

SAFETY, HEALTH & ENVIRONMETAL

POLICY AND PROCEDURES



D V INFRA & PROJECTS

17/C Phase-01, IDA Patancheru, Hyderabad

INDEX

1. SAFETY & HEALTH POLICY
 - Safety Policy.
 - Objectives of Safety Policy.
 - Safety Officers.
2. TRAINING POLICY
 - General Training
3. DRUGS AND ALCOHOL POLICY
4. ORGANIZATION ENVIRONMENT POLICY
5. RESPONSIBILITIES OF STAFF ON SHE TRAINNING
 - 5. 1 Director Responsible for Health and Safety.
 - 5.2Site In charge responsibilities.
 - 5.3Site Safety supervisor responsibilities.
 - 5.4Site employee responsibilities.
6. PROJECT SAFETY MANAGEMENT
 - 6.1 Strategies.
 - 6.2 People.
7. INDUCTION TRAINING
8. PRO-ACTIVE SAFETY MONITIRING
9. SAFETY PROMOTIONAL ACTIVITIES
10. FIRE PREVENTION
11. FIRST AID & HOSPITALS
12. INCIDENT/ACCIDENT REPORTING
13. SITE EMERGENCY PROCEDURES
14. LOCAL LAWS, STATUATORY REGULATIONS
15. LABOUR LAWS AND RULES
16. TRAINING AND IMPORTANCE OF EMPLOYEES
 - 16.1 Initial site orientation/induction.
 - 16.2 Specific hazards training.
 - 16.3Toolbox Talks.
17. SAFE PLAN OF ACTION

18. PERMIT TO WORK SYSTEM

19. HEALTH MONITORING

20. INSURANCE

21. PLANT AND EQUIPMENT

21.1 Plant & Equipment Safety.

21.2 Condition of the Machinery.

21.3 List of Machinery and Equipment Register.

22. ACCIDENT / INCIDENTS MANAGEMENT

23. PERSONAL PROTECTIVE EQUIPMENT (PPE) AND FACILITIES

24. SAFE WORK METHODS

24.1 Fall Protection.

24.2 Scaffolding /Working platforms.

24.3 Floor/Wall/Roof Opening guards.

24.4 Mobile equipment Safety.

24.5 House Keeping.

24.6 Fire Protection.

24.7 Injury Treatment Procedure.

24.8 Rescue/Evacuation Procedure.

24.9 Hazard Recognition.

24.10 Lock Out/Tag Out.

24.11 Manual Handling.

24.12 Eye Protection.

24.13 Hearing Protection.

24.14 Foot Protection PPE.

24.15 Respiratory Protection PPE.

24.16 Anti-Fall Protection.

24.17 Hand Protection PPE.

24.18 Telephones.

24.19 Carrying the drugs and alcohol prohibition.

25. HAZARD MANAGEMENT

26. EMERGENCY PREPAREDNESS AND RESPONSE

26.1 Introduction.

26.2 Definition.

26.3 Objectives.

26.4 Essential elements.

26.5 Criteria for proclaiming major emergency.

26.6 On site centers for emergency control.

26.7 Central Control Center (CCC).

26.8 Handling of an emergency /disaster.

26.9 Preventive measure to avoid accidents & emergency situations.

27. ROLES AND RESPONSIBILITIES DURING EMERGENCY

27.1 General.

27.2 Action by fire safety member.

27.3 Role of First Aid Team.

27.4 Role of Fire Safety.

27.5 Role of HR Department.

27.6 Role of Maintenance Department.

27.7 Role of Finance Department.

28. JOB SAFETY ANALYSIS

29. METHOD STATEMENT

30. EMERGENCY RESPONSE AT SITE

Annex. – 1 : Inspection Checklist – FULL BODY HARNESS.

Annex. – 2 : Inspection Checklist – LANYARD WITH SHOCK ABSORBER.

Annex. – 3 : Inspection Checklist – SAFETY HARNESS.

Annex. – 4 : Inspection Checklist – TOOLBOX TALK SHEET.

Annex. – 9 : Inspection Checklist – LADDER.

Annex. – 10 : Inspection Checklist – MOBILE SCAFFOLDING / ACCESS PLATFORM.

Annex. – 11 : Inspection Checklist – RIGGING TOOLS & TACKLES.



SAFETY & HEALTH POLICY

Safety Policy

DV PLOYMERS is fully committed for provided safe and healthy working conditions for all employees working on the projects and our goal is zero accidents in our operations. Safety is an overriding value that the operation shall be conducted in such a manner that reasonably practicable measures are taken to protect people not only in our employment but also others who may be affected by our activities. We believe that accidents are caused, and they can be prevented by eliminating the causes of accidents.

Safety is the responsibility of every employee, but line management is ultimately responsible for the implementation of safety requirements.

Everyone involved must be committed to achieving high standard of HSE performance with proactive approach at all levels in the organization with excellent team work.

All activities shall be in compliance with relevant local laws, statutory requirements, codes, and practices pertaining to health & safety of employees.

All personal should share a sense of empowerment on safety matters with an effective communication system to facilitate the flow of HSAE information both up and down through the organization.

Objectives of Safety Policy:

General:

Everyone working on the Project shall be committed to a Policy of ensuring that the highest standards of Healthy, Safety and Welfare which are reasonably Practicable are adopted. To this end, he following objective have been set for the project.

- Successfully implement the Safety Policy.
- Unsafe acts & conditions must be identified and corrected, with action aimed to prevent recurrences.
- Achieve Safe and Healthy Workplace.
- The safety & health of all employees must receive prime consideration throughout the phases of work.
- Ensure compliance with all applicable laws, statutory requirements, codes of practices and standards set forth by Owner.
- In essence “NO SAFETY NO WORK”



Target

The following Safety targets apply to the project:

- Lost time injuries : Zero
- Reportable injuries : Zero
- Occupational illness : Zero
- Environmental incidents : Zero

DV PLOYMERS have written statements of policy in respect of safety and health of Zero.

- Environmental incidents : Zero

: DV PLOYMERS have written statements of policy in respect of safety and health of building workers, copy of the policy is to be signed by an authorized signatory.

- DV PLOYMERS shall prepare a comprehensive safety Assurance Plan in the form of standard documents for implementation and monitoring of HSE requirements.
- This shall be submitted to DV Polymers owner for approval and implementation.
- DV PLOYMERS shall appoint safety personnel as given below.

Safety Officer:

At all times, minimum one officer for worker not exceeding 25 in numbers will be reported to the site.

TRAINING POLICY

2.1: General Training:

DV INFRA & PROJECTS has training policy as soon as the employee is joined the organization, he shall go under the safety training like awareness of the product handling and recommended safety guidelines to be followed. We shall arrange for initial Site orientation / induction of all workmen/supervising personnel on “Safety Practices” before commencing work at site. This shall include brief about factory, safety policy, site safety rules and site facilities.

DV INFRA & PROJECTS is committed to impart training to all the employees including staff, workman in the factory as well as at site in line with safety, health, and environment as per the requirement of the organization. All the existing employees must undergo training at least once in 6 months.

3.0 DRUGS AND ALCOHOL POLICY

Rules for Drugs and Alcohol Policy:

DV INFRA & PROJECTS has Drug and Alcohol Management Plan (DAMP) in place at all its workplaces which includes a zero-blood alcohol and drug-free workplace. This means that you must be free from alcohol and drugs when working at factory and at project site.

DV INFRA & PROJECTS reserves the right to check the employee free from drugs and alcohol before entering the workplace.

DV INFRA & PROJECTS has a 'smoke-free' workplace policy. Smoking is not permitted in any Site premises workplace.

Site mandatory indications will be displayed to worker entering into site which enables him to make himself check before entering the site with any of such contents.



A worker attending at a workplace while under the effect of alcohol or drugs will not be permitted to commence or continue working.

4.0 ORGANIZATION ENVIRONMENT POLICY

Organization Environment policy:

- An environmental policy is an agreed documented statement of a company's stance towards the environment in which it operates.
- We are completely responsible to ensure a good environment condition.
- Any material which is harmful to the environment condition will be disposed in a Proper guided condition.
- Daily Housekeeping will be followed by the supervisor inspected at site and factory.
- All environmental commitments should be an integral part of the day-to-day activities.
- Set monitor and review objectives and targets on an ongoing basis toward achieving continuous improvement in environmental performance and the overall environmental management systems.
- Integrate energy and environmental considerations in the performance of our work activities.
- Communicate the environmental policy to all employees, business associates and other stakeholders and ensure that the policy is available to the public

5.0 RESPONSIBILITIES OF STAFF ON SH&E TRAINING

All our employees have been informed of the moral and legal responsibilities of SHE policy. In fact, at the time of induction and once in a month we will have a training program and at that time all our employees will be sufficiently educated on the moral and legal responsibilities of the SH&E policy and the relevant Statute like Employees Compensation Act , ESI Act etc.

5.1: Director Responsible for Health and Safety:

The Director Responsible for Health and Safety is accountable to the Managing Director for all matters relating to health, safety, and welfare of employees and those affected by the company operations.

