PROCEDURAL GUIDELINES

Department Order No. 13, series of 1998, otherwise known as

THE GUIDELINES GOVERNING OCCUPATIONAL SAFETY AND HEALTH IN THE CONSTRUCTION INDUSTRY

> Department of Labor and Employment Bureau of Working Conditions Intramuros, Manila

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FOREWORD

The construction industry plays a vital role in the socio-economic growth of a nation. In the Philippines, it contributed about 5.7% to the gross domestic product (GDP) and accounted for 50.9% of overall investments in 2002. For the past two (2) years, it has employed 1.6 million workers amounting to a 5.3% share of the total domestic workforce.

To ensure the protection and welfare of the workers and other vital resources in the construction industry, the Department of Labor & Employment (DOLE), through the Bureau of Working Conditions (BWC), has developed this Guidelines in the implementation of Department Order No. 13, series of 1998. It provides an overview of the legal bases for the issuance of the Guidelines, and outlines the role of the different government and private organizations in the implementation of Occupational Health and Safety in the industry. It likewise contains documentary, facility, training and procedural requirements in developing an appropriate Construction Health and Safety Program prior to undertaking a construction project, which constructors, professionals, skilled workers and testing organizations are expected to comply with.

With this instrument, it is hoped that our clientele and stakeholders in the industry will be guided in their efforts to comply with Occupational Health & Safety Standards OSHS) and Department Order No. 13.

Finally, the Department wishes to express its sincere appreciation to all those who have contributed their resources and expertise and to all the members of the Construction Industry Tripartite Council (CITC) for their invaluable inputs that enhanced the provisions of this Guidelines and the evolution of construction safety and health.

PATRICIA A. STO. TOMAS

Secretary Department of Labor and Employment

Pursuant to Department Order No. 13 series of 1998, otherwise known as the Guidelines Governing Occupational Safety and Health in the Construction Industry and other Related Laws and Issuances, this Procedural Guidelines shall apply in the filing, processing and evaluation of Construction and Health and Safety Program (CHSP) and other Related Activities and/or Operations in all construction worksites and workplaces and appropriate sanctions in cases of violations thereof.

A. OBJECTIVES

This Guidelines aims to:

- 1. Harmonize D.O. 13 with other existing standards and laws related to safety and health particularly in the construction activities and operations in all worksites and workplaces.
- 2. Provide stakeholders with clear and complete guide in order to comply with the requirements of D.O. No. 13 including the relevant rules of the Occupational Safety and Health Standards.
- 3. Standardize the procedures in the filing and processing of applications of Construction Safety and Health Program.
- 4. Strengthen linkages with other government and agencies and organizations involved in safety and health in the Construction Industry.
- 5. Enhance compliance with the requirements of D.O. 13 as well as the relevant provisions of Occupational Safety and Health Standards.

B. <u>LEGAL BASES</u>:

- a. Article 165, Chapter 2, Title I of Book IV of PD 442 otherwise known as the Labor Code of the Philippines, as amended provides that "The Department of Labor and Employment shall be solely responsible for the administration and enforcement of occupational safety and health laws, regulations and standards in all establishments and workplaces wherever they may be located."
- b. Article 162, Chapter 2, Title I of Book Four of the Labor Code of the Philippines, provides that "The Secretary of Labor and Employment shall by appropriate orders set and enforce mandatory occupational safety and health standards to eliminate or reduce occupational safety and health hazards in all work places and institute new and update existing programs to ensure safe and healthful working conditions in all places of employment".
- c. Department Order No. 13, series of 1998, Guidelines Governing Occupational Safety and Health in the Construction Industry.

- d. Section 10, D.O. 13 Safety on Construction Heavy Equipment.
- e. Department Order No. 16, series of 2001 mandates that "the Bureau of Working Conditions (BWC), either directly or through accredited training organizations shall conduct continuing programs to increase the supply and competence of personnel qualified to carry out the provisions of the Standards".
- f. Section 6.6.2, Department Order No. 19, series of 1993, mandates that "the Department through the Regional Offices shall strictly enforce the Occupational Safety and Health Standards, as amended, particularly Rule 1005 on Duties of Employers, Workers and other persons and Rule 1410 on Construction Safety. Through the Bureau of Working Conditions (BWC), the Department may issue a code of practice on Occupational Safety and Health for the Construction Industry."
- g. Occupational Safety and Health Standards (OSHS), Otherwise known as the Implementing Guidelines of the Article 162 of the Labor Code of the Philippines.
- h. Article 128 and 129 of the Labor Code of the Philippines (LCP) on the visitorial and enforcement power of the Secretary of Labor and Employment or her duly authorized representatives, including the labor inspectors.
- i. D.O. 57-04 Guidelines on the implementation of the Labor Standards Enforcement Framework series of 2004.

C. AGENCIES INVOLVED IN CONSTRUCTION HEALTH AND SAFETY LAWS AND REGULATIONS AND OTHER RELATED ISSUANCES :

1. Department of Labor and Employment

a. Bureau of Working Conditions (BWC)

Performs primarily policy formulation and program development and advisory functions in the administration and enforcement of laws relating to working conditions. Exercises technical supervision in the administration and enforcement of all Labor Standard laws, including health and safety in all establishments, workplaces and worksites.

b. DOLE-Regional Offices

Enforce laws, policies, plans programs, projects, rules and regulations of the Department on labor standards and working conditions and exercise the visitorial power through Labor Standards Enforcement Divisions (LSEDs), pursuant to Article 128 of the Labor Code, as amended.

c. Employees Compensation Commission

Initiates, rationalizes, and coordinates policies on employees compensation programs as well as deciding appealed cases from the Government Service Insurance System and Social Securities Services, the agencies which initially administer the employees compensation program.

d. Occupational Safety and Health Center (OSHC)

Plans, develops and implement training programs. Undertakes continuing studies and researches on OSH. Undertakes practical testing for standard specification for Personal Protective Equipment. Conducts work environment measurement and medical examination for the ready detection of occupational diseases.

e. Technical Education Skills Development Authority (TESDA)

Supervision in the development and implementation of the Skills and Equipment Standards Certification System. Issues the skills certification for critical construction occupation, pursuant to appropriate laws and issuances.

2. Department of Trade and Industry

a. Construction Industry Authority of the Philippines (CIAP)

Mandates to promote, accelerate and regulate the growth of the construction industry. Implements blacklisting proceedings pursuant to Section 5.2b.3 of the Revised Uniform Guidelines for Blacklisting Constructors Involved in Public Construction (Approved under CIAP Board Resolution No. 5, series of 2000) in cases of the failure of all the constructors to comply with D.O. 13, Labor standard laws including the Occupational Safety and Health Standards (OSHS).

b. Construction Manpower Development Foundation (CMDF)

Serves as the manpower development board for Philippine construction and its allied industries. Undertakes training for skills development, safety awareness and other supervisory/managerial courses. Participates in the development of skills standards for the construction industry.

c. Philippine Contractors Accreditation Board (PCAB)

The Board is vested with authority to issue, suspend and revoke licenses of contractors, investigate such violation of this act and the regulations there under as may come to each knowledge and, for this purpose, issue subpoena and subpoena duces tecum to secure appearance of witnesses in connection with the charges presented to the Board, and to discharge such other powers and duties affecting the Construction Industry in the Philippines.

3. Department of Health (DOH) - The Non-Communicable Diseases Control Office

Responsible in the formulation and implementation of Chapter VII of The Code on Sanitation of the Philippines (P.D. No. 856), among others, which provides rules, and regulations on industrial hygiene and other sanitary requirements.

4. Department of Public Works and Highways (DPWH) - Office of the Building Official

Responsible in the administration and enforcement of P.D. 1096 (National Building Code and Its Implementing Rules and Regulation) including the imposition of penalties for administrative violations.

5. Department of Interior and Local Government (DILG) - Bureau of Fire Protection

Responsible for the implementation of the provisions of **Presidential Decree 1185** otherwise known as the **Fire Code of the Philippines** which provide standards, rules and regulations on fire safety, prevention, protection and control/suppression.

