regarding precautions, Training to users and awareness to communities Appropriate signages / warnings on site 	
SOP_13. 11	Emergency Preparedness and Response (including PPE/First aid)	 Ensure the availability of first Aid Kits on Site and in Inspection Vehicles Contact List of Health units, Rescue Vehicles within easy reach Employees engaged in site clearing shall be protected from hazards of irritant and toxic plants and suitably instructed in the 	
SOP_13. 12	Monitoring procedures (or protocol for replacement / refurbishment)	 Proper inspection and maintenance are required to prevent injury, and they can prolong the life of equipment. Only qualifie A schedule of inspections and maintenance should be established by site team, based on local sensitivities (during Walkthre-All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessed apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (h tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrections. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., 	
SOP_13. 13 SOP_13. 14	Signage systems and symbols or coding Details on competent users	General Traffic Warning Signages on parking, crossing, danger, instructions. OSHA sign for heavy Equipment. Roads aroun allowed for heavy equipment on not; considering road conditions and manageability. This SOP is to be used by Workers / Labourers/ Drivers of Heavy Equipment or Vehicles, EESL site teams, Regional Manag Only designated, qualified and licenced personnel are allowed to operate.	
		 Operators must have good hearing, vision, and depth perception. Operators should not operate this equipment if they have a known physical condition that would prevent them from acting Operators who are taking prescribed medication should make sure that the medication will not impair the ability to operate alcohol or drugs is strictly prohibited in the workplace. If anyone suspect an operator's ability to be impaired for this or an alcohol or drugs is strictly prohibited in the workplace. 	
SOP_13. 15	Training needs	Training to Drivers, workers and labourers on site, Regional Manager, Site Staff and EHSS Personnel on Inspection Proc Contractors Personnel, Awareness to Communities	
SOP_13. 16	Duties / Responsibilities (with contact details)	Drivers / Labourers, Workers, Site Supervisors (Give Contact Details), EHSS Officials	
SOP_13. 17	Inspection Procedures and Documentation required	Walkthrough inspection 1: (At the beginning of site work) Site engineer, Contractor - Interview with site employees, Discuss agencies, Receptacles and special considerations required for wastes, general and emergency situations, singes and barricadin the communities regarding the work, contact persons, emergency situations, warnings	
		Walkthrough inspection 2: (Daily Site engineer, Contractor - Work Status and daily work completion, check all items stowage reporting near miss-out incidents, waste management, imminent danger. Inspection and Maintenance programs must be based on the manufacturer's recommendations. Signed documentation is required 12 months and every month as required. Signed documentation is required.	
SOP_13. 18	Disposal of scraps and process wastes	As per above procedures & agreed Contract Conditions Suitable receptacles shall be kept on site, without hinderance to movement or traffic; for segregated storage of different types	
SOP_13. 19	Site management	 A person shall be designated to observe clearance of the equipment and give timely warning for all operations where it is diclearance by visual means; Cage-type boom guards, insulating links, or proximity warning devices may be used on cranes, but the use of such devices regulation of this part even if such device is required by law or regulation; Any overhead wire shall be considered to be an energized line unless and until the person owning such line or the electrical energized line and it has been visibly grounded; Prior to work near transmitter towers where an electrical charge can be induced in the equipment or materials being handled shall be made to determine if electrical charge is induced on the crane. The following precautions shall be taken when necess The equipment shall be provided with an electrical ground directly to the upper rotating structure supporting the boom; and 	

s, stowage and parking, Site Work, Electrical -

e first aid treatment available.

ed personnel shall perform inspections. ough Inspection 1) and meticulously followed pries are in safe operating condition and free of and brake); emergency stopping system (brakes); rected before the vehicle is placed in service. , where such equipment is necessary.

nd should be marked regarding whether entry is

ger and Contractors

g quickly in case of an emergency. te these equipment / vehicles safely. Use of ny other reason, notify a supervisor immediately.

