EM 385-1-1 2014 Compliant

USACE-NAVFAC EM 385-1-1 Accident Prevention Plan Sample

19 selected pages (out of 125)

Part 1: Project Accident Prevention Plan

Part 2: Safety Management Manual

Part 3: Submittal Forms

Contact: First Time Quality 410-451-8006

PROJECT ACCIDENT PREVENTION PLAN

TABLE OF CONTENTS

a.	9	Signature Sheet	3
1		Plan Preparer	3
2	<u>.</u> .	Approval by Company Officer	3
3	3.	Plan Concurrence	
b.	E	Background Information	4
1		Contractor Name	4
2		Contract number	
3	3.	Project name	
4		Project description	
5	j.	Major Phases of Work (Features of Work)	
c.	9	Statement of Safety and Health Policy	7
1		Safety and Health Policy	7
2		Project Safety Performance Goals	7
3		Project Safety Performance Objectives	۷
4		Contractor Accident Experience Goals	8
d.		Responsibilities and Lines Of Authority	
1		Company Responsibility Statement	
2		Identification and Accountability of Personnel Responsible for Safety	
3		Equivalent Training to the OSHA 30-Hour Classes	
5		Risk Management Processes	
6		Feature of Work Activity Hazard Analysis	
7		Presence of Competent Personnel	
8		Policies and Procedures Regarding Noncompliance	
9		Safety Lines of Authority	
	.0.		
e.	9	Subcontractors and Suppliers	
1		Identification of Subcontractors and Suppliers	
2		Safety Responsibilities of Subcontractors and Suppliers	
f.	ı	Fraining	31
1		Requirements for New Hire SOH Orientation Training	
2	2.	Requirements for Mandatory Training and Certifications	
3		Procedures for Periodic Safety and Health Training	
4	ŀ.	Requirements for Emergency Response Training	34
~		Safety and Health Increations	27

1	L. Safety Inspections	38
2	2. External Inspections	42
h.	Mishap Reporting and Investigation	54
1	L. Exposure Data	54
2	2. Mishap Investigation Reports and Logs	54
i.	Plans Programs, and Procedures Required	58
i.	Appendix: Supporting Plans, Policies, and Procedures	62



h. MISHAP REPORTING AND INVESTIGATION

1. EXPOSURE DATA

The Site Safety and Health Officer will submit Monthly Man-hour Exposure Reports to the Contracting Officer no later than the 5th workday of each month. The report encompasses on-site work including all hourly and salaried employees. The report will include all subcontractors working on this project.

Exposure data will be reported on the Man-Hour Exposure Reports form included as an exhibit in this subsection.

2. MISHAP INVESTIGATION REPORTS AND LOGS

a. MISHAP INVESTIGATION REPORTS AND LOGS (INCLUDE WHO)

MISHAP REPORTS

All Mishaps occurring incidentally to the project is investigated, reported, and analyzed. The Site Safety and Health Officer will report all Mishaps and injuries no matter how slight. The Site Safety and Health Officer will notify the Contracting Officer as soon as practical, but not later than 24 hours, after any accident. The accident notification will include: contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known; and brief description of accident (to include type of construction equipment used, PPE used, etc.).

The Site Safety and Health Officer will notify the Contracting Officer as soon as practical, but not later than four hours, after any accident that

- Meets the definition of Recordable Injuries or Illnesses or High Visibility Mishaps
- Property damage equal to or greater than \$2,000
- Weight handling equipment accident in accordance with NASA NPG 8621.1.

Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

The Site Safety and Health Officer will notify the Contracting Officer immediately when there is:

- A fatal injury
- A permanent total disability
- A permanent partial disability
- The hospitalization of three or more people resulting from a single occurrence
- Property damage of \$200,000 or more

Mishaps will be reported on OSHA Form 301 Injury and Illness Incident Report included as an exhibit in this subsection.

Questions? Call First Time Quality (410) 451-8006 Log of Work-related Mishaps and Injuries

All work-related Mishaps and injuries occurring incidentally to this project, no matter how slight, will be recorded on the OSHA 300 Log of Work-related Mishaps.