6. Department of Environment and Natural Resources(DENR) - Environmental Management Bureau (EMB)

Responsible in the issuance of Environmental Compliance Certificate (ECC) prior to construction activities.

7. Construction Industry Tripartite Council(CITC)

Advisory and oversight functions in the formulation and implementation of laws, policies and issuances pertaining to working conditions, health and safety in the construction industry.

D. DEFINITION OF TERMS:

As used herein, the terms below shall be defined as follows :

- 1. Accredited organization refers to any organization duly accredited by the Department of Labor and Employment (DOLE) which is pursuant to Rule 1030, delegated or authorized to perform functions related to the improvement of occupational safety and health such as training, testing, certification, safety and health audit or any other similar activity.
- 2. Certified First-Aider refers to any person as defined in Rule 1960 of the Occupational Safety and Health Standards, trained and duly certified or qualified to administer first-aid by the Philippine National Red Cross or by any organization accredited by the same.
- 3. **Construction project manager/consultant** refers to any person or entity who is hired by the project owner, to act in the owner's behalf concerning the supervision and monitoring of all matters related to the overall execution of a construction project. The construction project manager shall be a separate entity from the general constructor or any subcontractor of the construction project.
- 4. **Construction safety and health committee** refers to the general safety and health committee for a construction project site that shall be the overall coordinator in implementing OSH programs.
- 5. **Construction safety and health officer** refers to safety personnel or any employee/worker trained and, in addition to their regular duties and responsibilities, tasked by his employer to implement occupational safety and health programs in accordance with the provisions of the Occupational Safety and Heath Standards (OSHS).
- 6. **Constructor** deemed synonymous with the term "builder" and refers to any person or organization who undertakes or offers to undertake or purports to have the capacity to undertake or submits a bid to, or does himself or through others, construct, alter, repair, add to, subtract from, improve, move, wreck or demolish any building, highway, road, railroad, excavation or other structure, project, development or improvement, or to do any part thereof, including the erection of scaffolding or other structures or works in connection therewith. The term constructor includes subcontractor and specialty contractor.
- 7. **Emergency health provider** refers to any person or organization who is certified or recognized by the Department of Health and who can provide the same or equivalent emergency health services as an emergency hospital, including emergency treatment of workers on site, emergency transport and care during

transport of injured workers to the nearest hospital, with adequate personnel, supplies and facilities for the complete immediate treatment of injuries or illnesses.

- 8. **General constructor** –refers to a constructor who has general supervision over the constructors in the execution of the project and who directly receives instructions from the owner or construction project manager if one is appointed by the owner.
- 9. **Occupational health personnel** refers to a qualified first-aider, nurse, dentist, or physician, engaged by the employer to provide occupational health services in the establishment/undertaking.
- 10. **Private Safety Organization** deemed synonymous with the term "consulting organization" accredited pursuant to Rule 1030 of the Occupational Safety and health Standards.
- 11. **Project manager** refers to the overall technical personnel of the general contractor and/or the subcontractor in charge of the actual execution of a construction project.
- 12. **Resident engineer** refers a duly licensed engineer who shall be tasked to be present at the construction site at all times, whenever work is being undertaken, and shall have the responsibility of assuring the technical conformance of all designs, materials, processes, work procedures rendered for the execution of the construction project, including safety and health of all persons within the construction site.
- 13. **Safety personnel** refers to any person engaged by any constructor, trained, accredited by DOLE and tasked to provide occupational safety and health services for the workers/employees in any construction project.
- 14. **Safety and Health Committee** refers to a group tasked with the responsibility to monitor, inspect, and investigate all aspects of the construction project pertaining to health and safety of construction workers.
- 15. **Safety organization** refers to any organization recognized and accredited by the DOLE to conduct occupational safety and health training and/or safety and health audit.
- 16. **Construction safety and health program** refers to a set of detailed rule that shall cover the processes and practices utilized in a specific construction project site in conformity with the OSHS including the personnel responsible and the penalties for violations thereof.
- 17. General Labor Standards inspection including general occupational health and safety refers to inspection by authorized person/s of the work environment, including the location and operation of machinery other than those covered by

technical safety inspections, adequacy of work space, ventilation, lighting, conditions of work environment, handling, storage or work procedures, protection facilities.

- 18. **Safety and health audit** refers to a regular and critical examination of OSH management system in project sites, OSH programs and records conducted by authorized person in pursuance of Rule 1040, D.O. 13, s 1998 and D.O. 16, s 2001.
- 19. **Skills standards** refers to the written specification of the minimum stock knowledge and skills a worker should possess to perform the functions identified in the job description of his occupation.
- 20. **Technical safety inspection** refers to inspection for the purpose of safety determination of boilers, pressure vessels, internal combustion engine, electrical installation, elevators, hoisting equipment and other mechanical equipment.
- 21. **Trade test** refers to an instrument used to measure workers' skills and knowledge based on the requirements of the skills as prepared and determined by TESDA in coordination with its accredited organization/s.
- 22. **Tool box meeting or gang meeting** refers to daily meeting among workers and their respective supervisors for the purpose of instructions, discussion and proper briefing on the planned work, the assessment of past work, the possibility or actual occurrence of accidents at the site, tips and suggestions on how to prevent possible accidents and other related matters.
- 23. Construction safety signage refers to any, but not limited to, emergency or danger sign, warning sign or safety instruction, of standard colors and sizes in accordance with the specifications for standard colors of signs for safety instructions.
- 24. **Heavy equipment** refers to any machine with engine or electric motor as prime mover used either for lifting, excavating, leveling drilling, compacting, transporting and breaking works in the construction site, such as but not limited to crane, bulldozer, backhoe, grader, road compactor, prime mover and trailer, with minimum operating weight and horsepower rating of 1,000 KG and 10 HP, respectively, that are subject to test based on the requirements of D.O. No. 13.
- 25. **Imminent danger** refers to a condition or practice that could reasonably be expected to cause death or serious physical harm before abatement under the normal enforcement procedures can be accomplished.
- 26. **Treatment Room** refers to any enclosed area or room equipped with the necessary medical facilities and supplies, and located within the premises of the

establishment where workers maybe brought for examination and treatment of their injuries or illnesses in cases emergency.

27. **Unguarded surface** – refers to any working surface above water or ground, temporary or permanent floor platform, scaffold construction or wherever workers are exposed to the possibility of falls hazardous to life or limb.

E. COVERAGE

This Procedural Guideline shall apply to:

- a. All public and private operation and undertakings in the construction industry and its subdivision, namely general building construction, general engineering construction and specialty trade construction, based on the classification code of the Philippine Construction Accreditation Board of the Construction Industry Authority of the Philippines (CIAP);
- b. Companies and entities involved in demolition works; and
- c. Those falling within the construction industry as may be determined by the Secretary of Labor and Employment and as provided for under D.O. 13 and the Occupational Safety and Health Standards.

F. DEPARTMENT ORDER NO. 13, REQUIREMENTS, The following shall be the minimum requirements for the approval of a Construction Safety and Health Program (CSHP).

1. Construction Safety and Health Program pursuant to Section 5, D.O. 13, series of 1998.

1.1 Company Safety and Health Policy. The following shall apply:

A Company Safety Policy which shall serve as the general guiding principles in the implementation of safety and health on site duly signed by the highest company official or his duly authorized representative who has the over-all control of project execution and should include the contractor's general policy towards occupational safety, worker's welfare and health, and environment.

A Safety policy, which shall include the commitment that the contractor shall comply with DOLE minimum safety requirements, including reporting requirements of the Occupational Health and Safety Standards (OSHS), and other relevant DOLE issuances. These may include, but are not limited to the following:

- a. Registration (Rule 1020 and DO 18-02)
- b. Report of Safety Committee Organization (Rule 1040)
- c. Notification of Accidents and Occupational Illnesses (Rule 1050)
- d. Annual Work Accident/Illness Exposure Data Report (Rule 1050)
- e. Application for installation of mechanical/electrical equipment for construction of structure for industrial use (Rule 1070 and 1160)
- f. Annual Medical Report (Rule 1960)
- **1.2** Specific Construction Safety and Health Program shall contain the tendering agency's requirements in addition to the minimum requirements under the appropriate sections of D.O. No. 13 whenever deemed as applicable.