ares, Discussions & format instructions for

sions on permits/certificates required from various ng requirements, information to be passed on to

ge off site safely, barricading and signages,

uired. Periodic inspection must be inspected every

s of wastes and construction materials

ifficult for the operator to maintain the desired

shall not alter the requirements of any other

l utility authorities indicate that it is not an

d, the transmitter shall be de-energized or tests sary to dissipate induced voltages: I Ground jumper cables shall be attached to

SOP 13	SPECIAL CONDITIONS OF USE OF NEW GENERATION HEAVY EQUIPMENTS		
Index No:	Head	Description	
		materials being handled by boom equipment when electrical charge is induced while working near energized transmitters. Con- having large alligator clips or other similar protection to attach the ground cable to the load. - Combustible and flammable materials shall be removed from the immediate area prior to operations. - Employees engaged in site clearing shall be protected from hazards of irritant and toxic plants and suitably instructed in the	
SOP_13. 20	Info and Instructions to be passed on to communities	 To alert on any perceived dangers or near misses due to use of heavy equipment, machinery To be aware of the dangers associated with heavy equipment, machinery on site Special issues in case of emergencies Suggested Grievance Reporting Mechanisms 	
SOP_13. 21	Amendment Record (Version No:, Link/Info)	Version 1 (Original) Dated: 30 November 2017 This version Amended 19 February 2021 (New Programs added)	

rews shall be provided with nonconductive poles e first aid treatment available.

1.1.14 SOP 14: Emergency Responses

SOP 14	EMERGENCY RESPONSES AGAINST DISASTERS, ACCIDENTS, BREAKAGES AND COLLAPSE ON SITE/TRANSPORT/STORAGE		
Index No:	Head	Description	
SOP_14. 1	Purpose	Ensure that EESL can deal with emergency situations effectively by planned and co-ordinated response procedures	
SOP_14. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to work sites and offices, facilities throughout the country	
SOP_14. 3	References	 OSHA Principal Emergency Response and Preparedness Requirements and Guidance Available at: https://www.osha.gov/Publications/osha3122.pdf Accessed on November 2017 OSHA's Walking-Working Surfaces Standard (1910.22(a)) 	
SOP_14. 4	Hazard Mapping / Assessment	 High Hazard to Workers, Communities Conduct a Process Hazard Analysis (PHA) for each covered process, and update and revalidate the PHA every 5 years. Incorporate emergency shutdown actions and operations into the written operating procedures for each process. Include qualified operator responsible for performing these procedures. 	
SOP_14. 5	Incident Categorisation (may be Classification/ levels)	High	
SOP_14. 6	Suitability and Intended use of the activity, tool or material	Applies to: (i) all instances of natural or manmade emergencies, accidents during planning, design, construction, operation	
SOP_14. 7	General Operating Procedures and Best Practices	 EXIT ROUTES Ensure that the number of exit routes is adequate based on the number of employees, the size of the building, its occupar Separate an exit route from other workplace areas with materials that have the proper fire resistance-rating for the number Separate an exit routes meet width and height requirements. The width of exit routes must be sufficient to accommodate floor served by the exit route. Ensure that doors used to access exit routes have side hinges and swing in the direction of travel (depending on occupant Design exit routes that lead to an outside area with enough space for all occupants. An outdoor exit route is permitted but may have additional site-specific requirements. Ensure that required exit routes and fire protections are available and maintained, especially during repairs and alteration Ensure that employee alarm systems are installed, operable. Direct employees through exit routes using clearly visible signs. These signs must meet the required letter height and ille When openings could be mistaken for an exit, post appropriate signs stating "NOT AN EXIT." Arrange exit routes so that employees are not exposed to the dangers of high hazard areas. Exit routes must be free and unobstructed. Prevent obstructions, such as decorations, furnishings, locked doorways, and FIRE EXTINGUISHERS Provide only approved portable fire extinguishers. Maintain fire extinguishers. Maintenance includes monthly visual inspections, hydrostatic testing, annual internal exami Ensure that the travel distance from employee to the nearest extinguisher is appropriate for the fire class. EMERGENCY ALARMS Provide a distinctive and perceivable alarm system for emergency action or safe evacuation. Specific requirements may apply if the alarm system includes telephones/manual operations, the workplace has 10 or few purpose. Ensure that all equipment used for alarm systems is	
SOP_14. 8	Use, Storage of Tools and Records maintenance	 Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Sites/ Site Offices 	

conditions that require emergency action and the

n and maintenance activities till full work close out

ncy, and the arrangement of the workplace. er of stories the route connects. the maximum permitted occupant load of each

cy and hazard areas).