All work-related Mishaps and injuries occurring incidentally to this project, no matter how slight, will be recorded on the OSHA 300 Log of Work-related Mishaps included as an exhibit in this subsection.

MISHAP INVESTIGATION

Should a mishap occur, the Site Safety and Health Officer will thoroughly investigate the m The Site Safety and Health Officer will conduct an Accident Investigation Inspection following the procedures identified in the Inspection section of this plan. The Site Safety and Health Officer records results of the investigation on the Accident Investigation Report included as an exhibit in this subsection.

IMMEDIATE ACTION NOTIFICATION

The Site Safety and Health Officer will notify the customer immediately when there is:

- A fatal injury
- A permanent total disability
- A permanent partial disability
- The hospitalization of three or more people resulting from a single occurrence
- Property damage of \$200,000 or more

Mishaps are reported using the Accident Investigation Report form on the following pages. The Site Safety and Health Officer prepares the Accident Investigation Report.

CORRECTIVE ACTIONS

Corrective Actions will be taken following the procedures identified in the Inspection section of this plan. The Site Safety and Health Officer follows up on each corrective actions and records findings on the Accident Investigation Report.

[CompanyName] **Man-hour Exposure Reports** Version 20150514 **DFOW / Location** project Number Month project Name [ProjectNumber] [ProjectName] **Site Safety and Health Officer Approval** (Signature and Date): Prime / **Exposure Hours** Name of **Exposure Hours Total Exposure** ID/Code Organization Subcontractor for Month for Year **Hours to Date**

[CompanyName] PLANS, PROGRAMS, and PROCEDURES

REQUIRED BY	EM 385-1-1 2014			
Contract Name and Number:	Contractor/Subcontractor:			
[ProjectName]	[CompanyName]			
[ProjectNumber]				
Government Inspector:	Location:			
Contractor Inspector:	Date:			
NOTE: The following plans should be on site and accessible to employees. The expected answer should be yes to all applicable plans. Be prepared to provide a plan or an explanation.	Yes No Notes			
a. Fatigue Management Plan (01.A.20)				
b. Emergency Response Plans				
i. Procedures and Tests (01.E.01)	In emergency response plan			
ii. Spill Plans (01.E.01, 06.A.02)	In emergency response plan			
iii. Firefighting Plan (01.E.01, Section 19)	In emergency response plan			
iv. Posting Of Emergency Telephone Numbers (01.E.05)	In emergency response plan			
v. Man Overboard/Abandon Ship (Section19.A.04)	Separate from ER plan			
vi. Medical Support. (Section 03.A.02 03.D)	Separate from ER plan			
c. Plan For Prevention Of Alcohol and Drug Abuse (01.C.02)				
d. Site Sanitation Plan (Section 02)				
e. Medical Support Plan, (03.A.01; 03.A.06; 03.D)				
f. Bloodborne Pathogen Plan (03.A.05)				
g. Exposure Control Plan (03.A.05)				
h. Site Layout Plan (04.A)				
i. Access/Haul road Plan (04.B)				
j. Hearing Conservation Program (05.C)				
k. Respiratory Protection Plan (05.G))				
I. Health Hazard Control Program (06.A)				
	L L			

[CompanyName] Emergency Response Plan

20131023

Project Name	Project Number	Prepared By:	Date:
[CompanyName]	[ProjectNumber]	[PreparedBy]	[Date]

01.E.01.a.1 Escape procedures:

In the event of an emergency evacuation, [describe procedures for escape from the emergency area].

01.E.01.a.2 Escape routes:

Routes of escape will depend upon the emergency. In general, [describe escape routes]. [include site maps if applicable]

01.E.01.a.3 Critical plant operations:

Not applicable

01.E.01.a.4 Employee accounting following an emergency evacuation:

After meeting at the designated emergency evacuation area, employees will be accounted for by [describe employee accounting method here, i.e.: attendance taken from time sheets used that day]

01.E.01.a.5 Rescue and medical duties:

[If using internal rescue and medical team, describe their duties here.]

[If using external rescue and medical team, i.e.: plant rescue team or emergency medical services, note that here. You may be using a combination of the two depending on the tasks.]