In particular the Director Responsible for Health and Safety will:

1. Understand and ensure that the implications and duties imposed by new Acts of Parliament, Statutory Instruments, H.S.E. Guidance Notes and Codes of Practice are brought to the attention of the Board of Directors.
2. To bring company related health and safety matters to the attention of the Board of Directors at regular intervals.
3. To ensure that good communications exist between employer and employees and are maintained.
4. Liaise with the person appointed in the role of Safety Manager over the full range of their duties and responsibilities, with respect to inspections, audits, report recommendations, changes in legislation and advice obtained from other sources.
5. Ensure adequate means of distributing and communicating health, safety and welfare information obtained for the H.S.E., Safety organizations and Trade associations regarding new techniques of accident prevention, new legislation requirements and codes of practice etc.
6. Ensure that an adequate program of training for health and safety is established and that the safety culture is encouraged amongst employees.
7. Set a personal example at all times by using the correct personal protective clothing/equipment and following all safety requirements and procedures.

5.2: Site In charge responsibilities:

The primary role of the Site In charge is to advise the Directors and Managers on all safety, health and welfare matters to ensure the Company complies with its statutory obligations. The site in charge is designated responsibility by the Director responsible for health and safety to control and update this Safety Manual and to ensure that all Departments operate to the procedures and instructions contained there:-

In particular the site in charge will:

8. Implement and monitor day to day activities as per client requirements.
9. Implement the SHE Management Plan.
10. Observe all SHE rules and regulations.

11. Making sure that work activities are carried out in a safe and environmentally sound manner.
12. Planning to do all work safely including any interface with other work activities.
13. Providing advice and assistance on OHSE matters to employees.
14. Deciding when training on SHE is required as per directions of Managing Partner.
15. Action on SHE reports and carrying out workplace inspections.
16. Setting up SHE meetings and programs.
17. Helping to prepare Safe Work Method Statements for the organization work activities.
18. Investigating hazard reports and ensuring that they are completed, and corrective actions undertaken.
19. Carrying out project inductions, Toolbox Talks and team meetings.
20. Being a part of incident investigations.
21. Leading by example and promoting sound SHE practices at every opportunity.
22. Other SHE duties as directed by the Managing Partner.

5.3: Site Safety supervisor responsibilities:

The Safety Supervisor is responsible for his personal safety and that of all personnel under his authority, including others who may be affected by the company's activities. In particular he will:-

23. Understand and implement the Company Safety Policy.
24. Appreciate the responsibilities of personnel under their authority and ensure that each employee knows his/her responsibility and are equipped to play their part!
25. Prepare and maintain a scheme which identifies work equipment requiring inspection by competent persons and ensuring that the equipment is easily identifiable and available for inspection on the date required.
26. Prepare and maintain suitable records of all inspections. These records to identify precisely what was inspected, how, who by, when, any defects found, remedial action taken and the date/time of the next inspection.
27. Conduct Risk Assessments on activities within their department ensuring that the methods and systems of work are safe. Also, that the necessary procedures, rules, and regulations designed to achieve this are formulated, published, and applied.
28. Ensure that all engineering construction work under his control complies with all relevant construction statutory instruments.
29. Ensure all employees and sub-contractors are suitably trained/competent to carry out the prescribed task and that the necessary licenses/certificates of competence are in force and appropriate.
30. Ensure the Statutory Notices, the Safety Policy, Insurance Certificate, and the names of Appointed First-Aiders are displayed and maintained in prominent locations.
31. Reprimand any employee for failing to discharge their health and safety responsibilities.
32. Set a personal example regarding health and safety matters.

5.4: Site employee responsibilities:

Are responsible for the following:

1. Working in a safe manner without risk to themselves, others, or the environment.
2. Complying with the SHE Management Plan including all Safe Work Method Statements.
3. Reporting all incidents to the Works Supervisor.
4. Reporting all injuries and illnesses to the designated at client OHC.
5. Reporting any SHE hazards to the Works Supervisor.
6. Providing suggestion, through agreed consultation methods, on how to improve SHE issues.
7. Seeking assistance if unsure of SHE rules.
8. Reporting any faulty tools or plant to the site in charge.
9. Complying with site rules.
10. Correctly using all personal protective equipment.
11. Complying with emergency and evacuation procedures.

6.0 PROJECT SAFETY MANAGEMENT

6.1: Strategies

The following are some of the important strategies, which are in place to accomplish the HSE plan.

- Method statements should be prepared by the Contractors well in advance of the respective activity.
- Monitor compliance with HSE plan, requirements by all involved personnel.
- Conduct Safety Audits.

6.2: People

- DV INFRA & PROJECTS shall ensure training of all personnel on the general requirements for work and specific requirements for the project.
- DV INFRA & PROJECTS to employ skilled people suitable for the job.
- Ensure that the workmen are physically fit for the job.

7. SITE SAFETY INDUCTION TRAINING

Induction training is a type of training given as an initial preparation upon taking up a post. To help new people get to work initially after joining a firm, a brief program of this training can be delivered to the new worker as a way to help integrate the new employee, both as a productive part of the business, and socially among other employees. It often contains information dealing with the layout of the firm's operating facility, health and safety measures and security systems. An attempt may also be made to introduce the individual to key employees and give an impression of the culture of the organization; it is a critical time for the employer to gain commitment from the employee, and the latter to understand the expectations, targets and so on. The induction provides a really good opportunity to socialize and brief the newcomer on the company's overall strategy, performance standards etc.

Procedure:

1. After receiving and joining report of new employee and completing the formalities like filling up the forms like PF, ESI, and gratuity nomination forms and verification of other records HR will take him to concerned dept head, brief him on nature of duties, responsibilities, and expectations of Management.
2. A new employee is required to submit the Xerox copies of his qualification, identity mark, date of birth proof, address proof etc.
3. He will be briefed on the need to maintain punctuality, regularity and attendance, safety methods using safety equipment and precautions to be taken to the safety of co employees and machinery/ equipment.
4. He will be trained on Safety, health, and environment during the course of time.
5. We strongly believe that prevention is better than cure. With that avowed intention we frame our safety policy.
6. Accident and incident investigation, corrective, and preventive action and on site emergency plan will be explained.
7. As a preventive measure, any employee before starting the machine he should check the aspects like, leakage of oil, possibility of short circuit, spillage of metallic.
8. Fire prevention / protection and handling of Fire Fighting Equipment.
9. Hazard identification and risk analysis in each activity.
10. Every employee is given training on usage of PPE. Every employee has to follow wearing of safety shoes, helmet, wherever applicable welding goggles, before plant operation the equipment / machinery free from dust, free from leakage of lubricant oil and preventive steps to avoid short circuit.
11. New employee will not be straightaway put into his job, he will be taken into all the related depts. i.e., if he is production man, he will be taken to mechanical and electrical maintenance, Quality control, safety dept etc.

12. First aid is available at security, shop floor and at Admin dept and maintaining of all will be the responsibility of GM.
 13. New employee is required to give undertaking to maintain confidentiality on company, customer, production process, knowhow, and technical details.
 14. The attendance of each employee will be monitored daily by maintaining attendance register kept at security gate. Leave register will be maintained. Every day a list will be prepared showing the no of persons present and no of persons on leave/ absent. At the end of the month the attendance will be fed to the pay roll section and we will prepare the pay sheet covering statutory deductions like PF, ESI and Professional Tax etc. The pay slip will be given to each employee every month.
- A. DV INFRA & PROJECTS shall conduct tool box talks for all workers each newly joined employee allocated to site. These tool box should include topics relates to ongoing work activities and precautions for those works.
 - B. DV INFRA & PROJECTS site in charge shall also submit Health & Safety report on monthly basis to
 - C. HO in the formals given with this document.
 - D. The safety conditions specified and recommended here are being issued for guidance of site in charge. It is primary responsibility of the site in charge to ensure that jobs are executed in safe manner.
 - E. These rules do not exempt the site in charge from statutory duties on health and safety but are intended to assist in attending a high standard of compliance with those duties in order to provide a safe and healthy working environment.
 - F. The site in charges shall not mobilize his office, equipment and shall not store construction material, consumable, tools, and tackles, etc. at any place other than area marked by the site in charges.
 - G. The site charge shall designate a competent man as safety officer who will be available at site during the period of execution of the contract and shall assume all responsibilities in terms of safety, time schedule, insurance, and statutory obligations.
 - H. The site in charge shall be responsible and indemnify the owner, against all injuries to persons both his own workmen and others and for all damages to structural and/or decorative parts of the owner's property during construction, erection and during commissioning of the equipment. The site in charges shall repair / reinstate all such damages.
 - I. The site in charge should take all precautions not only for the safe working of his workmen but also for safeguarding existing structure, equipment, and workmen of the owner as well as other agencies in and around the job site.
 - J. DV INFRA & PROJECTS shall cover his workmen under the Employees State Insurance Scheme.

It is the responsibilities of the Site In charge to familiarize all new personnel to the project on the actual location of assembly points, fire alarm points, first aid center and the like.