ns.

umination specifications.

dead-ends within exit routes.

nations, and all associated documentation.

wer employees, or alarms serve more than one

SOP 14	EMERGENCY RESPONSES AGAINST DISASTERS, ACCIDENTS, BREAKAGES AND COLLAPSE ON SITE/TRANSPORT/STORAGE		
Index No:	Head	Description	
SOP_14. 9	Compliance to regulations/permits	NA	
SOP_14. 10	Safety Precautions	 Pre-inspection discussion with site team regarding precautions for emergencies Appropriate PPEs shall be used for site visits and stock taking 	
SOP_14. 11	Emergency Preparedness and Response (including PPE/First aid)	 Ensure the availability of first Aid Kits on Site and in Inspection Vehicles Contact List of Health units, Rescue Vehicles within easy reach Ensure that medical personnel are ready and available for advice and consultation on the overall employee safety and he Provide trained personnel and adequate first aid supplies to render first aid when a medical facility is not in near proximities Provide suitable facilities for immediate emergency use if exposure to injurious or corrosive materials is possible. 	
SOP_14. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	NA	
SOP_14. 13	Signage systems and symbols or coding	 General Warning Signages, Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) Image: Also posters on response mechanisms can be placed, with contact details (in local language and Hindi) 	
SOP_14. 14	Details on competent users	This SOP is to be used by EHSS officials, EESL site teams, Regional Manager and Vendors	
SOP_14. 15	Training needs	 Adequately train personnel expected to administer first aid. Provide education specific to any equipment employees are e plan. Provide training upon initial assignment and at least annually thereafter. Establish procedures and instruct employees on when and how to sound an alarm and notify emergency personnel, and w Review the emergency action plan with each employee when the plan is developed, responsibilities shift, or the emergence Provide training to employees who are expected to assist in the evacuation. As a host employer, EESL shall clearly communicate emergency action plans with contractors. Contract employers must potential fire, explosion, or toxic release hazards related to their jobs. Train employees in emergency procedures applicable to their work, such as pole top and manhole rescue. Train sufficient employees in first aid and CPR, when working on or near exposed lines or equipment at 50 volts or more. 	
SOP_14. 16	Duties / Responsibilities (with contact details)	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Reg Details, as applicable from time to time), EHSS Officials:	
SOP_14. 17	Inspection Procedures and Documentation required	 Identify possible emergency scenarios based on the nature of the workplace and its surroundings. Prepare a written emergency action plan. The plan does not need to be written and may be communicated orally if there ar At a minimum, the plan must include: The fire and emergency reporting procedures; Procedures for emergency evacuation, including the type of evacuation and exit routes; Procedures for those who remain to operate critical operations prior to evacuation; Procedures to account for employees after evacuation; Procedures for employees performing rescue and medical duties; and Names of those to contact for further information or explanation about the plan. 	
SOP_14. 18	Disposal of scraps and process wastes	As per above procedures & agreed Contract Conditions Suitable receptacles shall be kept on site, without hinderance to movement or traffic; for segregated storage of different types of the segregated storage of the segregated	

ealth condition in the workplace. ity to the workplace.

expected to use as part of an emergency action

what each alarm type means. ncy procedures change.

ensure that their employees are instructed in

gional Managers, Site Supervisors (to Give Contact

re 10 or fewer employees (like UJALA kiosks).