1.3 Composition of Construction Safety and Health Committee.

A structure and membership of the construction safety and health committee which shall be consistent with the minimum requirements of Section 11 of D.O. 13, series of 1998.

1.4 Safety and Health Personnel. The following shall apply:

- a. All appointed first-aiders shall be duly trained and certified by the Philippine National Red Cross and shall possess a Certificate of Basic First Aid Training Course (Standard) with a valid PNRC ID Card.
- b. All appointed Safety Officers shall have completed the 40-hour BWC prescribed safety and health course as required by Rule 1030 of the OSHS, as amended by D.O. 16. All full-time safety personnel shall be accredited by the BWC pursuant to D.O. 16.
- c. All physicians and nurses assigned at the project site shall have completed the Bureau prescribed course on occupational safety and health course, pursuant to Rule 1960 of the OSHS.

1.5 Specific duties and responsibilities of the Safety Officer. The following shall apply:

- a. Specific duties and responsibilities shall comply with the outlined duties and responsibilities in Rule 1047 of the OSHS; and
- b. Procedure on the required performance of the assigned duties and responsibilities of safety officers in the construction site.

1.6 *Applicable In-plant Safety and Health Promotion and Continuing Information Dissemination.* The following shall apply:

- a. Detailed information dissemination or advisories to the new employees prior to on-site assignment.
 - e.g. conduct of safety orientation, company's health and safety policies, hazards related to the job safety measures, safe work procedures.

- b. Detailed programs on continuing education such as trainings and seminars, if any, that shall be given to employees
 - e.g. BOSH, refresher course, first aid training, refresher course toolbox meeting, construction safety training for site safety officers, 80-hour advance safety course prescribe.
- c. Arrangements for conveying information on safety and health IEC materials

e.g. Posters/komics/flyers, safety signages, handbooks/manuals, bulletin boards

- d. Arrangements for setting up sub-committees on safety and health, where necessary.
- e. Schedule of safety related activities e.g. toolbox meeting, health and safety committee meeting
- *1.7 Accident and incident investigation, recording, and reporting.* The following shall apply:
 - a. All accidents or incidences shall be investigated and recorded.
 - b. All work related accidents resulting to disabling injuries and dangerous occurrences as defined in OSH Standards (Rule 1050) shall be reported.
 - c. Responsible or duly authorized officer for accident or incident investigation recording and reporting who are either the employer/owner/project manager/safety officer
 - d. Accident Report shall contain the minimum information as required in DOLE/BWC/OHSD/IP-6.
 - e. Shall notify the appropriate DOLE Regional within 24 hours in case of fatal accidents. An accident investigation shall be conducted by the Regional Office within forty eight (48) hours after receipt of initial report of the employer.

1.8 Provisions for the protection of the general public within the vicinity of the company premises during construction and demolition. The following shall apply:

- Measures in order to ensure the safety of the general public shall be pursuant to Rule 11 of the National Building Code-Implementing Rules and Regulations: Protection of Pedestrians During Construction or Demolition
- b. Appropriate provisions and rules of OSHS
 - Rule 1412.09: Protection of the Public
 - Rule 1412.12: Protection against collapse of Structure
 - Rule 1412.16: Traffic Control
 - Rule 1413: Excavation
 - Rule 1417: Demolition

- Rule 1060: Premises of Establishments
- D.O. 13, Section 9: Construction Safety Signs
- Other relevant provisions of OSHS.

1.9 General safety within construction premises. The following shall apply:

The provisions for danger signs, barricades, and safety instructions for workers, employees, public, and visitors such as, housekeeping; walkway surfaces; means of access i.e. stairs, ramps, floor openings, elevated walkways, runways and platforms; and, light.

1.10 Environmental Control (Rule 1070 of the Standards). The following shall apply:

- a. Monitoring and control of hazardous noise, vibration and air-borne contaminants such as gases, fumes, mists and vapors.
- b. Provisions to comply with minimum requirements for lighting, ventilation and air movement.

1.11 Guarding of hazardous machinery (Rule 1200 of the Standards). The following shall apply:

- a. Provisions for installation/design of built-in machine guards.
- b. Provisions for built-in safety in case of machine failure.
- c. Provisions for guarding of exposed walkways, access-ways, working platforms.

1.12 Provisions for and use of Personal Protective Equipment (PPE) - (Rule 1080 of the Standards). The following shall apply:

- a. Appropriate types and duly tested PPEs to be issued to workers after the required training on their use.
- b. Provisions for maintenance, inspection and replacement of PPEs.
- c. In all cases the basic PPE commonly required for all types of construction projects are hard hats, safety shoes and working gloves. Other PPEs shall be required depending on the type of work and hazards.

1.13 Handling of Hazardous Substances – (Rule 1090 of the Standards). The following shall apply:

Provision for identification, safe handling, storage, transport and disposal of hazardous substances and emergency procedure in accordance with Material Safety Data Sheet (MSDS) in cases of accidents.

1.14 General materials handling and storage procedures. – (Rule 1150 of the Standards). The following shall apply:

- Safe use of mechanical materials handling equipment
- Secured and safe storage facilities
- Regular housekeeping as necessary so as not to constitute and/or present hazards
- Clearly marked clearance limits
- Proper area guarding of storage facilities

1.15 Installation, use and dismantling of hoist and elevators.-Rule 1415.10 Testing and Examination of Lifting Appliance, Rule 1220 Elevators and Related Equipment. The following shall apply:

- a. Provisions to ensure safe installation, use and dismantling of hoist and elevator;
- b. Periodic inspection of hoists and elevators.
- **1.16** *Testing and inspection of electrical and mechanical facilities and equipment.* The following Rules of the Occupational Safety and Health Standards shall apply:

Rule Coverage

- a. Rule 1160 Boiler
- b. Rule 1170 Unfired Pressure Vessels
- c. Rule 1210 Electrical Safety
- d. Rule 1220 Elevators and Related Equipment
- e. Rule 1410 Construction Safety
- f. Rule 1415.10 Training and Examination of Lifting Appliance
- 1.17 Workers skills and certification. The following shall apply:
 - a. Provisions to ensure that workers are qualified to perform the work safely.
 - b. Provisions to ensure that only qualified operators are authorized to use and operate electrical and mechanical equipment.

1.18 *Provisions for emergency transportation facilities for workers.* The following shall apply:

Rule 1963.02 of the Occupational Safety and Health Standards - Emergency Medical and Dental Services

1.19 Fire Protection Facilities and Equipment. The following rule shall apply:

- a. Fire protection facilities and equipment as required under Rule 1940 of the OSHS
- b. Proposed structure and membership of fire brigade
- c. Provision for training on emergency preparedness

1.20 First aid and health care medicines, equipment and facilities.

- a. Identification of the proposed first aid and health care facilities that the employer shall provide satisfying the minimum requirements of OSHS.
- b. Identification of the medical and health supplies, such as medicines and equipment to be provided.
- c. In all cases, the provision of first aid medicines and emergency treatment shall be mandatory.
- d. In the absence of the required on site health care facilities, the employer shall attach a copy of a written contract with a recognized emergency health provider as required under the OSHS.

1.21 Workers Welfare Facilities. The following shall apply:

- a. Provisions for toilet and sanitary facilities
- b. Proposed bathing, washing, facilities
- c. Proposed facilities for supplying food and eating meals
- d. Proposed facilities for supplying potable water for drinking and for washing
- e. Proposed facilities for locker rooms, storing and changing of clothes for workers.

1.22 Proposed Hours of Work and Rest and Rest Breaks. The following shall apply:

- a Work schedules, working hours, shifting schedules
- b. Frequency and length of meals and breaks
- c. Schedule of rest periods

1.23 Waste Disposal. The following shall apply:

- a. Proposed method of clearing and disposal of waste.
- b. Provisions for permits and clearance where require in disposal of hazardous wastes.

1.24 Disaster and Emergency Preparedness Contingency

- 1.25 Safety Program . The Safety Programs shall contain the following:
 - a. Standard work procedures.

- b. Job hazard analysis for the following activities as applicable to the project.
- c. Other hazardous work, not outline herein but will be performed during project execution must also be included.