01.E.01.a.6 Means of reporting emergencies:

Emergencies will be reported to the GDA after first aid or other emergency services are rendered. Reporting will be done within the timeline specified by the contract.

[include any specific emergency reporting details here, i.e.: who is responsible for reporting emergencies to the emergency medical services and the GDA, including timeline for reporting per contract]

01.E.01.a.7 Persons to be contacted for information or clarification:

[Names of those who can be reached for information on project emergencies, i.e.: project manager, superintendent, SSHO or other responsible person. Include their phone numbers if applicable.]

01.E.01.b.1 Names, training organization, and training dates for personnel certified in first-aid/CPR/blood borne pathogens.

[list this information here or include as separate attachment with copies of certifications]

01.E.01.b.2 Location of list(s) identifying personnel trained in first-aid/CPR/blood borne pathogens.

A list of trained personnel is available at [note project location here].

01.E.01.b.3 Rescue and medical duties for those employees who perform them.

[if your onsite employees are to be responsible for rescue and medical duties, list those duties here]

01.E.01.b.4 Location of first-aid kits.

First aid kits will be provided on the project at [list locations here]. [include site map if applicable]

01.E.01.b.5 Location of list(s) identifying emergency telephone numbers.

Emergency telephone numbers will be posted [note posting location here, i.e.: near all jobsite phones and designated posting areas.]

01.E.04 Emergency alert systems

In the event of an emergency, employees on the project will be notified by [note notification method here, i.e.: air horn or public address system announcement].

The project emergency alert system will be tested [note testing timeline here, i.e. monthly or quarterly].

01.E.05 Emergency telephone numbers and reporting instructions for ambulance, physician, hospital, fire, and police

These phone numbers will be posted conspicuously on the project. [list the emergency telephone numbers applicable to your project here]

Employees will be instructed on how to report emergencies to these authorities. [include details on how employees will be trained, i.e.: employees will understand how to give clear instructions to emergency responders for how to access jobsite, or only designated employees are allowed to report emergencies]

01.E.06 Provisions an effective means of emergency communications for employees working alone in a remote location or away from other workers.

[If applicable, list the means of emergency communications employees working alone or remotely are to use, i.e.: cell phone, two-way radio, hardline phones, or other method.]

[if applicable, describe the employee check-in/check-out procedures to be used for employees working alone or remotely]

01.E.01.b.2 Emergency services provider

[If coordinating emergency services with an off-site service, describe how this coordination will occur. Include provisions for orienting the off-site provider to the jobsite]

03.A.02. First-aid and cardiopulmonary resuscitation (CPR) availability.

[If a medical facility or physician is not accessible within 5 minutes of an injury to two or more employees, at least 2 employees on each shift shall be qualified to give first-aid and CPR. If applicable, list those employees and their qualifications, include documentation as necessary]

Employees working alone in remote areas will have an effective means of communication [list communication method here] to call for help in the event of an emergency.

03.D On-site Licensed Physician

SAFETY MANAGEMENT MANUAL TABLE OF CONTENTS

1. Safety System Management and Responsibilities	12
1.1. Overview	12
1.2. [CompanyName] Safety Policy	12
1.3. Safety Responsibilities	12
1.4. Safety System Performance Measures	15
1.5. Exceptions	16
2. Project Accident Prevention Plan	
2.1. Overview	17
2.2. Accident Prevention Plan Preparation	17
2.3. Signature Sheet	17
2.4. Background Information	18
2.5. Statement of Safety and Health Policy	18
2.6. Responsibilities and Lines Of Authorities	18
2.7. Subcontractors and Suppliers	19
2.8. Training	19
2.9. Safety and Health Inspections	22
2.10. Accident Reporting	22
3. Contract Safety Specifications	
3.1. Overview	24
3.2. Contract Technical Specifications	24
3.3. Contract Safety Submittals	24
3.4. Contract Safety Review and Approval	25
4. Project-Specific Safety Standards	27
4.1. Overview	27
4.2. Regulatory Codes and Industry Standards	27
4.3. Safety License and Credential Requirements	28
4.4. Project Risk Assessment	28
4.5. Identification of Safety Controlled Feature of Work	
4.6. Job Position Hazard Analysis	28
4.7. Activity Hazard Analysis	
4.8. Identification of Applicable Safety Risk Management Plans	
4.9. Material and Equipment Specifications	
4.10. [CompanyName] Safety Standards	
4.11. Application of Multiple Sources of Specifications	29