pes of wastes and construction materials

SOP 14	EMERGENCY RESPONSES AGAINST DISASTERS, ACCIDENTS, BREAKAGES AND COLLAPSE ON SITE/TRANSPORT/STORAGE		
Index No:	Head	Description	
Index No: Head Description SOP_14. 19 Site management HOUSEKEEPING STANDAH A. General Housekeeping: Each Contractor shall clea B. Protection and Control: 1. Fire Protection) Store volatile waste removed Gasoline and fuel oil storage fi 2. Pollution Control: Conduct C. Cleaning Materials: 2. Use cleaning materials Use only cleaning materials only D. Scope of Final Clean-Up: 1.General (a). Use experienced work (b) Maintain clean work 2. Remove grease, dirt, dust, s 3.Repair, patch and touch up n 4. Clean surfaces of equipment 4. Clean surfaces of equipment		DISASTERS, ACCIDENTS, BREAKAGES AND COLLAPSE ON SITE/TRANSPORT/STORAGE Description HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its respective contract weeping: B. Protection and Control: 1. Fire Protection Of Gasoline and fuel oil storage facilities shall be located offsite and maintained in full compliance with local, state and cent 2. Pollution Control: Conduct clean up and disposal operations as required by local, state and central regulations. C. Cleaning Materials: Use only cleaning materials recommended by manufacturer on surfaces to be cleaned., 2. Use cleaning materials only on surfaces and as recommended by the cleaning material manufacturer. D. Scope of Final Clean-Up: 1.General (a) Use experienced workers or professional cleaners for final cleaning activities, (b) Maintain clean work spaces without sharps, rejects and wastes; 2. Remove grease, dirt, dust, stains, labels, fingerprints and other foreign materials from interior and exterior surfaces, 3.Repair, patch and touch up marred surfaces to match surfaces to adjacent finishes,	
		 4. Clean surfaces of equipment; remove excess lubrication. 5. Clean light fixtures and lamps., 6. Remove waste, foreign matter and debris from footpaths, drainage systems and dispose in appropriate points suggested Ensure proper waste containment at disposal points 7. Remove waste, debris and surplus materials from site. Clean grounds; remove stains, spills and foreign substances fror exterior surfaces. 8. All workplaces should be kept clean and orderly and in a sanitary condition including passageways, storerooms and se 9. Drainage should be present where wet processes are used. 10. Prevent trips, slips and falls especially during emergency operations; by maintaining good housekeeping standards an 11. Eliminate fire hazards, control dust, avoid tracking materials, prevent falling objects, clear clutter 12. Maintain emergency evacuation support vehicle easily accessible to work site, discuss with employees and arrange s 	
SOP_14. 20	Info and Instructions to be passed on to communities	 To Alert the staff, vendors, site personnel on various emergency situations To be aware of the mock drills and procedures on site Special issues in case of emergencies occurring prior to close out like Flooding and Drainage problems (Electrical), he installation or operations 	
SOP_14. 21	Amendment Record (Version No:, Link/Info)	Version 1 (Original) Dated: 30 November 2017 Version 2: This version as amended during 19 February 2021.	

ork immediately

ance with local, state and central regulations. ntral regulations.

d by the local body in closed/covered containers. m paved areas and sweep clean. Rake clean other ervice rooms. Floors should be clean and dry. around work spaces, kiosks and ware houses. safe assembly point in case of emergencies