The Site In charge is responsible for arranging site safety inductions for their workmen at least one day in advance.

8.PRO-ACTIVE SAFETY MONITORING

A pro-active safety monitoring programme shall be used on the project.

Proactive safety monitoring is carried out before we have any indication of failure; before anything goes wrong. It is routine, regular checking, that can include physical inspections of the workplace, audits, and environmental sampling.

These techniques include safety inspections and audits, where the objective is to obtain performance feedback, enabling corrective action to be taken prior to any failure in the system. This type of monitoring is used to evaluate the level of compliance with a legal requirement, or with a stated organizational objective.

This may involve the setting up of a health and safety group but generally risk assessments by a competent person. This must evaluate existing procedures of work and the actual methods and systems that are adopted.

The following are some of the elements of such program.

- Safety Observation Reports.
- Safety Inspection / Safety audits.
- Safe Plan of Action.
- Method Statements.

Suitable formats will be provided for the purpose.

9.SAFETY PROMOTIONAL ACTIVITIES

Everyone - employers, unions, other worker advocate organizations and workers themselves can actively promote a healthy and productive workplace. By committing to providing safe and healthy work, employers can meet their legal requirements, improve productivity, and reduce costs.

Employers and employees should plan or participate in at least one activity to improve health and safety in the workplace.

Employers should

- Work with workforce representatives to develop health & safety programming as needed.
- Invite a site visit from an occupational health expert to make health & safety recommendations.
- Offer medical screenings.
- Distribute health & safety information regularly, along with appropriate protective equipment to employees.

Employees should

- Work in a safe manner wearing appropriate protective equipment.
- Bring to the attention of health & safety committees/employers/coworkers potential worksite hazards needing elimination.
- Participate in medical screenings, trainings, workshops, and other activities offered by employers or labor unions.
- Distribute health and safety information to co-workers.

To develop safety consciousness amongst the employees the DV PLOYMERS site management shall organize safety completion and safety rewards.

10.FIRE PREVENTION

The following will be ensured to prevent fire:

- Inflammable waste to be stored separately and tidily.
- Burning of waste / rubbish to be controlled.
- Inflammable material is stored away from hazardous process e.g., welding, fabrication areas. All storage areas to have warning signs.
- Petrol/diesel driven plant/equipment and vehicles to be switched off before refueling and a funnel to be used to avoid splashes.
- Smoking to be prohibited in the entire plant premises.No naked light or defective/worn out electrical / cables to be operated / run through this area.

While doing hot work, like gas cutting and welding that require special considerations, the following will be observed:

- Removal of all combustible material beyond the area of sparks and spatters.
- No tarpaulins will be used as protection against sparks.
- The work site after the work is completed is to be checked to ensure fire is not smoldering.

Adequate fire extinguishers shall be provided on selected locations with an emphasis that site personnel know.

- The correct type of extinguisher and their location.
- Limitation of use according to type of fire.
- How to use

The various requirements shall be explained by the site safety officer during site training programs.

11.FIRST AID & HOSPITALS

“First-aid” is the assessment and interventions that can be performed by a first aider during an emergency with minimal equipment until appropriate medical personnel arrive. The life of an injured or ill worker or member of the public within the vicinity of the workplace may depend on proper first aid being given within the first few minutes of an accident or an illness.

Besides saving lives, first-aid treatment is important in preventing further complications from injury and pain and in promoting recovery. It is also important for minor injuries such as bumps, sprains, cuts, etc.

The owner at project site may provide a first - aid center for the treatment of minor injuries and illness. However, all major injuries and sickness cases shall be referred to the Hospitals and DV INFRA & PROJECTS shall make his own arrangement for such treatment as required.

DV INFRA & PROJECTS shall have arrangement for rendering necessary first - aid in case of accidental injuries. Work site must be provided first-aid box containing items as specified in the Building and other Construction Workers ' (Regulation of Employment and conditions of Service Rules, 1998) and keep the same in a conspicuous place where it is easily accessible.

DV INFRA & PROJECTS shall make arrangement for the emergency care treatment of all employees at the nearest (or reasonably nearby).

12.INCIDENT/ACCIDENT REPORTING

Purpose

Accident/incident reporting is necessary to identify causation and to help identify deficiencies in the environment and implement corrective actions that might be indicated.

Any accident that appears to be serious or which entails a person reporting to hospital or leaving site for treatment shall be reported immediately to PMC/ Client and the victim shall bring to OHC for furtherance parallel to Guide for identifying casual factors and for investigation report.

DV PLOYMERS shall ensure that any accidents that occur is fully investigated to find root cause and preventive measures are adopted to prevent its reoccurrence.

All employees are insured in the open policy (Policy Enclosed).

Incident/Accident Reporting:

- If worker at working site have an accident or near miss/or ill health, he must report it to supervisor or line manager.
- Supervisor shall report to PMC/Client
- Complete an employee accident form with supervisor.
- If you experience violence at work must also report this.

Incident/Accident Investigation Process:

Secure and document the scene.

- Remove employees who might still be at risk for a similar action.
- Secure the scene with cones or a barricade.
- Document the site by writing down observed conditions.
- Photograph the site if needed for the investigation.
- Document the names of witnesses to the incident for interview.
- Identify the facts. Do not assume anything, opinionate or blame anyone.
- People-the eyewitness or the ear (hearing) witness.
- Parts-use words such as debris, guards, and equipment.
- Position-exact location of the people and parts, providing measurements.
- Paper-records, codes, standards, and blueprints provide strong, concrete data.

Investigation Interview Steps:

- Eliminate distractions and allow the proper timeframe for the interview.
- Conduct the interview at the incident site.
- Interview witness separately to get a full detail of their recollection of events without the influence from other witness.
- Listen during a typical interview the interviewer should be talking 25 percent of the time, and the interviewee should be speaking 75 percent.
- Ask open-ended questions. Show the importance of the employee and investigation. Ask for suggestions to solve the problem.

Job Hazardous Analysis Technique:

A job hazard analysis is a technique that focuses on job tasks as a way to identify hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment. Ideally, after you identify uncontrolled hazards, you will take steps to eliminate or reduce them to an acceptable risk level.

Supervisors can use the findings of a job hazard analysis to eliminate and prevent hazards in their workplaces. This is likely to result in fewer worker injuries and illness; safer, more effective work methods; reduced workers compensation costs; and increases worker productivity. The analysis also can be a valuable tool for training new employees in the steps required to perform their job safely.

For a job hazard analysis to be effective, management must demonstrate its commitment to safety and health and follow through to correct any uncontrolled hazards identified.

Otherwise, management will lose credibility and employees may hesitate to go to management when dangerous conditions threaten them.

A job hazard analysis can be conducted on many jobs in your work place. Priority should go to the following types of jobs.

- Jobs with the highest injury or illness rates.
- Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents.
- Jobs in which one simple human error could lead to a severe accident or injury.
- Jobs complex enough to require written instructions.

13.SITE EMERGENCY PROCEDURES

A detailed site emergency procedure shall be worked out and communicated to all employees at site. Necessary arrangements shall be made to deal with such emergency situations.

In any emergency Response Procedure, the following steps are basic and essential while following with client's procedure.

- Stay Calm.
- Assess the situation.
- Take command.
- Provide protection.
- Aid and manage.
- Maintain contact.
- Guide emergency services

14.LOCAL LAWS, STATUTORY REGULATIONS

DV PLOYMERS shall comply with all local laws and statutory rules particularly the provisions under Contractor Labor (Abolition and Regulation) Act. Building and other Contractor Workers (Regulation of Employment and Condition of Services) Act 1996 and Building and other construction workers (Regulation and Conditions of Services) Rules,1998.

15.LABOUR LAWS AND RULES

DV PLOYMERS shall maintain relevant records and fulfill all conditions and requirements in accordance with following:

No person below the age of 18 (eighteen) years shall be employed for the work.

DV INFRA & PROJECTS shall not pay less than what is proved under law to any persons.

16. TRAINING AND IMPORTANCE OF EMPLOYEES

16.1: Initial site orientation/ induction:

- Personal Protective Equipment (hard hats, safety glasses, steel-toed boots, earplugs, safety jackets).
- Housekeeping.
- Working in and around excavations.
- Working at height (ladders, Scaffolds, free edges, and openings).
- The Safe Plan of Action (SPA)
- First aid facilities, Accident reporting system.
- Emergency Procedure.
- Smoking restriction, prohibition of alcohol and drugs & Tobacco products
- Site DO's and Don't's
- Welfare Facilities

16.2: Specific hazards training:

Specialized training will be given for such topics as:

- Hot work
- Scaffolding and work at height
- Material handling
- Pressure testing
- Heavy equipment lifting and rigging.
- Work permit system
- Lockout and tagout procedures
- Entry into confined spaces
- Handling hazardous material
- Fire prevention and control

The following topics for training shall be considered:

- Overall safety program HSE Policy
- The statutory Regulations and HSE Codes and Practices Site Safety Rules and requirements
- Safety Organization and Responsibilities
- Safety and Health Inspections / Safety Audits Environmental protection / Waste disposal Fire prevention Control
- Personal protective Equipment and safety Equipment Scaffolding, ladders, safety nets, etc. Fall Protection Cranes, Hoists and lifting Equipment Good Housekeeping Excavations Electrical Safety Gas Cutting and Welding Hazardous material handling Permit to work System.