5. Project Purchasing	31
5.1. Overview	31
5.2. Subcontractor and Supplier Safety Requirements	31
5.3. Subcontractor Noncompliance Policy	33
5.4. Independent Laboratory Credential Requirements	33
5.5. Qualification of Suppliers, Subcontractors, and Departments	33
5.6. Project Subcontractor and Supply List	34
5.7. Purchase Order Requirements	34
5.8. Project Purchase Order Approvals	35
6. Construction Process Controls	36
6.1. Overview	36
6.2. Pre-construction and Safety Control Coordination Meeting	36
6.3. Preparatory Project Safety Planning	
6.4. Weekly Safety Planning and Coordination Meetings	37
6.5. Process Control Safety Standards	37
6.6. Daily Safety Control Report	
6.7. Monthly Safety Report	39
6.8. Man-hour Exposure Report	39
7. Inspections and Tests	40
7.1. Overview	40
7.2. Inspection and test acceptance criteria	40
7.3. Required Safety Inspections and Tests	40
7.4. Hold Points for Customer Safety Inspection	42
7.5. Safety Inspection and Test Specifications	42
7.6. Safety Inspection and Test Records	43
7.7. Project Completion and Closeout Inspection	43
8. Accident Reporting, Nonconformances and Corrective Actions	45
8.1. Overview	45
8.2. Accident Reporting	45
8.3. Immediate Action Notification	45
8.4. Log of Work-related Accidents and Injuries	46
8.5. Nonconformances	46
8.6. Corrective Actions	47
9. Preventive Actions	49
9.1. Overview	49
9.2. Identify Preventive Actions for Improvement	49
9.3. Train Preventive Actions for Improvement	50
10. Safety System Audits	51
10.1 Overview	51

10.2. Project Safety System Audit	51
10.3. Company-wide Safety System Audit	51
11. Record and Document Controls	53
11.1. Overview	53
11.2. Safety Manual	53
11.3. Safety System Policy and Procedure Requirements	53
11.4. Records Control	53
11.5. Document Control	54
12. Appendix	56
12.1 Definitions of Terms	5.6

4. Project-Specific Safety Standards

APPLICABLE REGULATIONS, INDUSTRY, and COMPANY STANDARDS

4.1. OVERVIEW

[CompanyName] personnel and subcontractors are accountable for compliance to safety standards-based written specifications.

To achieve expectations reliably and consistently, specifications are clearly spelled out not only for results but also for processes. Specifications apply to materials, work steps, qualified personnel and subcontractors, safe work rules, and environmental work conditions.

Standards ensure that materials, methods, and results are specified rather than left to discretionary practices.

4.2. REGULATORY CODES AND INDUSTRY STANDARDS

All [CompanyName] construction activities must comply with the relevant regulations. The Site Safety and Health Officer identifies regulatory requirements applicable to the jurisdictions served, including:

- Applicable Federal regulations
- Applicable State regulations
- Applicable building codes and local addenda to building codes
- Applicable Fire Code
- Applicable Fuel and Gas Code
- Applicable Mechanical Code
- Applicable Plumbing Code
- Additional regulations specified by the customer contract

The Site Safety and Health Officer identifies regulatory requirements that apply to a specific project on the Project Accident Prevention Plan.

The Superintendent had jobsite access to relevant codes and government regulations.

4.2.1. INDUSTRY SAFETY STANDARDS

All [CompanyName] construction activities comply with generally accepted practices and industry safety standards.

The Site Safety and Health Officer identifies supplemental requirements for industry safety standards that apply to a specific project on the Project Accident Prevention Plan when it is not otherwise specified by the contract, contract technical specifications, or approved drawings.

4.2.1.1. [COMPANYNAME] PROJECT LICENSE AND QUALIFICATION REQUIREMENTS

The Site Safety and Health Officer identifies company license and qualification credentials required by contract specifications and government regulators. The Site Safety and Health Officer obtains records, certificates, and license records that provide verification of [CompanyName] credentials.