neavy winds, stampedes near around areas of

1.1.15 SOP 15: Work Close-out Procedures

SOP 15	WORK CLOSE OUT PROCEDURES		
Index No:	Head	Description	
SOP 15.1	Purpose	Ensure all work is completed satisfactorily, required documentation is completed and/or received in accordance with contr to the Client / Employer	
SOP_15. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to work sites throughout the country	
SOP_15. 3	References	OSHA Field Inspection Reference Manual Available at: https://www.osha.gov/Firm_osha_data/100005.html Accessed on November 2017	
SOP_15.4	Hazard Mapping / Assessment	High Hazard to Communities	
SOP_15.5	Incident Categorisation (may be Classification/ levels)	NA	
SOP_15. 6	Suitability and Intended use of the activity, tool or material	Work Close out procedures applies to: (i) all instances of work completion (ii) all instances of emergency close out by the	
SOP_15. 7	General Operating Procedures and Best Practices	Prepare and Schedule Work Closeout related meetings and activities as per proposed timetable and adhere	
SOP_15.8	Use, Storage of Tools and Records Maintenance	 Records to be maintained at Regional Office of EESL and site offices, submitted to the Client in duplicate PPEs and Tools associated with the procedures to be stored at Site Offices 	
SOP_15.9	Compliance to regulations/permits	All permits and regulations for Transport of Materials and Wastes, Ware House Maintenance, Site Work, Electrical Works	
SOP_15. 10	Safety Precautions	 Pre-inspection discussion with site team regarding precautions Appropriate PPEs shall be used for site visits and stock taking 	
SOP_15. 11	Emergency Preparedness and Response (including PPE/First aid)	 Ensure the availability of first Aid Kits on Site and in Inspection Vehicles Contact List of Health units, Rescue Vehicles within easy reach 	
SOP_15. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	NA	
SOP_15. 13	Signage systems and symbols or coding	General Warning Signages	
SOP_15.14	Details on competent users	This SOP is to be used by EESL site teams, Regional Manager and Contractors	
SOP_15.15	Training needs	Training to Regional Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instruction	
SOP_15. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective Program and Reg Details, as applicable from time to time), EHSS Officials:	

act requirements and effect the project's transition
contractor due to various reasons;
to be checked
s for Contractors Personnel,
ional Managers, Site Supervisors (to Give Contact

WORK CLOSE OUT PROCEDURES			
Head	Description		
Inspection Procedures and Documentation Required	 Walkhrough inspection 1: (Baseline for Closeout: At the beginning of site work) Site engineer, Contractor - Interview with site employees, Distension and closeout. Prepare schedule and list of items to be removed from various sit weekly, end of work), Inventorying the materials, List of materials to be collected, and wastes types to be removed, Receptacles and special cor and emergency situations, signages and barricading requirements, information to be passed on to the communities regarding the work, contact warnings Walkhrough inspection 2: (Daily Closeout) Site engineer, Contractor - Work Status and close out daily; check all items storage off site safel any materials or works on site, check items on various sites, Inventorising the materials, reporting near miss-out incidents. Preparation of Punch List: The EESL site supervisor and PMC) shall prepare a punch list before 15 days of work closeout determining that the Contractor's work has progressed to the point of Substantial Compliance with the requirements of the drawings and/or specifications. O promptly to complete and correct items within fifteen (15) days of its receipt of the punch list form EESL site team from the date of request, an item of deficiency on the punch list shall not relieve the Contractor of this responsibility to perform its work in accordance with the project - O&M Instructions: Contractor shall pass on to the Client - on site & in writing: Before 5 days of Work Closeout A. Contractor shall past point of a client equaring partial of succession. B. Contractor shall past project - 13: (Trial Closeout) Regional Manager, Contractors Engineer, Client: Closeout interview we Contractors: Check all items and wastes are inventorised, safely and securely stowed. all materials and equipment are nerved from the site loose wires, construction material, batteries, packaging wastes; and that all records are maintaining all parts and equipment are professional engineer (PE) or a state or city certifd apsec		
Disposal of scraps and process wastes	As per above procedures & agreed Contract Conditions Suitable receptacles shall be kept on site, without hinderance to movement or traffic; for segregated storage of different types of wastes and c		
Site management	 HOUSEKEEPING STANDARDS A. General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its respective contract inspection. B. Protection and Control: Fire Protection (a) Store volatile waste removed during final cleaning in covered metal containers and remove from premises in accordance with local, state (b) Gasoline and fuel oil storage facilities shall be located offsite and maintained in full compliance with local, state and central regulations. 		
	WORK CLOSE OUT PROCEDURES Head Inspection Procedures and Documentation Required Image:		