16.3: Tool box Talks:

- DV INFRA & PROJECTS will conduct toolbox talks for all employees before deploy to work by supervisor
- Topics will include current issues or precautions for about to start.
- Each session will last from 15 to 30 minutes.
- Record will be Maintained

17.SAFE PLAN OF ACTION

17.1: The SPA is the primary tool used at site to identify and plan to mitigate safety hazards. This form shall be completed by the employees and their supervisor of each crew before starting a new activity and kept at the workplace for ready reference.

17.2: The SPA has sections for the employees to:

- State the task to be performed.
- Location of the task to be performed.
- Safety hazardous anticipated.
- Steps to be taken to prevent the risk identified.
- Equipment, tools, or materials need for protection against the hazard and to perform the work safely.

17.3: It is the responsibility of the supervisor to ensure that all equipment, tools, or materials needed to implement the prevention's identified by the SPA are obtained and all the steps identified to prevent the safety hazardous are implemented before starting the work task.

18.PERMIT TO WORK SYSTEM

19.1: A permit to work system is a safety strategy designed to protect personnel and plant and which consists of an organized and predefined safety procedure. It forms a clear record of all foreseeable hazards, which have been considered in advance of the construction operation.

19.2: The identities of the permit “issuing authority” and “permit acceptor” will be dependent on nature of the activity.

19.3: The following are some of the types of permits, which are introduced from time to time depending upon work situation.

- General
- Excavation
- Lifting Operations
- Hot work/naked flame
- Electrical works
- Confined spaces
- Height

19.HEALTH MONITORING

All the employees are enrolled under the Health safety policy all the employee working at the site will be carried there ESI.

The entire employee will have a health checkup once a year.

Employee of DV INFRA & PROJECTS will be covered under insurance policy if any accidental case has been observed.

All the employee working at site will be personally take care to inform the about the health conditions.

The working time of the employee is strictly maintained to avoid the under fall of healthy condition.

Employee health record will be maintained in our factory.

There are other things you can do to gain information on whether or not your workforce may be suffering. These including:

- Using administrative resources such as reviewing entries in the accident book, sickness absence records /fit notes, staff turnover etc. Although this information is already available you may need to interpret it.
- If workers are reporting symptoms, consider a referral to an occupational health provider or suggest they see their GP to get treatment.
- When you have gathered all available information, it is important that you interpret this data and look for patterns in:
 - Comments from employees.
 - Symptoms reported.
 - Existing risk factors.
 - Results of surveys.

20.INSURANCE

A. GPA Insurance

B. Building, Plant and Machinery Insurance

It is the practice in our company that all our buildings, Plant and Machinery, office furniture, raw materials etc. are insured regularly .A copy of our insurance policy is enclosed. Further we have 5 Car and 3 motorcycles, and all are duly insured (Insurance policy copies enclosed.

We regularly maintain the product insurance copy will be disclosed on the any incidental occurrence of the effect.

All the employee working from day-1 is covered under the ESI under this no liability insurance is required.

If incase it is required, we are ready to obtain the insurance policy for the working employee at project.

21.PLANT AND EQUIPMENT

All the equipment will have a periodic maintenance and inspection by an authorized person to avoid the failure of the machine.

All the machines equipment is inspected and maintained in accordance with the relevant standard and manufacturer's recommendations.

Maintenance on plant and equipment is carried out to prevent problems arising, to put faults right, and to ensure equipment is working effectively.

21.1: Plant & Equipment Safety:

Each employee shares in the responsibility to protect human beings and the environment in his or her area of work. All applicable laws and regulations on environmental protection or plant and industrial safety must be fully complied with. The same applies to the company's own guidelines and rules. Each superior has the duty to instruct, supervise and support and support his or her employee in assuming this responsibility.

21.2: Condition of the Machinery:

Condition monitoring is the process of monitoring a parameter of condition in machinery (vibration, temperature etc.) in order to identify a significant change which is indicative of a developing fault. It is a major component of predictive maintenance. The use of conditional monitoring allows maintenance to be scheduled, or other actions to be taken to prevent failure and avoid its consequence. Condition monitoring techniques are normally used on rotating equipment and other machinery (pumps, electric motors, internal combustion engines, and presses), while periodic inspection using non-destructive testing techniques and fit for service (FFS) evaluation are used for stationary plant equipment such as steamboilers, piping, and heat exchangers.

21.3: List of Machinery and Equipment Register

S. No	Equipment	Make	Model	Year of Mfg.	Remarks
1	Fall Arresters				
2	A-Type Ladders				
3	Compartment Tool Boxwith Lock				
4	Scaffolding materials				
5					
6					
7					
8					
9					
10					
11					
12					
13					
OTHERS, if any					
1					
2					
3					
4					
5					

All the tools and tackles handled at site are operated under the PPE practice.

22.ACCIDENT / INCIDENTS MANAGEMENT

- The foreman at the site is responsible for reporting the event and further handling it.
- On the occurrence of a work accident the first priority is to take care of the health and safety of the injured and see that they are evacuated quickly and efficiently when required.
- There will be an investigation of every accident according to the relevant DV INFRA & PROJECTS procedures under the guidance of the safety administration, in order to understand the way, it happened and prevent its recurrence by drawing conclusions and learning practical lessons which can be implemented.
- The conclusions from the event will be distributed and taught by the site safety administration, at its professional discretion.
- All accident reports and investigations will be documented at the site safety administration's office and used as database for data analysis, for safety guidance and for training employees and foremen regarding safety issues.

23. PERSONAL PROTECTIVE EQUIPMENT (PPE) AND FACILITIES

DV PLOYMERS shall provide all his employees / workers working overhead or in other hazardous job, with full body safety harness, safety helmets, goggles, etc. as and when required for the work and ensure their regular use by their employees / workers to prevent accidents.

Wearing of safety shoes is compulsory for all workers except those on earthwork who also shall wear any other alternate shoes suitable for their working.

Full body safety harness and other equipment as stated above must be subject to inspection and approval by the engineer.

DV PLOYMERS shall provide all necessary protective clothing and equipment. Records of the issue of safety equipment must be maintained.

24.1: The Site In-charge shall:

1. Maintain all personal protective equipment in good working condition and keep them clean.
2. Replace and defective / broken personal protective equipment.
3. Provide storage for personal protective equipment is effectively use.
4. Give training, information, and instruction on its use to employees.
5. The following PPE are generally used on site. However, special equipment may be required for certain operations depending upon the risk involved.

ii. : All the PPE provided are legally comply with requirement:

Since all the material provided under the PPE are legally approved under the safety guidelines

- iii. : Employees working are well trained under the safety program to use all the PPE supplied properly.

Record maintained has complete PPE issued and trained properly to use all the issued PPE.

Employee Name	Items Issued	Date of Issue / Replacement	Signature of receiver



23.4: CHECK LIST FOR USAGE OF PPE				
Project:		Type of Job:		
Location:		Safety Audit Conducted on:		
S. No	Description	Requirement Y/N	Percentage Compliance	REMARK
1	Safety Helmet			
2	Eye protection			
3	Face Protection			
4	Hand Protection			
5	Safety Footwear			
6	Ear Protection			
7	Protective Clothing			
8	Respiratory equipment			
9	Safety Harness			
10	Condition of Equipment			
OVERALL USAGE OF PPE ON PROJECT				State Satisfactory [or] Adequate [or] Unsatisfactory

24.SAFE WORK METHODS

All the Employee working are pre instructed regarding the safety work methods to be followed:.

24.1: Fall protection.

DV INFRA & PROJECTS will provide completely fall protection for the employees by providing the proper arrangements for the Scaffolding.

Working at 6mt level is properly barricade and under the supervision of the site safety engineer will be promoted.

24.2: Scaffolding/Working platforms

Procedure: All scaffolding, staging, and work platforms must satisfy the applicable SHE regulations and manufacturer's erection requirements.

The use of site-built staging, or scaffolding is not allowed unless prior approval is obtained from the client Representative and the DV INFRA & PROJECTS Safety Supervisor

The proper use of scaffolding requires that:

1. The scaffold be erected and inspected by a trained, competent person. Client expects scaffold erectors and users to comply with regulations and standard industry practices per Site requirements. DV INFRA & PROJECTS shall train scaffold erectors and users in safe work practices and procedures.
2. Scaffold erectors shall work under the supervision of a "competent person" as defined by SHE Scaffolding Standards. The "competent person" shall be within sight of the scaffold erecting activity.
3. Completed scaffolding will bear a green inspection tag, signed, and dated by the DV INFRA & PROJECTS competent person each shift prior to use. If the green tag is not present, or it is not signed and dated, or a red tag is affixed, the elevated work platform shall be considered unsafe for use.

24.3: Floor/Wall/Roof opening guards:

Proper floor and roof opening should be guarded with railing system by client not to counter any accidents.