The activities may consist of any number of the following, depending on the nature of the project, vis-à-vis exposure to hazards:

- a. Site Clearing
- b. Excavations
- c. Erection and dismantling of scaffolds and other temporary working platforms
- d. Temporary electrical connections/installations
- e. Use of scaffolds and other temporary working platforms
- f. Working at unprotected elevated working platforms or surfaces
- g. Work over water
- h. Use of power tools and equipment
- i. Gas and electric welding and cutting operations
- j. Working in confined spaces
- k. Use of internal combustion engines
- 1. Handling hazardous and/or toxic chemical substances
- m. Use of hand tools
- n. Working with pressurized equipment
- o. Working in hot or cold environments
- p. Handling, storage, usage and disposal of explosives
- q. Use of mechanized lifting appliances for movement of materials
- r. Use of construction heavy equipment
- s. Demolition

The hazard analysis shall contain the following:

- a. Identification of possible hazards for a particular activity.
- b. Identification of any company permits or clearances needed prior to the performance of the activity together with the name of person/s who is authorized to issue such permit or clearance.
- c. Identification of the proposed improvement in work standard procedures that shall be followed during implementation of a particular activity.
- d. Company inspection procedures to ensure safety during the execution of a particular activity.
- e. Identification of emergency procedures in case of accidents or any untoward incident while performing a particular activity.
- 1.26 Company Penalties/Sanctions for Violation/s of the Provision/s of Safety and Health Program – The appropriate penalties or sanctions for violation of company rules and regulations or those stipulated in the CHSP and the observance of due process.

2. Personal Protective Equipment by Type of Project

2.1 General Building Construction Project (GBC). The following classifications shall apply:

Classification: Air Navigation Facilities, Power Transmission & Distribution, Building and Housing, Communication facilities, Sewerage, water treatment plants and Site/Land development.

(For the required PPE see Annex PPE-I)

2.2 General Engineering Construction Project. The following classifications shall apply:

Classifications: Roads and airports(Horizontal structure), bridges, irrigation system, flood control and drainages, dams, tunneling, ports and harbor, water supply

(For the required PPE see Annex PPE-I)

2.3 Specialty Construction Project. The following classifications shall apply:

Classifications: Electrical work, mechanical work, plumbing and sanitary work, air conditioning or refrigeration, water proofing work, painting work, communication facilities, foundation or piling work, structural steel work, concrete pre-cast, elevator or escalator, well drilling work, navigational equipment and instrument installation, electromechanical work, metal roofing and siding installation, structural demolition and landscaping.

(For the required PPE see Annex PPE-I)

3. Safety Personnel and Skilled Worker. The following shall apply:

3.1 Minimum Required Safety Personnel. The following shall apply:

- a. The General Constructor shall provide for a full time officer, who shall be assigned as the general construction safety and health officer to oversee full time the overall management of the Construction Safety and Health Program.
- b. The General Constructor shall provide for additional Construction Safety and Health Officer/s in accordance with the requirements for Safety Officer of

D.O. 16, s. 2001, depending of the total number of personnel assigned to the construction project site.

- c. The General Constructor shall provide for one (1) Construction Safety and Health Officer for every ten (10) units of heavy equipment assigned to the project site.
- d. Each construction contractors/subcontractors shall provide for the required number of safety officers in accordance with the requirements of D.O. 16 series 2001.
- **3.2 Qualification and Training of Safety and Health Personnel and Skilled Workers.** The following shall apply:
 - a. Training of OSH Personnel shall be pursuant to D.O. 16 series of 2001 and its Procedural Guidelines.
 - b. Worker Skills Certification for the critical operations/occupations shall be pursuant to D.O. 13 and D.O. 19 as well as the TESDA requirements on worker competency.
- 4. Construction Heavy Equipment. The following shall apply:
 - 4.1 Accreditation of Organization for Testing of Construction Heavy Equipment shall be pursuant to D.O. No. 16 and its Implementing Guidelines and Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment.

(Please see Annex B – Checklist of Requirements for Accreditation of Testing Organization)

- 4.2 Conduct of Inspection and Test of Construction Heavy Equipment shall be pursuant to Sec. 10 of D.O. No. 13 and its Procedural Guidelines. The following shall apply:
 - a. Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment
 - b. Standard Checklist for Testing and Inspection of Construction Heavy Equipment. (See Annex CHE-I)
 - c. Inspection Procedures for DOLE Inspectors
- 4.3 TESDA Certification Requirements for Operators. Certification for Operators shall be in accordance with the requirements of TESDA on worker competency...
- 4.4 Monitoring and Evaluation of CHE Test/Inspection conducted shall be pursuant to the Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment.

5. Signages and Barricades. The following shall apply:

Construction Safety Signages shall be provided as a precaution and to advise the workers and the general public of the hazards existing in the worksite.

5.1 Signage Procedures: The signages shall be:

- a. Posted in prominent positions and at strategic locations.
- b. As far as practicable, be in the language understandable to most of the workers employed in the site.
- c. For non-raised floor areas, the attached yellow CAUTION sign shall be used when using yellow CAUTION tape. (See Table II of the OSHS)
- d. For non-raised floor areas, the attached red DANGER sign shall be used when using the red DANGER tape. (See Table II of the OSHS)
- e. Placed in designated areas at four (4) feet from ground level, if there are no other more practicable height placement.
- f. Regularly inspected and maintained in good condition to achieve its purpose. Signages that are damaged; illegible or that no longer apply as to purpose, site or language, shall be removed or be replaced by the safety officer when needed.
- g. Removed after the hazard is completely eliminated. If upon work completion the hazard is still present, the signage shall remain in place.
- h. Designed and constructed following the Overall Dimensions of Safety Signs Formula as required by the OSHS (see Table II, B page 178, OSHS)
- i. Specific with the type of hazard and should indicate the name of the contaminant/ substance involved (for chemical hazards), and the type of PPE or respiratory equipment to be worn.

5.2 Posting of Signages shall include, but not limited to the following places:

- a. Areas where there are risks of falling objects.
- b. Areas where there are risks of falling, slipping, tripping among workers and the public
- c. Prior to entry in project sites, locations and its perimeter.
- d. Where there is mandatory requirement on the usage of PPEs.
- e. Areas where explosives and flammable substances are used or stored
- f. Approaches to working areas where danger from toxic or irritant airborne contaminants/ substances may exist,
- g. All places where contact with or proximity to electrical facility/equipment can cause danger
- h. All places where workers may come in contact with dangerous moving

parts of machinery or equipment

- i. Locations of fire alarms and fire-fighting equipment
- j. Locations for instructions on the proper usage of specific construction equipment, tools.
- 5.3 Barricading Procedures: The following shall apply:
 - a. The contractor shall provide all necessary barricades, safety tapes, safety cones or safety lines as required in isolating or protecting an unsafe work area from other workers, pedestrians or vehicular traffic.
 - b. Barricades shall completely enclose the hazardous area and effectively limit unintentional or casual entry.
 - c. Barricades shall be three (3) feet vertical height from the ground, when no other more practical height specification is available.
 - d. Barricades shall be maintained in good condition to achieve its purpose.
 - e. Barricades that are damaged; faded or that no longer apply as to purpose, site or meaning, shall be removed or shall be replaced by the safety officer.
 - f. Barricade tape shall not be used on the floor as this presents a slipping hazard of its own.
 - g. In addition to using the proper warning tape, the contractor shall use the appropriate safety signage when barricading an area.
 - h. All barricades shall be removed after the hazard is completely eliminated.
 - I. Upon work completion, if the hazard is still present, the barricade shall remain in place.

5.4 Installation of barricades shall include, but not limited to the following worksites conditions:

- a. hazardous areas
- b. trip hazard
- c. robotic movement
- d. energized electrical works
- e. overhead suspended load test
- f. critical high pressure test
- g. chemical introduction
- h. fall exposure
- i. Emergency Response Zone
- j. Unsafe condition zone
- k. Danger zone
- 1. Confined and enclosed space

6. Construction Safety and Health Committee. The following shall apply:

6.1 Composition

- a. Project Manger or his representative as chairperson ex-officio
- b. General Construction Safety and Health Officer
- c. Construction Safety and Health Officers
- d. Safety representatives (SAFETY OFFICER) from each subcontractor.