te employees, Discussions on permits/certificates l from various sites during various stages (Daily, es and special considerations required for general the work, contact persons, emergency situations, rage off site safely, barricading and signages for of work closeout from each site/local body; on work which shall include items of work r specifications. Contractor shall proceed date of request. The site teams failure to include with the project drawings and/or specifications. structural, mechanical and electrical systems, and equipment and replacement of consumable items. seout interview with Sub Contractors, ved from the site including screws, nails, ladders, poles and systems will be inspected by a licensed on, the contractor shall remediate the deficiencies that all operations and maintenance instructions ontract Document ate all changes due to addenda modifications, wided in print and AutoCAD 2010 or higher., changes or as specified in the contract. es of wastes and construction materials espective contract work immediately before final e with local, state and central regulations.

SOP 15	WORK CLOSE OUT PROCEDURES	
Index No:	Head	Description
		C. Cleaning Materials
		1. Use only cleaning materials recommended by manufacturer on surfaces to be cleaned.,
		2. Use cleaning materials only on surfaces and as recommended by the cleaning material manufacturer.
		D. Scope of Final Clean-Up:
		1.General
		(a). Use experienced workers or professional cleaners for final cleaning activities,
		(b) Maintain clean work spaces without sharps, rejects and wastes;
		2.Remove grease, dirt, dust, stains, labels, fingerprints and other foreign materials from interior and exterior surfaces,
		3.Repair, patch and touch up marred surfaces to match surfaces to adjacent finishes,
		4. Clean surfaces of equipment; remove excess lubrication.
		5.Clean light fixtures and lamps.,
		6.Remove waste, foreign matter and debris from footpaths, drainage systems and dispose in appropriate points suggested b
		Ensure proper waste containment at disposal points
		7.Remove waste, debris and surplus materials from site. Clean grounds; remove stains, spills and foreign substances from
		exterior surfaces.
SOP_15. 20	Info and Instructions to be passed on to	- To alert on various equipment, sharps, wires abandoned on site
	communities	- To be aware of the dangers associated with strewn materials and wastes on site
		- Special issues in case of emergencies occurring prior to close out like Flooding and Drainage problems (Electrical), heav
		installation or operations
		- Suggested Grievance Reporting Mechanisms
SOP_15. 21	Amendment Record (Version No:, Link/Info)	Version 1 (Original) Dated: 30 November 2017
		Version 2: This version as amended during 19 February 2021.

by the local body in closed/covered containers. a paved areas and sweep clean. Rake clean other

vy winds, stampedes near around areas of

1.1.16 SOP 16: Project Screening & Categorisation

SOP 16	Project Screening and Categorization		
Index No:	Head	Description	
SOP_16. 1	Purpose	To facilitate effective screening and addressing the environmental issues by categorizing the projects into	
		and regulatory requirements.	
SOP_16. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM	
		Applicable to work sites throughout the country (Transportation, Warehouse, Local Storage, Installation	
SOP_16. 3	References	EESL Environment, Occupational Health & Safety & Social (EHSS) Manual	
		EESL Environment Monitoring Framework (EMF)	
		IFC - Environmental, Health, and Safety (EHS) Guidelines	
SOP_16. 4	Hazard Mapping / Assessment	a) Environmental and cultural risks due to placement of temporary kiosks for distribution of bulbs.	
		b) Environmental, cultural/social risks on putting new luminaries (Street lights, flood lights), putting new	
		storage area.	
		c) Issues of fire safety, waste management, traffic management, Electrical safety, working at heights etc.	
SOP_16. 5	Incident Categorization (may be Classification/ levels)	Categorization of projects into Ea, Eb and Ec in line with EMF of EESL ; linked to severity of impacts a	
		Ea: Environmental issues are likely to be diverse, unprecedented and irreversible indicating long term str	
		Project Specific EA / EMP to be carried out by independent agency Public Consultation and Disclosure	
		Eb: Environmental issues are of moderate nature that can be mitigated with a reasonable effort; Project S	
		DPR with Public Consultation as required. Regulatory clearances to be sought as applicable	
		Ec: Insignificant or negligible environmental issues expected that require little or no mitigation; Generic	
		environmental practices to be integrated in the sub-project	
		For Social, cultural & other risks identified in 16.4 c), checks to be carried out on individual issues.	
SOP 16.6	Suitability and Intended use of the activity, tool or material	Applies to all sites under the programs.	
		At each location, UJALA and SLNP will be subjected to screening followed by decision on further assess	
		Checklist for sensitive features is provided for UJALA and SLNP respectively in Table 5.3 and 5.4 respec	
		Framework. Categorization of the program to be carried out based on outcomes of screening the check lis	
SOP 16 7	General Operating Procedures and Best Practices	Environmental Management Plan (EMP to be prepared for Ec category in line with provisions of chapter	
SOP 16.8	Use Storage of Tools and Records maintenance	Checklist and screening report for each site to be maintained at Regional Office of EESL and site offices	
501_10.0		MoEFCC rules not triggered.	
SOP 16 9	Compliance to regulations/permits	WB-Ops OP/BP 4.01 triggered	
SOP 16 10	Safety Precautions	Implementation of recommendations as under EMP.	
DOI _10, 10	Sarcty i focautolis		