The railing provided should have proper indication reflectors while working under the night shifts.

Roof openings should be covered with the proper supporting material to avoid the falling of the material which may cause harm to the employee working under the opening level.

Before execution of the work safety officer will have a site round to inform the client.

24.4: Mobile equipment Safety

1. DV INFRA & PROJECTS has proper instruction procedure to operate the mobile equipment used at site.

2. DV INFRA & PROJECTS shall ensure that only trained and authorized personnel operate mobile equipment, such as extendable boom lifts and cranes. DV INFRA & PROJECTS shall provide trained personnel to assist the operator in clearing building fixtures or other obstructions when raising, lowering, or advancing the equipment.
3. Mobile Equipment will have a regular inspection by the site safety supervisor and by the site engineer.

25.5: Housekeeping.

Keeping a construction site relatively clean of debris can further reduce hazards. The benefits of good housekeeping far exceed the small additional effort required to establish good housekeeping practices at a construction site.

This safety requirement and procedure is established in accordance with Occupational Safety and Health Standards for Construction.

Debris: Unusable or unwanted construction waste material.

Employees will be trained to work safely on construction sites by following good Housekeeping practices. Employees will be trained in:

- The importance of housekeeping
- The benefits of housekeeping

Non-combustible scrap material and debris that consist of form and scrap lumber with protruding nails, and all other debris, must be kept cleared from work areas, passageways, and stairs, and from around buildings or other structures.

During the end of the Day work the site supervisor will have a round on to examine the wastage has been properly collected and disposed.



24.6: Fire Protection

- DV INFRA & PROJECTS ensure that no carry of flammable things to site premises. Proper training and guidance are provided to the entire employee working how to handle the fire extinguisher at site.
- DV INFRA & PROJECTS works carried at site are not at related to fire causing.
- As an organization policy all the fire extinguishers are equipped well and contains the checkup of the extinguisher every six months.
- Employees shall be trained in the proper use of fire extinguishers if conducting fire watch duties. DV INFRA & PROJECTS shall provide fire extinguishers shall be clearly marked and have current inspection. DV INFRA & PROJECTS shall provide their own portable fire extinguishers for any hot work unless other arrangements have been made with the Site in charge.



24.7: Injury Treatment Procedure

DV INFRA & PROJECTS has a written policy in case of the injury the responsible engineer to start the first aid immediately.

According to situation of the injury the engineers responsible to take the injured to nearest ESI hospital and ensure the proper treatment is provided on medical officer prescription.

Engineer is responsible to inform the concerned safety head and ensure remedy action to be taken to avoid the future accidents.

At site condition the injured will, be treated with first aid and informed to client safety head about the situation.

We have a site provided own vehicle which acts as an ambulance to take the necessary action.

24.8: Rescue/Evacuation procedure

Employee is trained before entering the site for the emergency routing and assembling point during the fire.

Emergency Situation - Fire

Follow these basic “rules” for fire safety:

- Never enter a room that is smoke filled.
- Never enter a room if the top half of the door is warm to touch.

If an individual's clothing is on fire, extinguish the fire by rolling the person around on the floor, covering the person with a heavy cloth (blanket), or drenching the person in a safety shower if the shower is in the immediate area of the person. Remember “stop, drop, and roll.”



Report any problems with fire alarms, fire extinguishers, or other fire protection devices to appropriate maintenance staff / Safety Supervisor.

Evacuate the area and call the persons from a safe location. And notify safety supervisor as soon as possible.

24.9: Hazard recognition

The Company will use some or all the following methods to identify and manage Hazards on its work sites:

Health Hazards

- Chemical: Includes any form of chemical such as compressed gases, solvents, lead, and others.
- Physical: Includes noise, vibration, heat, cold and radiation
- Ergonomic: Includes design of the workplace and jobs that involve repetition, force, and posture.
- Biological: Includes organisms or toxic substances produced by living things that can cause illnesses or disease in humans (e.g., bacteria, viruses, fungi, parasites, and insects).

Safety Hazards

- Machine: includes hazards from moving parts like rotating shafts, belts, pulleys, blades, and saws.
- Energy: includes pneumatic or hydraulic pressure, steam, heat, and electricity. Material Handling: includes manual and mechanical handling (e.g., lifting, lift trucks, conveyors)
- Work Practices: includes failure to have or follow safe work practices.

Recognizing hazards:

- Observations and Worker Concerns
- Inspections
- Investigations
- Examining Records
- Task and Process Analysis

Once recognized, hazards must be brought to the attention of employees who can act on them.

Assessing hazards:

Assessment is the process of comparing what we suspect is a hazard against standards and expectations. Other standards should be considered including policies and procedures.

Controlling hazards: Controls are used to maintain standards and expectations. They act to minimize, substitute, or eliminate workers' exposure to the harmful effects of hazards.

Collect data using methods from prior "Recognizing Hazards" steps and compare findings to:

- Acts and regulations
- Standards
- Guidelines
- Manufacturers' recommendations
- Workplace standards as outlined in the safety manual/handbook.

Control Activities:

- Prevention.
- Immediate Response.
- Return to Work.

24.10 Lock out / Tag out.

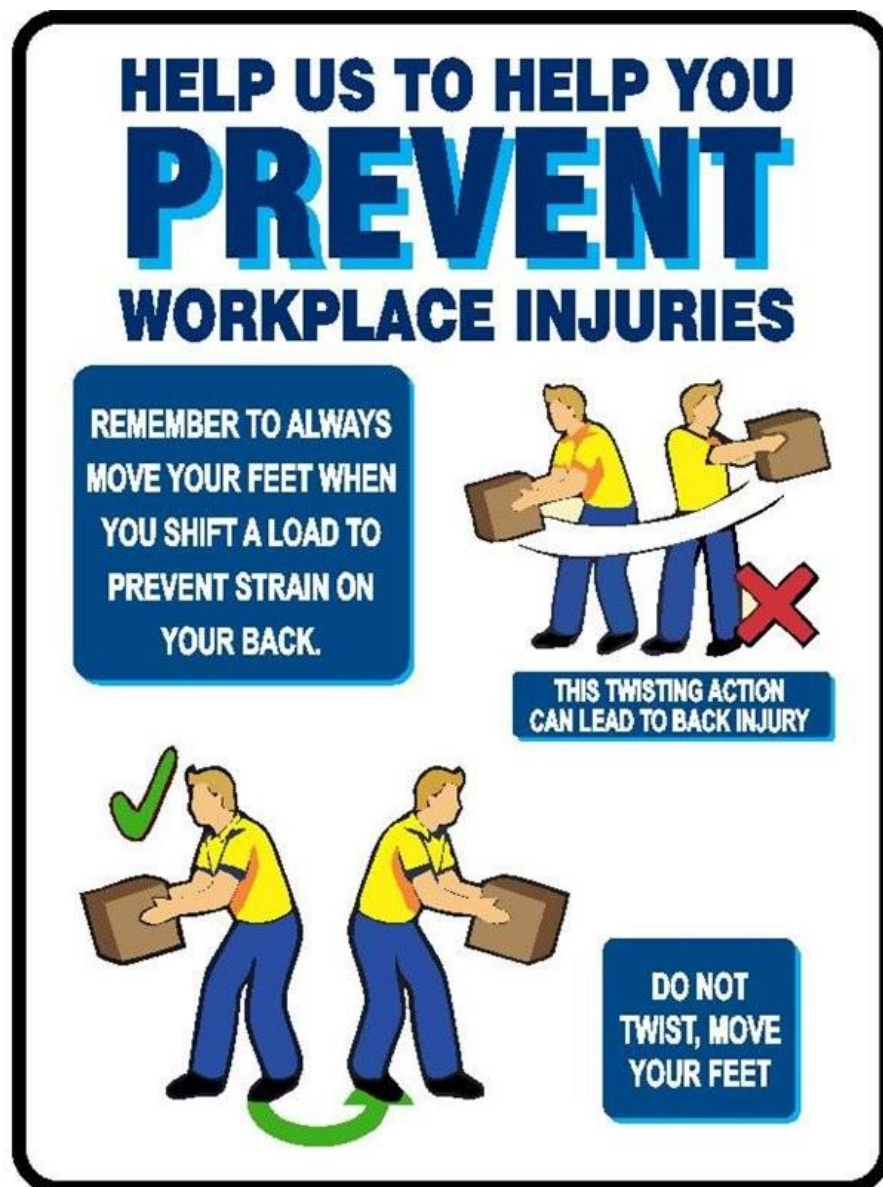
DV INFRA & PROJECTS will comply with the client work permit system “Lock-Out /Tag out” including training and equipping workers.