4.3. SAFETY LICENSE AND CREDENTIAL REQUIREMENTS

4.3.1. COMPANY SAFETY LICENSE AND CREDENTIAL REQUIREMENTS

The Site Safety and Health Officer identifies requirements for company licenses, credentials, and certifications related to project safety.

4.3.2. Personnel Safety License, Credential, and Qualification Requirements

The Site Safety and Health Officer defines safety-related credentials for each project job position that affects safety including:

- Required licenses
- Required training
- Required certifications
- Required experience

4.4. PROJECT RISK ASSESSMENT

The Site Safety and Health Officer assesses and identifies project safety risks in preparation for planning safety risk mitigation and prevention.

4.5. IDENTIFICATION OF SAFETY CONTROLLED FEATURE OF WORK

The Site Safety and Health Officer identifies each feature of work that is a phase of construction that requires separate safety controls to assure and control safety results. Each FOW triggers a set of requirements for activity hazard analysis, safety inspection, and testing.

4.6. JOB POSITION HAZARD ANALYSIS

Considering the feature of work identified in Safety Manual section 4.5 Identification of Safety Controlled Feature of Work, the Site Safety and Health Officer identifies job positions that apply to the project, assesses and identifies project safety risks for each, and plans reduction and prevention of those risks.

A job position hazard analysis (PHA) is prepared as warranted by the hazards associated with the position's activities. The Site Safety and Health Officer shall determine the need for analysis of each position within his or her area of responsibility.

The Site Safety and Health Officer will train each employee on the PHA related to the job positions(s) performed by the employee and upon completing the training award a certificate of completion. An employee must have a valid certificate before performing work of the job position.

[CompanyName] Activity Hazard Analysis (AHA)

Activity/Work Task: Project Location: Contract Number: Date Prepared:		Risk Assessment Code (RAC) Rating Matrix						
		Severity	Probab	Probability				
		Severity	Frequent	Likely	Occasional	Seldom	Unlikely	
		Catastrophic	Е	E	Н	Н	М	
Prepared by (Name/ Hue):	Prepared by (Name/Title):		E	Н	Н	M	L	
		Marginal	Н	М	M	L	L	
Reviewed by (Name/Title):		Negligible	M	L	L	L	L	
		Frequent, Likely, Occasional, Severity" is the outcome/de as: Catastrophic, Critical, Ma	Seldom or Unlikely. gree if an incident, near miss, rginal, or Negligible bability/Severity) rating as E,	incident, near miss, or accident did occur and identified Negligible Severity) rating as E, H, M, or L for each "Hazard" on AHA		RAC Ratin E = Extrem H = High R M = Mode L= Low Ris	nely High Risk Lisk erate Risk	
Job Steps	Hazards	Contr	rols				RAC	
Equipment to be Used Training Requirements/Comp Qualified Personnel name(s)								

LIBRARY OF SAFETY SUBMITTAL FORMS

- PROJECT ORGANIZATION CHART FORM
- SAFETY MANAGER APPOINTMENT
- PROJECT MANAGER APPOINTMENT
- PROJECT SUPERINTENDENT APPOINTMENT
- SAFETY CONTROLLED FEATURE OF WORK LIST
- SAFETY TESTING PLAN AND LOG
- PROJECT SAFETY COMMUNICATIONS PLAN
- POINT OF CONTACT LIST
- PROJECT SAFETY TRAINING PLAN FORM
- PROJECT SAFETY TRAINING RECORD
- PROJECT SAFETY RECORDS PLAN
- CHANGE ORDER FORM
- SOURCE OF SUPPLY FORM
- PREPARATORY PHASE CHECKLIST
- PREPARATORY PHASE CHECKLIST
- CONTRACTOR QUALITY CONTROL REPORT
- CONTRACTOR PRODUCTION REPORT
- INITIAL PHASE CHECKLIST
- FEATURE OF WORK INSPECTION FORM
- INSPECTION AND TEST REPORT
- NONCONFORMANCE REPORT
- NONCONFORMANCE REPORT CONTROL LOG
- TRAINING RECORD
- PROJECT SAFETY SYSTEM AUDIT FORM