to different categories, linked to severity of impacts

maintenance and distribution activities)

w meters, installing Solar PV Panels, pole and

and regulatory requirements

tress on environmental components; Either avoid or Regulatory clearances to be sought as applicable

Specific EA / EMP to be carried out along with

c Environmental Management Plan and good

sment or application of mitigation measures. ctively of the Environment Management sts.

r 7 of the EMF..

SOP 16	Project Screening and Categorization	
Index No:	Head	Description
SOP_16. 11	Emergency Preparedness and Response (including PPE/First aid)	NA
SOP_16. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Checklist (Table 5.3, 5.4 of EMF) to be prepared at start of each sub-project/site/state operations.
SOP_16. 13	Signage systems and symbols or coding	NA
SOP_16. 14	Details on competent users	This SOP is to be used by EESL SDU team, Regional Manager and Contractors, distribution and installa
SOP_16.15	Training needs	Training to Regional Manager and EHSS Personnel on Inspection Procedures & Discussions
SOP_16. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head - SLNP; Unit Head- Smart Meter, Unit Head – Solar, Respective (to Give Contact Details, as applicable from time to time), EHSS Officials:
SOP_16. 17	Inspection Procedures and Documentation required	Internal Audit (Quarterly): (Project screening reports)- Discussion with site employees, Check on project assessment at sites. Discussion with regional staff on screening assessment and potential environmental/o DOCUMENTS: 1. Screening reports & checklists 2. Risk Assessment Report 3. Environment management Plan (EMP) 4. Records of communication with external agency 5. Audit reports in-line with Annexure IV of the EMF
SOP_16.18	Disposal of scraps and process wastes	NA
SOP_16. 19	Site management	NA
SOP_16. 20	Info and Instructions to be passed on to communities	NA
SOP_16. 21	Amendment Record (Version No:, Link/Info)	Version 1: Appended as SOP 16 to Amended EHSS Manual dated 04.12.2018 Version 2: This version, updated on Feb 19, 2021

tion teams

e Program and Regional Managers, Site Supervisors

t screening checklists. Discussions on risk cultural risks.