- The yellow “Out of Service” tag procedure is used to prevent the unauthorized use of plant and equipment which is unsafe, operationally defective, Unserviceable, or when continued use could result in further damage.
- The red “Danger” tag is designed to give personal protection to an individual working on a particular task or in a Particular area.
- A machine/equipment or process may be tagged “Danger” BY ANY PERSON who considers it to be unsafe or unfit for continued use.
- Once tagged the machine/equipment **MUST NOT BE OPERATED** or used by a person other than those authorized to carry out the required inspection / repair.
- Failure to obey the tag system will result in disciplinary action commensurate with the severity of the breach.
- Before placing a tag in position, the required details (e.g., the name of the person applying the tag) must be filled out on the tag.
- The tag must be tied or securely fastened to the machine/equipment on or adjacent to the main positive isolators, valve, control, etc. in such a position that it will be clearly visible to anyone attempting to operate or use it. Switches such as push buttons, emergency stops, and control switches are not positive isolators and should never be used as such. If any uncertainty exists about the correct switch, ask the in charge shall be contacted.
- Where there is a need for multiple switches valves or positive isolators to be isolated a “Danger” tag shall be placed on each one by every individual working on the task.
- The Supervisor must then be notifying the action taken.
- The tag must remain attached to the machine/equipment until the defect has been corrected. The “Out of Service” tag can be removed.



24.11 Manual Handling

- As the material reach the site it is unloaded with the manpower having all the PPE condition satisfied to the client.
- All the material will be placed at one, point to have an inspection by the client.
- All the tools and tackles used manually in site working condition will be guided properly.
- Before carrying to work all the employees have the Toolbox awareness i.e., how to use under the proper safety guideline.
- Workers who are required to lift as a routine part of their job shall be trained in effective and proper lifting techniques. Wherever possible, workers shall use lifting aids such as carts, Material handling equipment and hoists. Workers shall not overload carts to the point where the load is unstable or unsafe during movement.



24.12 Eye Protection

As a part of the PPE all the employee working are provided with goggles when they are exposed to conditions like flying of the particles during cutting and welding.

DV INFRA & PROJECTS Ensure that employee working at such place covered with goggles and carry on his work.

Goggles or other suitable eye protection shall be used during all gas welding or oxygen cutting operations. Spectacles with side shields and suitable filter lenses are required during gas welding operations on light work, torch brazing, and for inspections. Operators and attendants of resistance welding or brazing shall use transparent face shields or goggles, depending on the particular job.

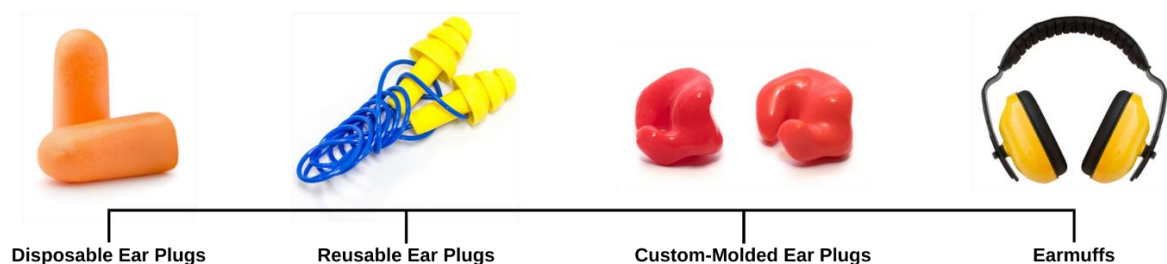


24.13 Hearing Protection

Every Construction site will have noisy conditions: DV INFRA & PROJECTS shall provide hereprotection equipment under PPE to avoid the noise problems.

Proper inspection of tools and maintenance of the tools will eradicate the noisy conditions.

Workers working in noisy area are provided and carefully observed by the safety supervisor proper PPE followed.



24.14 Foot Protection PPE

- Employee Joined in organization will be issued the Safety Shoe to protect himself to avoid the injuries.
- The use of foot protection minimizes the potential for Occupational foot injuries.
- Workers at site will be inspected by the safety supervisor before entering the site.
- No worker will be entertained to enter the site without the Safety shoes.
- Falling packages / objects (valves, tools , hoist loads), Rolling objects, sharp metal at foot level are identified as major foot hazards.



Himalayan Black Leather
Metatarsal S3 Safety
Boot plus Midsole



CAT Holton Honey Safety
Boot SB



CAT Holton Brown Safety
Boot SB



Dickies Thames
Waterproof Super Safety
Boot EN20345 S3



Dickies Severn Super
Safety Boot EN20345 S3



Dickies Super Safety
Scuff Cap Rigger Boot
EN20345 S1P



Dickies Ladies Verona
Boot EN20345 S3 SRA



Dunlop Acifort Warwick
Full Safety Wellington
Boot - Black

24.15 Respiratory protection PPE

DV INFRA & PROJECTS will be provided with complete respiratory protection PPE to avoid the inhalation of the dust particles.

All the employees working in this dust accumulating place will be provided with the respiratory protection PPE.

Respiratory protection equipment will help worker from preventing the effect of the inhalation of gases in running plants.



N95 disposable respirator



Half mask respirator



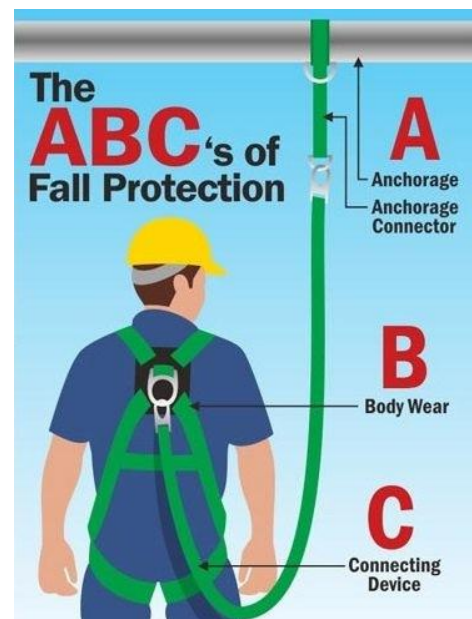
Dual cartridge respirator

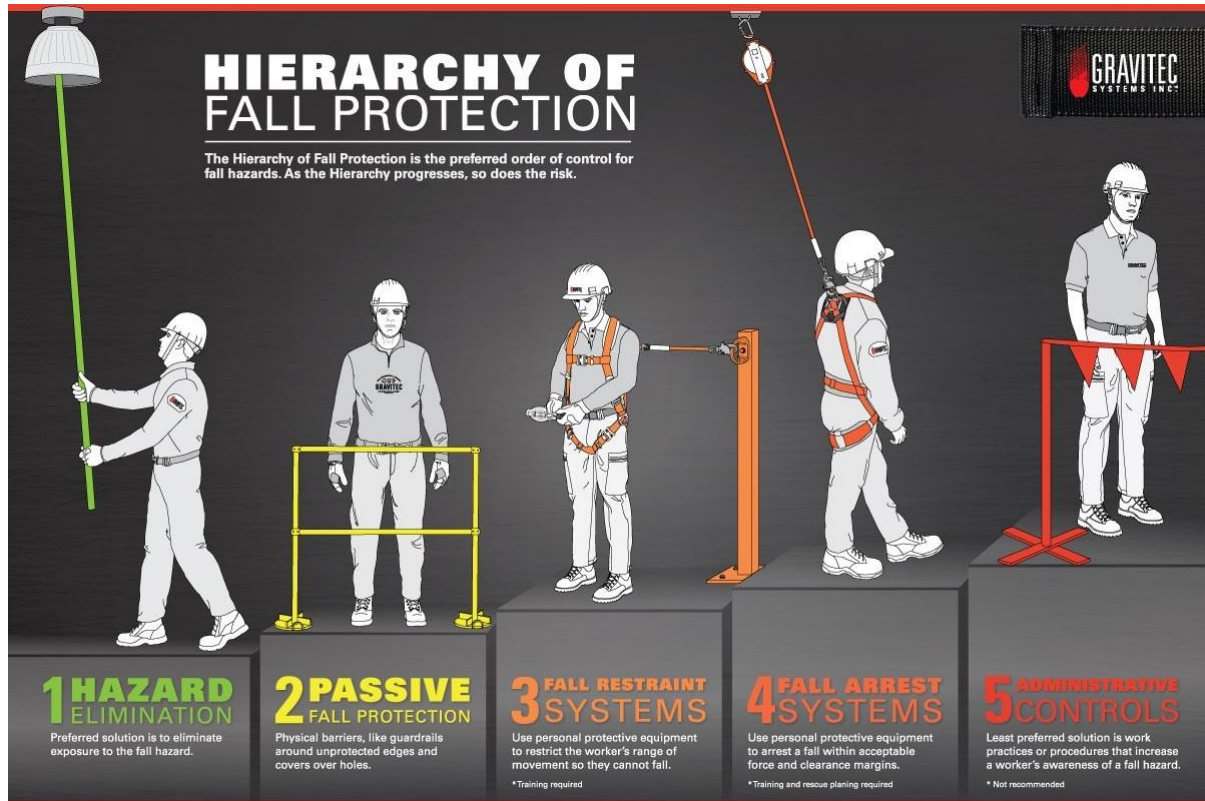


Powered air purifying respirator

24.16 Anti-Fall Protection PPE

- DV INFRA & PROJECTS Shall provide proper training to all the employee working at site to handle the tools and tackles using at above the 2 mt from Floor level.
- DV INFRA & PROJECTS shall provide the scaffolding with a barricade to avoid the falling of the tools from the height.
- In case it is found any unsafe condition entire area working under particular job will be barricade with the tags stating the area is under working process not to enter.
- The entire employee working at certain level i.e., 2 mt above the ground will have the safety belts to protect themselves from slipping chances.
- All the employee working under the height work will be safe guarded wearing the helmets, Safety Harness belts, Fall arrestors etc.