If DOLE's minimum requirements based on the number of workers of the contractor/sub-contractor requires only a part time safety officer, the safety officer need not be an accredited safety practitioner or consultant.

- e. Doctors, nurses and other health personnel pursuant to the requirements stated in Rule 1042 of the OSHS
- f. Workers' representatives

If there are no contractors/sub-contractors or the constructor is a subcontractor, the safety and health committee shall be in accordance with the requirements of Rule 1040 of the Occupational Safety and Health Standards.

6.2 Duties and responsibilities

- a. The Project Manager or his representative shall act as the Chairperson of the committee.
- b. The committee shall conduct safety meetings at least once a month.
- c. The persons constituting the Safety and Health Committee shall, as far as practicable, be at the construction site whenever construction work is being undertaken.
- d. The committee shall continually plan and develop accident prevention programs.
- e. The committee shall review reports of inspection, accident investigation and monitor implementation of the safety program.
- f. The committee shall provide necessary assistance to government authorities authorized to conduct inspection in the proper conduct of their activities
- g. The committee shall initiate and supervise safety trainings for its employees
- h. The committee shall conduct safety inspection at least once a month, and shall conduct investigation of work accidents and shall submit a regular report to DOLE.
- i. The committee shall initiate and supervise the conduct of daily brief safety meetings or toolbox meetings.

- j. The committee shall prepare and submit to DOLE, reports on said committee meetings.
- k. The committee shall develop a disaster contingency plan and organize such emergency service units as may be necessary to handle disaster situations.

7. Construction Safety and Health Reports. The following shall apply:

7.1 The Construction Safety and Health Report shall include:

- a. Monthly summary of all safety and health committee meetings
- b. Summary of all accident investigations /reports
- c. Corrective/Preventive measures/action for each hazard
- d. Periodic hazards assessment with corresponding remedial measures for new hazards
- e. Safety promotions and trainings conducted/attended

7.2 Submission of Reports. The following shall apply:

- a. All general constructors shall be required to submit a monthly construction safety and health report to the BWC copy furnished the DOLE Regional Office concerned.
- b. In case of any dangerous occurrence or major accident resulting in death or permanent total disability, the concerned employer shall notify the appropriate DOLE Regional Office within twenty-four (24) hours from occurrence.
- c. After the conduct of investigation by the concerned construction safety and health officer, the employer shall report all disabling injuries to the DOLE Regional Office on or before the 20th of the month following the date of occurrence of accident using the DOLE/BWC/HSD-IP-6 form.

8. Cost of Construction Safety and Health Program. The following shall apply:

- 8.1 The total cost of implementing a Construction Safety and Health Program shall be mandatory and shall be made an integral part of the project's construction cost as a separate pay item, duly quantified and reflected in the Project's Tender Documents and likewise reflected in the Project's Construction Contract Documents.
- 8.2 The cost of the following PPEs: helmet, eye goggles, safety shoes, working gloves, rain coats, dust mask, ear muffs, rubber boots, and other similar PPE's shall be indicated/enumerated per cost, per worker, foreman, leadman, jackhammer operator, carpenter, electrician, mason, steelman, painter, mechanic,

welder, plumber, heavy equipment operator, physician/inspector, and other such personnel.

- 8.3 The PPEs shall be sufficient in number for all workers particularly where simultaneous construction activities/operations in different areas are being undertaken.
- 8.4 The cost of the minimum required inventory of medicines, supplies and equipment as indicated in Table 47 of the OHS Standards shall be included.
- 8.5 The safety personnel manpower cost salaries/wages, benefits shall be included.
- 8.6 Cost of safety promotions/activities, training conducted and salaries of safety and health personnel, medical personnel employed or engaged by constructor.

9. Safety and Health Information. The following shall apply:

9.1 Workers shall be adequately and suitably:

- a. Informed of potential safety and health hazards to which they may be exposed at their workplace.
- b. Instructed and trained on the measures available for the prevention, control and protection against those hazards.

9.2 Every worker shall receive instruction and training regarding general safety and health common to construction sites which shall include, but not limited to the following:

- a. The basic rights and duties of the workers at the construction site.
- b. The means of access and egress, both during normal work and in emergency situations.
- c. The measures for good housekeeping.
- d. The location and proper use of welfare and first-aid facilities.
- e. The proper care and use of the items or personal protective equipments and protective clothing provided the workers.
- f. The general measures for personal hygiene and health protection.
- g. The fire precautions to be taken.
- h. The action to be taken in case of any emergency.
- I. The requirements of relevant health and safety rules and regulations.

9.3 The instruction, training and information materials provided shall be given in a language or dialect understood by the worker.

Written, oral, visual and participative approaches shall be used to ensure that the worker has understood and assimilated the information.

- **9.4** Each supervisor or any person e.g. foreman, lead man, gangboss, and other similar personnel shall conduct daily tool box or similar meetings prior to the start of the operations for the day to discuss with the workers and to anticipate safety and health problems related.
- **9.5** No person shall be deployed in a construction site unless he has undergone a safety and health awareness seminar conducted by safety professionals or accredited organizations or other institutions recognized by DOLE.

9.6 Specialized instruction and training shall be provided to the following:

- a. Drivers and operators of lifting appliances, transport, earth-moving and materials-handling equipment and machinery; or any equipment of specialized or dangerous nature.
- b. Workers engaged in the erection or dismantling of scaffolds.
- c. Workers engaged in excavations at least one (1) meter deep or deep enough to cause danger, shafts, earthworks, underground works or tunnels.
- d. Workers handling explosives or engaged in blasting operations.
- e. Workers engaged in pile-driving.
- f. Workers in compressed air cofferdams and caissons.
- g. Workers engaged in the erection of prefabricated parts of steel structural frames and tall chimneys, and in concrete work, form work and other such type of work.
- h. Workers handling hazardous substances and materials.
- i. Workers as signalers and riggers.
- j. Other types of workers as may be categorized by TESDA

10. Welfare Facilities. The following shall apply:

The employer shall provide the following welfare facilities in order to ensure humane working conditions:

10.1 Adequate supply of safe drinking water:

- a. If the water is used in common drinking areas, it shall be stored in closed containers from which the water is dispensed through taps or cocks. Such containers shall be cleaned and disinfected at regular intervals but not exceeding fifteen (15) days.
- b. Notices shall be posted conspicuously in locations where there is water supply that is not for drinking purposes

10.2 Adequate sanitary and washing facilities:

- a. Adequate facilities for changing and for the storage and drying of work clothes.
- b. Adequate accommodation facilities for taking meals and for shelter.
- c. Adequate washing facilities regardless of sex for every 25 employees up to the first 100 and an additional of one (1) facility for every 40 additional workers.
- d. Suitable living accommodation for workers and as may be applicable for their families, such as separate sanitary, washing and sleeping facilities for men and women workers.

10.3 Adequate and suitable toilet and bath facilities for both male and female workers at the following ratio:

- a. Where the number of female workers exceeds 100, one (1) and bath facilities for every 20 female workers up to the first 100 and one (1) toilet and bath facilities for every 30 additional female workers.
- b. Where the number of male workers exceeds 100 and sufficient urinals have been provided, one (1) toilet and bath facilities for every 25 sales up to the first 100 and one (1) more for every 40 additional male workers.
- c. Every toilet shall be provided with enclosure, partitioned off so as to provide/ensure privacy. If feasible, shall have a proper door and fastenings, so doors shall be tight fitting and self-closing.
- d. Urinals shall be placed or screened so as not to be visible from other parts of the site, or other workers.
- e. Rest rooms shall be so arranged so as to be conveniently accessible to the workers and shall be kept clean and orderly at all times.
- f. Adequate hand-washing facilities shall be so provided within or adjacent to the toilet facilities
- g. In cases where persons of both sexes are employed, toilet and bath facilities for each sex shall be situated or partitioned so that the interior will not be visible even when the door of any facility is opened from any place where persons of the other sex have to work or pass.
- h. If toilet and bath facilities for one sex adjoin those for the other sex, the approaches shall be separate, and toilet and bath facilities for each sex shall be properly indicated.