1.1.17 SOP 17: Air pollution control

SOP 17	Air pollution control	
Index No.	Head	Description
SOP_17. 1	Purpose	To mitigate risks due to air emissions during transportations and from power machines running on fossil f
SOP_17. 2	Coverage: Program / Region	UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM Applicable to work sites throughout the country (Transportation, Warehouse, Local Storage, and Installat
SOP_17.3	References	CPCB emission limits for Vehicle Exhaust, DG sets. (Based on the vehicle, Indian Stage 2000 to Bharat No.14 of 1981, [29/3/1981] - The Air (Prevention and Control of Pollution) Act 1981, amended 1987 an National Ambient Air Quality Standards 2009
SOP_17. 4	Hazard Mapping / Assessment	 A routing plan for vehicles to be assessed for control of air Pollution because of transport vehicles monitored and phased out. Checks on following parameters to be carried out in the project plant 1. Transport of materials through unpaved roads 2. Unorganized routes creating air pollution 3. Use of backup diesel generator for the facilities including warehouses; 4. Open burning of solid waste onsite by labors 5. Site enclosure for excavation to check dust/air pollution
SOP_17.5	Incident Categorization (may be Classification/ levels)	Low
SOP_17. 6	Suitability and Intended use of the activity, tool, or material	Applies to: (i) all activities of transportation. (ii) Power generation at site using fossil fuels e.g. DG sets (iii) Excavation/Site activities of the UJALA, SLNP, SMNP, DECENTRALIZED SOLAR PROGRAM
SOP_17. 7	General Operating Procedures and Best Practices	 Prepare Logistics Plan: Optimized selection of route reduces the distance, time , fuel and hence the total Use of BS IV emission standard vehicles for transportation or above. Prepare Site/warehouse management plan by setting up DG set at sufficient height for the Chimney as p keep the DG set fuel away from all electrical equipment and sockets, providing space for equipment as procedures. Non-use of DG set can be put as a Selection of warehouse selection. Design of kiosk: Typical design showing weather protection, fire safety and waste storage space In case of dust, Water Sprinkling may be done twice a day on high site-traffic routes during installation
SOP_17. 8	Use, Storage of Tools and Records maintenance	Records of DG sets to be maintained at Regional Office of EESL and site offices Routing plan of the vehicle to be submitted to Supply & Logistics team by the suppliers.
SOP_17. 9	Compliance to regulations/permits	Vehicle emission standard of CPCB, India Vehicle Specification Report, PUC certificate of vehicle Emission norms of DG Sets National Ambient Air Quality Standards 2009
SOP_17. 10	Safety Precautions	No Transport of materials through unpaved roads (Controlled manner under special circumstances)Organized routes for reducing air emissions.Restrict use of backup diesel generator for the facilities including warehouses;Stop Open burning of solid waste onsite by labours.Create site enclosure for excavation to check dust/air pollution
SOP_17. 11	Emergency Preparedness and Response (including PPE/First aid)	NA (Pollution from fire is under Fire Safety SOP)
SOP_17. 12	Usage monitoring procedures (or protocol for replacement / refurbishment)	Quarterly checks on: a. Submission of routing plans b. Warehouses
SOP_17. 13	Signage systems and symbols or coding	NA

· 1 · · · · 1 · · ·
uels at site locations
on and maintenance activities)
Stage-IV emission standards)
. Use of DG sets in warehouses to be
ling stage:
τ.
A programs
gaseous emission and dust emissions to air/noise;.
er Central Pollution Control Board norms;
per Fire NOC obtained and emergency response
1
works at villages.

SOP 17	Air pollution control	
Index No.	Head	Description
SOP_17. 14	Details on competent users	This SOP is to be used by EESL SDU team, Regional Manager and Contractors, distribution and insta
SOP_17. 15	Training needs	Training to Regional Manager, Supply & logistics team and EHSS Personnel on Inspection Procedure
SOP_17. 16	Duties / Responsibilities	EESL: Unit Head - UJALA, Unit Head – SLNP, Unit Head – SMNP, Unit Head - Solar; Respective R Officials.
SOP_17. 17	Inspection Procedures and Documentation required	DOCUMENTS: a) Vehicle routing plans b) Vehicle Specification Report, PUC certificate c) Vehicle Maintenance Plan with Authorized Service Stations receipts d) Report on usage of DG in warehouses
SOP_17. 18	Disposal of scraps and process wastes	NA
SOP_17. 19	Site management	NA
SOP_17. 20	Info and Instructions to be passed on to communities	NA
SOP_17. 21	Amendment Record (Version No:, Link/Info)	Version 1: Appended as SOP 17 to Amended EHSS Manual dated 04.12.2018 Version 2: This version, updated on Feb 19, 2021

nation teams.

es & Discussions.

Regional Managers, Site Supervisors, EHSS