24.17 Hand Protection PPE

DV INFRA & PROJECTS shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

DV INFRA & PROJECTS shall base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.



24.18 Telephones

Telephones are not allowed in the working area at site as well as in the factory.

Proper signal indicators help employee to check himself before entering in to the site with Mobile phone etc.



24.19 Carrying the drugs and alcohol prohibition:

No employee will be entertained with carrying the drugs and alcohol in to construction site and factory.

Proper display of the Symbols indicates worker to check himself before entering the construction site and factory.



25.HAZARD MANAGEMENT

Risk:

Risk is the possibility that harm (death, injury, or illness) might occur when exposed to a hazard.

Hazard:

A hazard is anything with the potential to cause injury or illness. Hazards may be related to the work environment, the plant, equipment, tools and substances or the way work is organized.

Risk Assessment:

Involves the investigation of a task or process to determine the specific factors that have the potential to cause injury and to indicate their relative importance. Often a number of factors combine to increase the risk associated with a hazard. The assessment process provides an indication of priority for the development of control measures and their implementation.

Managing Risks:

The steps to manage hazards are as follows.

1. Identifying hazards.
2. Assess factors contributing to the hazards.
3. Controlling the hazards, ideally by eliminating them.

If it is not possible to eliminate the risk then they must be minimized by implementing control measures, using the hierarchy of controls.

Hierarchy of control measures:

Effectiveness	Types of control	Examples
Most effective	Elimination	Eliminate the risk source
	Substitution	Provide a safer alternative to performing the same task
	Isolation	Construct a physical barrier or guard
	Engineering controls	Redesign the task
	Administrative controls	Develop policies, procedures, practices, and guidelines in consultation with employee .Provide training, instruction, and supervision about the risk source.
Least effective	Personal Protective equipment	Provide personal protective equipment to protect the individual from the risk source

A safe and healthy workplace does not happen by chance or guesswork. You must think about what could go wrong at your workplace and what the consequences could be. Then you must do whatever you can to eliminate or minimize health and safety risks arising from your business or undertaking.

This process is known as risk management and involves the four steps set out in this Code.

1. Identify hazards – find out what could cause harm.
2. Assess risks if necessary – understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening.
3. Control risks – implement the most effective control measure that is reasonably practicable in the circumstances.
4. Review control measures to ensure they are working as planned Identifying hazards.

Hazards can be identified by inspecting the workplace, observing tasks, talking to workers, and checking records, e.g., workers' compensation claims. Hazards generally arise from the following aspects of work and their interaction:

- Physical work environment.
- Equipment, materials, and substances used.
- work tasks and how they are performed.
- work design and management.

Table 1: Examples of common hazard

Hazard	Potential harm
Manual tasks	Overexertion or repetitive movement can cause muscular strain
Gravity	Falling objects, falls, slips and trips of people can cause fractures, bruises, lacerations, dislocations, concussion, permanent injuries, or death
Electricity	Potential ignition source Exposure to live electrical wires can cause shock, burns or death from electrocution
Machinery and equipment	Being hit by moving vehicles, or being caught by moving parts of machinery can cause fractures, bruises, lacerations, dislocations, permanent injuries, or death
Hazardous chemicals	Chemicals (such as acids, hydrocarbons, heavy metals) and dusts (such as asbestos and silica) can cause respiratory illnesses, cancers, or dermatitis
Extreme temperatures	Heat can cause burns, heat stroke or fatigue Cold can cause hypothermia or frost bite
Noise	Exposure to loud noise can cause permanent hearing damage
Radiation	Ultra violet, welding arc flashes, micro waves and lasers can cause burns, cancer, or blindness
Biological	Micro-organisms can cause hepatitis, legionnaires' disease, Q fever, HIV/AIDS, or allergies
Psychosocial hazards	Effects of work-related stress, bullying, violence, and work-related fatigue

Risk assessment:

If all the hazards in the workplace are found and recorded it is necessary to set priorities so that the hazards that have the potential to cause the most harm can be identified and managed as a priority. This involves ranking the hazards by their estimated levels of risk (the likelihood of an accident occurring and the level of severity of the consequences).

HAZARD	ESTIMATED LEVEL of RISK		
	Likelihood of accident	Severity of consequences	Ranking of priority

Control risks:

The best way to control a hazard is to eliminate the hazard. If this is not reasonably practicable, apply the hierarchy of control to reduce the risk. A combination of these controls may be used. Administration and PPE must be implemented if the risk still exists after the other the control measures have been implemented.

Review:

Controls should be monitored and reviewed to check the hazards are eliminated and no unintended outcomes have resulted. Components of hazard management process

Identification:

- Inspections, surveys, observation
- Consultation
- Review of past records

Assessment:

Set priorities by ranking all hazards Assess specific hazard in a task/process by:

- reviewing information on hazard.
- identifying and investigating all risk factors.
- considering current controls in place to decrease risk.

Control:

- Work through hierarchy of controls.
- Decide on effective controls.
- Allocate responsibility and timeframes for implementation of controls.
- Implement.
- Monitor and review.

What is the supervisor's role in risk management?

Risk management is an essential role for supervisors in the management of workplace health and safety in the meat industry. Supervisors must ensure that all hazards are identified, the risks assessed, and effective control measures are developed and implemented.

It is the supervisor's role to conduct on plant inspections with the safety representatives and workers to ensure the health and safety of all involved.

Conduct or advise the appropriate manager of WHS Committee of any changes to work areas, production etc., that may deem a new RA to be undertaken.

Location:		Date:
Hazard	Potential Harm	Significant Hazard

Location:					Date:
Significant Hazard	Possible Action	By What	By Whom	By When	Completed

Location:		Date:
Significant Hazard (Isolated / Minimized)	Contributed injury RISK factors	Injury Prevention Action

26.EMERGENCY PREPAREDNESS AND RESPONSE

26.1 INTRODUCTION

DV INFRA & PROJECTS realize that Industrial safety is a priority issue attracting everybody's concern in order to provide a working environment, which is safe for the work force. A great deal of efforts and money is spent to reduce the scale & probability of hazards in the industries. However, there remains a finite possibility that certain hazards may occur. They can and have given rise to suffering and damage the extent of which is in part determined by the potential, for loss surrounding the Event. Effective action has been possible in the emergency situation, due to Existence of pre-planned and practiced procedure for dealing such emergencies.

The objective of the emergency plan is to define the action to be taken at departmental level and at factory level and these actions aim at the Protection of the people and property within the organization premises.

26.2 DEFINITION

An emergency occurring at workplace is one that may affect one or more departments within it and/or may cause serious injuries, loss of life, extensive damage to property / men or serious disruptions.

The following essential things shall be taken care for the effective Implementation of the Emergency Preparedness procedure:

- a. Periodic review and updating of the procedure.
- b. Periodic rehearsal of the plan by way of Mock Drills.
- c. Review and strengthening of the resources needed.
- d. Training of the site personnel in handling emergency equipment like the use of various Fire- Fighting Equipment.

26.3 OBJECTIVES

- a. Objective control and initial and Preventive control.
- b. Reduce risk to human health & life.
- c. Minimize damage to property.
- d. Liaison effectively with the Government Authorities/Public/Press to avoid Panic situation and public disorder.

- e. To protect the environment.
- f. To bring down the number of near-miss accidents to a minimum.

26.4 ESSENTIAL ELEMENTS

- a. Assignment of specific key responsibilities to the Emergency Task Force
- b. Effective communication of the nature of emergency to relevant authorities.
- c. Initiation of works emergency action.
- d. Maintenance of orderly public co-ordination
- e. Avoid of Emergency.
- f. Appraisal of Local Hospitals/Nursing Homes/Doctors on specific emergency treatment required for persons affected.

26.5 CRITERIA FOR PROCLAIMING MAJOR EMERGENCY

A major emergency can occur in the event of:

- a. A major fire
 - Fire can take place inside the Plant/Various departments/Stores and diesel storage yards/offices and other areas inside the site.
- b. Explosion followed by fire or vice versa.
 - Explosion followed by fire or fire followed by explosion. These could take place inside the Diesel Storage Yards & utility area.
- c. Spillage of oil or Puf
 - Though the spillage of oil / Puf cannot create a major Emergency situation in view of the limited quantities stored, the Procedure outlined to handle the emergency situation is to be Followed with respect to:-
 - Spillage during handling of oil / Puf
 - Taking appropriate steps for bringing the situation under control.
- d. Electric short circuit / Electric shock to person
 - Electric short circuit / shock can take place in any part of the factory/ site and the procedure outlined to handle the situation with respect to the Following:
 - Information to First Aid team
 - Taking appropriate steps for bringing the situation under control.