G. PROCEDURES IN THE FILING AND PROCESSING/EVALUATION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (CSHP).

- 1. *Where to file* application for processing/evaluation of CSHP shall be filed with the Bureau or through the DOLE Regional Office.
 - **A. Application received by the Region** the Regional Office shall officially endorse the CSHP to the Bureau within 7 working days from receipt thereof.
 - **B.** Application received by the Bureau application received by the Bureau shall be reviewed and evaluated by its appropriate technical staff
- 2. Evaluation of Construction Safety and Health Programs
 - A. General Requirements. The following shall apply:

1. Requirements for submission:

a. The contractor-applicant shall submit at least two (2) copies of the Construction Health and Safety Program is being submitted for evaluation and approval of DOLE. The letter of intent shall be in the official company letterhead, signed by an authorized company official/employee. It shall also contain the complete company address, telephone number/s and name/s of persons authorized to transact business with the DOLE on matters pertaining to the application.

The Program must contain provisions that comply with the minimum requirements of DOLE D.O. 13, s. 1998, and applicable requirements as indicated in Section F of this procedural guidelines.

- b. The required supporting documents as determined by DOLE such as, but not limited to the following: certificates of trainings or the required accreditation for safety and health personnel; Skills Certificates for heavy equipment operators and workers performing critical occupations; certificates of inspection and testing of construction heavy equipment; permits for electrical and/or mechanical installations; DOLE Registration; Constructor's Accreditation.
- 2. **Project Description-**The following shall be indicated:
 - a. Specific name of project as it may/will appear on project bid documents or as advertised by the project tender or as specified by the project owner.

- b. Specific location of the project, preferably the exact address of the project.
- c. Project classification as classified by the project tender
- d. Photocopy of the following:
 - Where applicable, Invitation to Apply For Eligibility and to Bid from DPWH, NHA and/or other government/nongovernment bid tendering agencies and/or from a newspaper of general circulation (name of newspaper and page number where such advertisement/s appeared) stating project name and location, contract duration, expected start/execution, date of bidding and/or Project Proposal submitted to the tender bidding agency stating the project name and location, duration of project/s expected start/execution. The Project Proposal, if prepared by the constructor-applicant, must be stamped –received by the bid tendering agency or entity. This may also apply to private bid tenders if they so require.
 - 2. Any other document/s issued by the project owner or project tender where the details as enumerated in no. 1 of this section may be identified in the absence any of the documents as mentioned therein.
- e. Project owner
- f. Name of main contractor if contractor is applying for approval of Safety and Health Program as a sub-contractor.
- g. Estimated start of execution of project and the estimated project duration
- h. Estimated number of workers to be deployed, consisting of the total number of workers to be directly employed by the contractorapplicant and the estimated number of workers who may not be under the direct supervision of the contractor applicant (ex. workers from subcontractors and other contractors who may simultaneously undertake the project)

B. Procedures in Processing and Evaluation. The following shall apply:

1. Evaluation - The authorized evaluator shall within five (5) working days upon receipt of the program evaluate the documents for completeness, veracity and sufficiency. The evaluator shall prepare a summary of evaluation indicating findings and recommendations for review/ by the immediate supervisors/Division Chief. A final summary of the findings and recommendation shall be submitted to the BWC Director for approval or disapproval of the program.

- 2. Results of evaluation
 - a. The results of the written evaluation shall be shall be submitted by the evaluator to the Director for final review and appropriate action.
 - b. Based on the decision of the Director, the evaluator shall prepare the appropriate communication to inform the applicant of the results of the evaluation.
 - c. In case of deficiencies, the communication shall contain all the noted deficiencies and the period to correct the same.
 - d. If the applicant does not correct the deficiencies within the fifteen-day (15) prescriptive period or the applicant does not have any valid reason as determined by the Director, the Director may resolve to disapprove or discontinue processing the application. All documents pertaining to applications with a resolution to discontinue the processing of the application shall be placed in an inactive file. Should the applicant desire to revive the application for approval, the same shall satisfy the General Requirements for submission and evaluation of applications for approval of construction safety and health programs, as required in this guidelines.
 - e. If the applicant has complied with the prescribed minimum requirements, the Director shall issue a Certificate of Approval for the CSHP covered by the specific project/s applied for.
 - f. If the applicant does not comply with the requirements as determined by the Director, the Director shall issue a resolution for the disapproval of the construction safety and health program for the particular project/s named in the application, stating the reason for the disapproval. The Director may furnish/forward a copy of the resolution to any agency for their appropriate action as the Director may deem necessary for the coordinated enforcement of national laws and standards and to the CIAP as the case maybe.

3. Inspection and Monitoring - The following shall apply:

- A. No construction project shall be undertaken without a DOLE Approved Construction Safety and Health Program and the required minimum personnel complement to implement the same.
- B. The DOLE Regional Office concerned through the labor inspectors shall inspect and monitor the implementation of Department Order No. 13, s 1998, Department Order No. 57-04 and their corresponding implementing procedures, guidelines and manuals for all construction sites within their respective jurisdiction.
- C. In case of an approved CSHP by the Bureau, in all cases shall provide a copy of the same for inspection and monitoring of the Regional Office.
- D. The Bureau shall refer to the concerned Regional Director for investigation, non-compliance applicant with respect to pending CSHP coming from applicant constructors/contractors within their jurisdiction.

E. The Regional Director shall submit to the Bureau his/her findings and/or recommendations within five (5) working days from the termination of his/her investigation.

H. Violations and Penalties. The following shall apply:

- a. Pursuant to the provisions of D.O. 13 and as circumstances may warrant, the DOLE shall refer to the Philippine Contractors Accreditation Board (PCAB) its findings, after due process, on any act or omission committed by construction contractors in violation of this rule, labor standards, safety rules and regulations and other pertinent policies. Any such violation committed by construction contractors, whether general constructors or sub-contractors, shall constitute as prima facie case of a construction malperformance of grave consequence due to negligence, incompetence or malpractice contemplated under RA 4566 (Constructors' Licensing Law), as amended, and its Implementing Rules and Regulations
- b. In cases of imminent danger situations, the DOLE Regional Director shall issue a stoppage order pursuant to the provisions of Rule 1012.02 of the OSHS and other pertinent issuances for stoppage of operation or for other appropriate action to abate danger.
- c. Pending the issuance of the order, the employer shall take appropriate measures to protect his workers.
- d. The stoppage order shall remain in effect until the danger is removed or corrected permanently.
- e. Non-compliance with the order shall be penalized under existing provisions of labor laws.
- f. All processes and/or procedures in the conduct of General Labor Standards inspection including General Occupational Safety and Health/Technical Safety Inspection shall be governed by the provisions of Department Order No. 57-04 and its corresponding Manuals of Instructions.

PPE-I

BUREAU OF WORKING CONDITIONS

Department of Labor and Employment

Classification of construction works/activities for purposes of determination of mandatory minimum Personal Protective Equipment(PPE) requirements:

General Construction Work – Basic PPE for all construction workers

- 1. Safety Helmet
- 2. Safety Gloves
- 3. Safety Shoes

Specialty PPE shall be provided to workers in addition to or lieu of the corresponding basic PPE as the work or activity requires as follows:

Con	struction Work/Activity	Sp	ecialized PPE	Remarks
1.	Work near unprotected areas such as but not limited to the following a. Working on scaffolds b. Working on roofs	1.	Safety belt	Where there is a possibility of fall that will normally cause disabling injury
2.	Work involving pouring of concrete Such as but not limited to the following a. Laying concrete slab b. pouring of concrete for beams and/or columns	1.	Safety chemical resistant boots Chemical resistant gloves	If worker's feet may have contact with fresh concrete If worker's hands may have contact with fresh concrete
3.	Work involving laying of asphalt	1. 2.	Heat resistant gloves Heat resistant safety footwear	If worker needs to work on or near hot asphalt
4.	Working with derricks and cranes	1. 2. 3.	Color-coded vest with reflectorized markings Heavy leather gloves high visibility	Proper visibility and identification of critical persons such as operators, riggers, signal men For riggers For signal men
		5.	gloves	ror signar men
5.	Working with earth moving equipment	1.	Heavy duty safety footwear	Safety shoes for relatively dry or sheltered work Water and mud resistant boots for wet outdoor works
		2.	Ear muff or ear plugs	When working near or on noisy equipment