Master Hazard List

ID	Hazard/ Injury	Correction/ Control
1	Airborne particles, explosive	Air filtration;; Exhaust fans; Wetting dusts; Dust collection systems and hoods for equipment; Airborne particle concentration detectors and alarms
2	Airborne particles, inhaled	Use correct respirator, mask, helmet or hood type
3	Anchor points, fall protection, loose, insufficient quantity or strength	Close inspection; Load testing; Snag and sharp edge free path for tethers; Proper netting installation; Personnel instruction in use and maintenance
4	Anchor points, temporary scaffolding, loose, insufficient quantity or strength	Verify fasteners, design and spacing; Concrete at design strength; Adequate strength of materials; Load testing;
5	Attention:, lack of personnel focus	Situational awareness training; coffee breaks; task variation
6	Barriers and rails, temporary, missing, damaged or insecure	Planning; robust construction; Regular inspections and maintenance
7	Biological Hazards, medical waste/needles, molds, bird feces	Hazard survey and management policy; Proper containers; Cleanup/removal and Remediation
8	Bolt-up work hazards, injuries when aligning bolts and flanges	Drift pin use, vs. fingers; Bolt installation, sequencing and torquing plan
9	Bolt-up work hazards, sudden movement of pipes and structural members	Body parts clear of joints; Communication between installer and lift/crane operators; Escape route for installer
10	Burns, sun	Proper clothing; Sun screen; Equipment roof and umbrella; Shade cloth; water mist systems
11	Burns, welding, skin and retinal exposure to UV light	No exposed skin while welding, Proper mask
12	Burns, welding, sparks, hot parts	Proper clothing, clean orderly workspace; welding screens; pants outside boots
13	Cables, ropes and wires, breaks when over stressed	Verify tensile strength; inspect connections; check for damage; Personnel safety instruction
14	Cleanup, individual trade responsibility, undone or incomplete	Posted general policy; subcontract clauses; backcharge enforcement
15	Cleanup, site, general, lax or undone	GC policy with assigned procedures and responsibilities
16	Communication, telephone, cell and land line, Interruption, wiretapping	Protected wires, secure boxes; identified, marked lines
17	Confined spaces, suffocation or engulfment	Personnel training, Entry supervision and attendant; Safety tests; Safety lockouts; Rescue plans and retrieval equipment
18	Corrosion, chemical/rust, fasteners, reinforcing, structural members, roofing	Protective coatings, rain protection;
19	Corrosion, electro-galvanic. fasteners, reinforcing, structural members, roofing	Sacrificial anodes; electrical isolation; protective coatings; proper material selection;
20	Crane collapse, sudden tilt or lift failure	Proper setup; maintaining specification limits; scheduled maintenance and inspections;
21	Crane counterweight motion, collision with vehicles or personnel	Barriers, audible alarms, personnel hazard awareness;
22	Crane load, injury during manual and tag line placement	Clear view of load and personnel by crane operator; Personnel never under load
23	Crane loads, swinging, impacting personnel , vehicles or structures	Qualified operator; Personnel awareness; Weather envelope policies per crane mfr.
24	Crane, communication, radio. faulty or dead battery	Assigned channels/frequencies; Operator/tender agreement on verbal commands; range check; daily battery check; communication loss policy
25	Crane, visual hand signaling, obstructed or distant view	Clear understanding between operator and tender before work
26	Data Line failures, hardwired and wireless, temporary and permanent	Protected wires or fibers; secure boxes; firewall and password protection; line conditioners and battery backup
27	Demolition, Falls, strains, punctures	Demolition-specific personnel instruction
28	Demolition, hazardous materials exposure	Pre-demolition site and structure survey; Sampling and testing program
29	Demolition. Structural collapse	Pre-demolition analysis and planning
30	Electrical circuits improper connection; back feeds	Circuit and continuity testing before energizing
31	Electrical explosion, faulty high voltage connections	Torque, voltage and continuity test all connections; proper boxes, enclosures and fasteners;
32	Electrical labels, missing or incorrect	Qualified electrician cross-check before energizing



For More Information:

Contact: FirstTimeQuality

410-451-8006

www.firsttimequality.com

EdC@FirstTimeQuality.com