26.6 ON SITE CENTERS FOR EMERGENCY CONTROL

The Central Control Center is the Security Room located at the Main Gate of the Factory or a place suggested by the client.

26.7 CENTRAL CONTROL CENTER (CCC)

This center will seek the services of the emergency tasks force for any assistance during the emergency.

Calling in assistance from External Fire Services, Ambulance etc. (Refer Section C for Outside Emergency Services).

It is equipped with.

- a. Internal / External Telephone Nos.
- b. Site-Master Plan
- c. A list of Internal/External Telephone Nos. of all Site Personnel.

HR head will look after this section.

26.8 HANDLING OF AN EMERGENCY SITUATION / DISASTER

RAISING AN ALARM

In the event of emergency, whosoever first witnesses the emergency will inform the Security Office (Phone No) or through someone where the guard on duty will raise an alarm) and there will be continuous siren.

26.9 ASSESSMENT OF THE MAJOR EMERGENCY SITUATION

Assessing the Major Emergency situation is to be done primarily by the concerned departmental Head/Manager. He assesses the situation and conveys information regarding the Emergency situation to the General Manager and other important persons whose telephone numbers are given separately in Section C. GM in consultation with the Departmental Head of the affected area will take decision, on any additional resources required from outside in handling the situation. Depending on level of emergency his job will involve co-ordination of rescue and other emergency activities on site and liaison with the respective authorities (Police, Fire Services and Hospitals) for assistance in firefighting, hospitalization etc., Fire Fighting Instructions & Assembly Point details are covered in Section D & Section E to act upon and give instructions to the Task Force Member & other Emergency Services.

27. ROLES AND RESPONSIBILITIES DURING EMERGENCY

27.1 General

Immediately on noticing the fire / explosion the noticing person should inform:

- Central Control Center (Main Gate Security): Ext. Security officer
- Fire Station on phone (If required)
- Concerned Manager / Supervisor)

The information should contain:

- Location of fire
- Identification of informer
- Nature of fire / explosion
- Confirmations of information receipt

Keep a vigilant watch over the involved area and try to extinguish and prevent from spreading.

Be there till the fire safety members arrive to guide and show the location.

27.2 Action by Fire Safety Members

On receipt of information on fire, the Security on duty shall do as follows:

- a. Sound the turn out bell and inform the officer in charge on duty about the exact location and nature of fire.
- b. Inform the GM / security department.
- c. Attend to all telephone calls for further action as ordered by the in charge.
- d. Inform the concerned Govt, authorities regarding location and nature of fire in case of serious fire only.

27.3 Role of First Aid Team

- a. To provide First Aid box at the respective areas.
- b. To co-ordinate with Safety Officer / Medical Officer for rescue/emergency control measures.

27.4 Role of Fire Safety

- c. To ensure adequacy of firefighting system with the statutory guidelines.
- d. To carry out periodic checks / inspection / tests of various Fire extinguishers, other appliances and maintain a record. Discrepancy if any noticed, shall be noted and

Attended immediately and rectified.

- e. To evaluate the needs of necessary firefighting devices commensurate with the nature of operation & potential fire emergencies.
- f. To reach the site with trained members during emergency.
- g. Plan and arrange rescue operation and for firefighting.

27.5 Role of HR Department

- h. To maintain liaison with external agencies dealing with medical care like hospitals at Hyderabad & blood banks nearer to the factory and site
- i. To take active part in Rehearsal / Mock drill.
- j. To evaluate the needs of Medical for providing medical assistance during emergencies.
- k. .To check periodically the availability of first aid boxes at shop floor /offices.
- l. To identify unsafe conditions / unsafe practices through periodic site visits
- m. To inform senior officials as may be required to organize first-aid / ambulance etc.
- n. Maintain complete accident report and undertake Investigation/corrective and preventive actions.
- o. To ensure proper usage of PPEs and statutory requirements.
- p. To maintain close co-ordination with security officer.

27.6 Role of Maintenance Department

- q. Rush to site immediately.
- r. Switch off electric supply, if required.
- s. Arrange emergency lights, if required.
- t. Plan and organize the maintenance of plant & machinery damaged.
- u. Ensure that maintenance squad deployed is kept informed of hazardous materials in the area and methods to cope up with them.

27.7 Role of Finance Department

- v. Prepare all necessary reports and collect data for insurance claims.
- w. Provide immediate finance help at factory / site.

28. JOB SAFETY ANALYSIS

Job Safety Analysis			
Contractor Name: DV INFRA & PROJECTS			
Activity: Civil Works			
S.No	Activities	Hazards	Recommendations
1	Materials & Tools Shifting from store	Back Pains & Shoulder Pains	Use Proper Lifting Techniques, avoid overweight lifting.
		Finger Injuries	Use hand Gloves
		Slip , Trip & Fall	Remove the Obstacles from store area, Maintaining good housekeeping at house area
		Snake bites	Carefully observe the store area, maintain good housekeeping at work
2	Power Tools Connections	Electrical Shocks	Provide Power Supply to all electrical equipment should be through ELCB (30mA)
			Never leave the power tools in on condition during rest of work
			Use hand Gloves
3	Man Movement	Head Injuries	Use safety helmets and barricade the
		Body Injuries	Restrict other workers from entering into erection area.
		Foot Injuries	Use Safety Shoes. Remove the sharp objects from area to prevent foot
4	Cutting Pipes	Eye Injuries	Use safety goggles
		Finger Injuries	Carefully cut the pipe spools by wearing the hand gloves
5	Work at height	Fall of Men	Use stairways & ladders, never climb through shortcuts
		Slip , Trip & Fall	Remove the Obstacles from the path ways
		Workers fall from height	Use Certified scaffold & wear safety belt.
			Follow 3 Point contact when climbing
		Pipes may fall during lifting	One by one person can climb or get
			Carefully tie with rope and lift slowly
		Hand Injuries	Use safety helmets
		Eye Injuries	Use safety goggles
		Slip , Trip & Fall	Never block the pathways or emergency doors
			During right work wear reflective jacket and ensure sufficient lighting

6	Pipe Spools Lifting	Fall on men	Proper sequence of spool erection shall be followed. Use safety belts.
		Fall of pipes / spools	Carefully tie with rope and lift slowly Barricade the area at ground level to prevent man movement
7	Belts, slings, or guide rope remove	Fall of material	Material handling either manual or mechanical shall be taken care. Small material should never be dropped down as it may hit somebody down.
			Never place the materials or tools at edges of staging
			Never stand the persons under the materials shifting area, barricade the
		Fall of Men	Never carry the tools or materials manually while access & agrees the ladder or stairways
8	Emergency	Fire/Emergency alarm etc.	Stop the work and assemble in assembly point. Stop all the power
			In case of fire try to extinguish if it is controlled fire.
Prepared By			Checked By

29. Method Statement

Method Statement and Job Safety Analysis Loading Shifting of Heavy Objects			
Job Safety Analysis Loading Shifting of Heavy Objects			
S.No	Activities	Hazards	Recommendations
1	Unloading of Materials manually	Back Pains & Shoulder Pains	Use Proper Lifting Techniques, avoid overweight lifting
		Finger Injuries	Use hand Gloves
		Slip , Trip & Fall	Remove the Obstacles from store area, Maintaining good housekeeping at house area
2	Unloading of Materials and Lifting or Shifting with Hydra or Crane	Crane or hydra failure	Ensure third-party certifications, valid licenses, Sling Condition, out rigger placement
		Finger Injuries	Use hand Gloves
		Materials fall from height	Barricade the area at ground level to prevent man movement. Provide guide ropes
3	Stacking of Materials	Materials fall	Stack the materials properly up to 6 feet height
		Finger Injuries	Use hand Gloves
4	Lifting & Shifting	Fall of Men	Use safety belts & life lines where work is at edges of slab
		Slip , Trip & Fall	Remove the Obstacles from the Patch ways
		Loose materials may fall	Carefully tie with ropes and lift it slowly
		Hitting others	Communication between riggers, crane operator and signal man
		Head Injuries	Use safety Helmet
		Fall of Ducts	Carefully tie with ropes and lift it slowly Barricade the area at ground level to prevent man movement.
5	Belts, slings, or guide rope remove	Fall of material	Material handling either manual or mechanical shall be taken care. Small material should never be dropped down as it may hit somebody down. Never place the materials or tools at edges of slab Never stand the persons under the materials shifting area, barricade the area.
		Fall of Men	Use safety belts & life lines where work is at edges of slab
6	Emergency	Fire/Emergency alarm etc.	Stop the work and assemble in assembly point. Stop all the power connections in case of fire try to extinguish if it is controlled fire.
Prepared By			Checked By



30.0 EMERGENCY RESPONSE AT SITE

The following members would constitute the Emergency Task Force of the site and would complement and supplement the efforts taken by Fire Brigade/Other Operations related to control of emergency.

Follow the site existing procedures in case of an emergency.