		3.	high visibility gloves	For spotters
		4.	High visibility vest	For all workers within immediate vicinity of equipment
6.	Manual excavation or digging	1.	padded vest	When work may involve being hit by falling materials
7.	Work on top of or near bodies of water	1. 2.	Life vest Safety belt	When there is danger of fall into deep water
8.	Work where hot cutting and welding of metals are involved		filtering respirators heat resistant protective clothing light filtering and	For welders and gas cutters For gas cutting in lieu of face
9.	Work involving exposure to or handling of hot materials or work near open flame	1.	heat resistant face goggles heat resistant and heat insulating gloves	shield For handling of hot substances and materials
		2. 3.	heat insulating protective clothing heat resistant face shield	For working in hot working environment For working near open flame
10.	When working with live electricity above 50 volts AC or DC	2.	electrically insulated gloves Electrically insulated safety shoes Electrically insulated gloves	Electrical resistance must be suitable for the maximum electrical voltage of energized parts that may be handled by worker
11.	Work involving handling of noisy and/or vibrating power tools/equipment	1.	Vibration insulating gloves Ear protection	Recommended total cumulative actual usage of tool shall be a maximum of 2 hours per day(for 8-hour work, duty cycle should be 1:4) When power tool generates
				noise of more than 85 dB.

13.	Work involving exposure to harmful dust	1.	dust filtering respirators	If dust concentration is above recommended Threshold Limit Value(TLV) for the contaminant
14.	Work that may involve shortage of oxygen	1.	Self contained or supplied air respirator	Work in confined spaces or work involving depletion of oxygen supply
15.	Working with organic solvent or toxic and/or corrosive chemicals	1. 2.	Chemical resistant gloves Chemical filtering respirator	If work involves handling of chemicals If chemical emits vapors above recommended TLV for the
		3. 4	Chemical resistant face shield Chemical goggles	contaminant chemical/s If work may involve chemical splashes to the face If chemical vapors may irritate
			Chemical resistant protective clothing	eyes If work will involve chemical splashes to the body of worker
16	Working with atmospheres containing contaminants above recommended threshold limit values for airborne contaminants	1. 2.	Appropriate contaminant filtering respirator Contaminant protection for eyes	For atmospheres containing not more than ten times the recommended TLV If contaminant may irritate eyes
		3. 4.	Self-contained or supplied air respirator Chemical suits	For environment containing more than ten time the recommended TLV If contaminant may enter through skin
17.	Working under high pressure			
18.	Working near vehicular traffic	1.	PPEs with Reflectorized or luminous markings for high visibility	
		2.	Heavy duty safety shoes	
	Work involves working underwater	1.	Self-contained or supplied air underwater breathing apparatus	
	Working at night under low	2.	Thermal insulating wet suit and accessories	If work involves long exposure to cold water
	Working at night under low lighting conditions	1.	High visibility vest	

ANNEX CHE-I

Bureau of Working Condition Department of Labor and Employment

Crane Inspection Checklist

	C	heck a	pplicable colu	mn	
ITEM	<u>Y e s</u>	No	Deficient	<u>N/A</u>	DESCRIPTION / PURPOSE
(1) Manufacturer's operating and Maintenance Manuals					Manufacturer's operating and maintenance manuals shall accompany all mobile hoisting equipment. These manuals stet forth specific inspection, operation and maintenance criteria for each mobile crane and lifting capacity.
 (2) Equipment Logbook 2.1 Has an updated equipment logbook 2.2 All repairs/ modifications are properly recorded 2.3 Logbook inspected and reviewed regularly by a competent person 					Equipment logbook should reflect daily activities which may affect its safe operation, such as inspections, repairs, maintenance, tests, among others
 (3) Guarding 3.1 Exposed moving parts guarded 3.2 Guards of adequate strength 3.3 Guards are of proper construction and installation 					All exposed moving parts such as gears, chains, reciprocating or rotating parts are guarded or isolated.
(4) Swing Clearance Protection					Materials for guarding rear swing area.
(5) High-Voltage Warning Sign					High-voltage warning signs displaying restrictions and requirements should be installed at the operator's station and at strategic locations on the crane.
(6) Boom Stops					Shock absorbing or hydraulic type boom stops are installed in a manner to resist boom overturning.
(7) Jib Boom Stops					Jib stops are restraints to resist overturning.
(8) Boom Angle Indicator					A boom angle indicator readable for the operator station is installed accurately to indicate boom angle.
(9) Boom Hoist Disconnect, Automatic Boom Hoist Shutoff					A boom hoist disconnect safety shutoff or hydraulic relief to automatically stops the boom hoist when the boom reaches a predetermined high angle.
(10) Two-Blocking Device					Cranes with telescoping booms should be equipped with a two-blocking damage prevention feature that has been tested on-site in accordance with manufacturers requirements. All cranes hydraulic and fixed boom used to hoist personnel must be equipped with two-blocking devices on all hoistlines intended to be used in the operation. The anti-two blocking device has automatic capabilities for controlling functions that may cause a two-blocking condition.
(11) Power Controlled Lowering					Cranes for use to hoist personnel must be equipped for power controlled lowering operation on all hoistlines. Check clutch, chains, and sprockets for wear.

(12) Lattice Boom	
12.1 Based section	
properly attached	
12.2 Proper pin	
clearance	
12.3 No boom lacing/	
cord damage	
12.4 Proper boom stops	
	All structural joints and connections, structural members
12.5 Proper gantry	should be inspected visually and if damage or unsafe
system A-frame	condition is suspected, additional non-destructive testing as
12.6 Proper boom	appropriate should be performed by an authorized person
section connection	
pins/ keys	
12.7 Proper boom	
gantry support	
12.8 Proper jib	
attachment/	
backstops/ belly	
slings	
(13) Leveling Indicating	
Device	A device or procedure for leveling the crane must be
	provided.
(14) Sheaves	Sheave grooves shall be smooth and free from surface
14.1 Hoist line and	defects, cracks, or worn places that could cause rope
sheave size match	damage. Flanges must not be broken, cracked, or chipped.
14.2 Sheaves are not	The bottom of the sheave groove must form a close fitting
worn	saddle for the rope being used. Lower load blocks must be
14.3 Adequate	equipped with close fitting guards. Almost every wire rope
lubrication and	installation has one or more sheaves – ranging from
moves freely	traveling blocks with complicated reeving patterns to
	equalizing sheaves where only minimum rope movement is
	noticed.
(15) Main Hoist and	Drum crushing is a rope condition sometimes observed which
Auxiliary Drums System	indicates deterioration of the rope. Spooling is that
15.1 Proper size and	characteristic of a rope which affects how it wraps onto and
spooling of	off a drum. Spoiling is affected by the care and skill with
hoistlines	which the first larger of wraps is applied on the drum.
15.2 Drum side/ shields	Manufacturer's criteria during inspection usually specify:
for cracks	
15.3 Dogs/ pawls/	• Minimum number of wraps to remain on the drum.
locking devices	Condition of drum grooves
15.4 Drum rotation vs.	5
control motion	Condition of flanges at the end of drum.
	Rope end attachment.
	Spooling characteristics of rope.
	Rope condition.
(16) Main Boom, Jib Boom,	Boom jibs, or extensions, must not be cracked or corroded.
Boom Extension	Bolts and rivets must be tight. Certification that repaired
	boom members meet manufacturers original design standard
	shall be documented. Non-certified repaired members shall not be used until recertified.
(17) Load Hooks and Hook	
Blocks	Hooks and blocks must be permanently labeled with rated
17.1 Sheaves function	capacity. Hooks and blocks are counterweighted to the
smoothly	weight of the overhaul line from highest hook position. Hooks
17.2 Hook rotates	must not have cracks or throat openings more than 15% of
freely/ lubricated	normal or twisted off center more than 10° from the
17.3 Proper Becket	longitudinal axis. All hooks used to hoist personnel must be
17.4 Duranti	equipped with effective positive safety catches especially on
17.4 Properly reeved	hydraulic cranes.

(18) Hydraulic Hoses	
Fittings and Tubing 18.1 No signs of leak 18.2 No blistering or abnormal deformation 18.3 No evidence of excessive abrasion or scrubbing	Image: Second and Second
(19) Outriggers 19.1 Lubrication 19.2 Structural condition 19.3 Pressure hoses/ connections	Outrigger number, locations, types and type of control are in accordance with manufacturer's specifications. Outriggers are designed and operated to relieve all weight from wheels or tracks within the boundaries of the outriggers. If not, the manufacturer's specifications and operating procedures must be clearly defined. Outriggers must be visible to the operator or a signal person during extension or setting.
(20) Load Rating Chart 20.1 Load radius	A durable rating chart(s) with legible letters and figures must be attached to the crane in a location accessible to the
20.2 Boom length	operator while at the controls. The rating charts shall contain the following:
20.3 Parts of line	
20.4 Quadrant of operation	 A full and complete range of manufacturer's crane loading ratings at all stated operating radii. Optional equipment on the crane such as outriggers
20.5 Boom angle	 and extra counterweight which effect ratings. A work area chart for which capacities are listed in
20.6 Weight of attachments	the load rating chart, i.e. over side, over rear, over front.
20.7 Weight of handling devices	 Weights of auxiliary equipment, i.e. load block, jibs, boom extensions. A clearly distinguishable list of ratings based on structural, hydraulic or other factors rather than stability. A list of no-load work areas. A description of hoistline reeving requirements on the chart or in operator's manual.
(21) Wire Rope	
21.1 Good overall condition 21.2 Proper end connections 21.3 Proper lubrication	Main hoist and auxiliary wire rope inspection should include examining for Broken wires. Excess wear.
21.4 Proper clips	External damage from crushing, kinking, cutting or corrosion.
(22) Drum	
22.1 Proper size and spooling of hoistlines 22.2 Drum side/ shields for cracks 22.3 Dogs/ pawls/ locking devices	Image:
22.4 Drum rotation vs. control motion	

(23) Cab		
23.1	Good glass and	
	visibility	
22.2	Functioning	
25.2	Instruments and	
	controls	Contains all crane function controls in additional to
23.3	Fire extinguisher	mechanical boom angle indicators, electric wipers, dash
	available	lights, warning lights and buzzers, fire extinguishers, seat
23.4	Appropriate load	
2011	charts and	belts, horn, and clear unbroken glass.
	warning signs	
23.5	Proper and	
	adequate access	
(24) Bra	king Systems	Truck cranes and self-propelled cranes mounted on rubber-
24.1	Parking brake or	tired chassis or frames must be equipped with a service
	locking devices	brake system, secondary stopping emergency brake system
	while stationary	and a parking brake system. Unless the owner/operator can
24.2	Brake capable of	show written evidence that such systems were not required
	stopping crane at	by the standards or regulations in force at the date of
	maximum grade	manufacture and are not available from the manufacturer.
	recommended for	The braking systems must have been inspected and tested
	travel	and found to be in conformance with applicable
24.3	Brakes remain	requirements.
25	engaged during	
	loss of pressure or	Crawler cranes are provided with brakes or other locking
	power	devices that effectively hold the machine stationary on level
		grade during the working cycle. The braking system must be
		capable of stopping and holding the machine on the
		maximum grade recommended for travel. The brakes or
		locks are arranged to engage or remain engaged in the event
		of loss of operating pressure or power.
	ntable/ Crane	
(25) Turi Body	ntable/ Crane	
Body		
Body	ntable/ Crane Level/ stable	Make sure that the rotation point of a crane gears and rollers
Body 25.1	Level/ stable	Make sure that the rotation point of a crane gears and rollers
Body 25.1	Level/ stable Normal wear of	are free of damage, wear and properly adjusted and the
Body 25.1	Level/ stable	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or
Body 25.1	Level/ stable Normal wear of	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1 25.2	Level/ stable Normal wear of gears, teeth, rollers	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1	Level/ stable Normal wear of gears, teeth,	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or
Body 25.1 25.2 25.3	Level/ stable Normal wear of gears, teeth, rollers No cracks	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1 25.2	Level/ stable Normal wear of gears, teeth, rollers No cracks	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1 25.2 25.3	Level/ stable Normal wear of gears, teeth, rollers No cracks	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1 25.2 25.3 25.4	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional
Body 25.1 25.2 25.3 25.4 (26) Cou	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards provided	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards provided Clear access	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards provided	are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured.
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards provided Clear access	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper size Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal Illustration	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4 27.5	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal Illustration provided	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4 27.5	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal Illustration provided Swing break	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4 27.5	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal Illustration provided Swing break	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the
Body 25.1 25.2 25.3 25.4 (26) Cou 26.1 26.2 (27) Eng 27.1 27.2 27.3 27.4 27.5	Level/ stable Normal wear of gears, teeth, rollers No cracks Bolts secure nterweight Proper attachment ine Housing Clean housing Machinery guards provided Clear access Good brake/ clutch adjustment Hand signal Illustration provided	 are free of damage, wear and properly adjusted and the components are securely locked and free of cracks or damage. The swing locking mechanism must be functional (pawl, pin) and operated in the cab. The counterweight must be approved and installed according to manufacturer's specifications with attachment points secured. No unusual signs of oil of fuel leaks within the vicinity of the

	k Crawler System Adequate Lubrication		
28.2	Complete and secure connection bolts		No missing track pads, locks, pins, bolts
28.3	Normal slack and wear of drive chain		

APPENDIX - GENERAL LOAD CHARTS AND OPERATIONAL CONSIDERATIONS

General Load Chart and Operational Consideration

<u>General Load Chart</u>: Manufacturer's operating notes supplied with the machine contain important information concerning proper setup, operation and additional points that need to be considered when calculating load handling capacities of cranes. Mistakes in calculating capacity can cause accidents.

Several factors to be considered when calculating a cranes load capacity, including the following:

- A. Load Radius: the horizontal distance between the center of the crane rotation to center of the load.
- B. <u>Boom length</u>: including the jib, swing away extension or any other attachments that may increase length of the boom.
 <u>Parts of line</u>:
- D. <u>Quadrant of operation</u>: the area of operation that the lift is being made in; note different quadrants usually have lower lifting capacities.
- E. Boom angle: the angle formed between the horizontal plane of rotation and center line of the boom.
- F. <u>Weight of any attachments</u>: jib, lattice extension or auxiliary boom point.
- G. <u>Weight of handling devices</u>: ball, block, and/or any necessary rigging.

Operational Considerations:

- A. When working at boom lengths or radii between the figures shown on the load capacity chart, the next lower capacity rating should be used. It is dangerous to guess the capacity for boom lengths or radii between those listed on the rating plate.
- B. It is very dangerous to lift a load without knowing whether it is within the rated capacity while expecting the crane to start to tip to warn of an overload. Cranes may suddenly tip over or the boom may collapse if the load is too heavy.
- C. Always stay within the rated capacity. Operators must reduce the load capacity under adverse field conditions until, it is determined, the machine can safely handle the lift.
- D. Loads shall not be allowed to exceed rated load capacity and working radius.
- E. Do not use counterweights heavier than the manufacturer's recommended weight.
- F. Even a light wind can blow the load out of control, collapse booms, or tip machines. Winds aloft can be much stronger than at ground level.
- G. Proper precautions shall be taken when the velocity of wind exceeds 20-mph.
- H. Crane capacity can be adversely effected when the machine set is not level.
- I. Do not lift loads when winds create an unsafe or hazardous condition. Booms should be lowered, if possible, under high wind conditions.
- J. Foot pedal brake locks are furnished on some cranes to allow the operator to rest his legs when suspending the load for short periods of time. Operators should keep their feet on the pedals while foot pedal brake locks are in use. Brakes may cool allowing the load to fall.
- K. No one, except the oiler, instructor or designated person should be allowed on a crane with the operator when the crane is in operation.