NATIONAL
FIRE & SAFETY

Safety Manual

National Fire & Safety

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Contents

Section 1: Safety and Responsibilities

Introduction

National Fire & Safety ("NFS") is committed to excellence in safety and health concerns and invites each person (client, contractors, and vendors) to be dedicated and personally committed to achieving an accident-free project. The mission of the health and safety program is for NFS employees to develop, achieve, and maintain an environment free from injury and illness. The total commitment and involvement of management, supervisors, individual employees, and subcontractors is imperative to accomplishing this goal.

NFS expects all individuals working at any project to follow specific safety procedures detailed in this Safety and Health manual to ensure compliance with all NFS site safety requirements and those defined by the Occupational Safety and Health Administration.

Nothing contained in this Safety and Health Manual is intended to create or establish employment or control relationship between NFS and an employee of any General Contractor.

NFS, as a Sub Contractor, reserves the right to deny any NFS employees or sub-contractors' access to any job site. All decisions affecting the individuals' terms or conditions of employment with his or her company shall be the decision of his or her employer.

Management Leadership

Our Safety Policy starts with each of our individual employees. We recognize it is our leadership's responsibility to cultivate and create a safe work environment. The best way to achieve this is to make sure our employees are properly trained to do their job safely. Safety does not start at the top and filter down. Safety starts with the individual who knows how to do their work safely. Our employees will be well trained, attend safety meetings, stay current with continually changing safety rules and regulations, and ensure the importance of safety is

communicated to our employees and all persons on any job site. Safety is EVERYONE'S responsibility.

NFS believes that a safe operation is necessary for an efficient operation. Safety and production go hand in hand. NFS will select employees who are willing to perform their jobs with regards to safety, safety rules, safe practices, and accident prevention.

Subcontractor Responsibilities

The General Contractor is ultimately responsible for site safety on any project. NFS will always enforce site safety rules and regulations to ensure compliance on all NFS projects.

Per OSHA's Multi Employer Worksite Policy, it is imperative that all subcontractors understand the definition of their role on a project. NFS Systems and our subcontractors (when applicable) are to work in conjunction with the rules and regulations as outlined below.

Controlling Employer Project

All subcontractors will provide only properly trained and qualified persons to perform work at the construction site. The subcontractor has the responsibility to train their employees on safe work practices and work-specific hazards.

It is with the definitions as outlined above, we ask each subcontractor to know their roles and expectations from the first day to the last on any NFS projects.

Safety Program Goals

NFS has established very clear goals and objectives for our safety program. They are:

1. Maintain a SAFETY-FIRST commitment in all aspects of our operations
2. Create a Safety and Health-conscious culture within NFS
3. Establish and maintain incident and hazard-free jobsites
4. Create procedures that meet or exceed the safety standards in our industry
5. Establish and maintain a workplace free from alcohol or substance abuse

Communications

All documentation, information and correspondence required by this Safety and Health Manual are to be transmitted to the "Project Team" consisting of the Project Manager, Superintendent, Project Safety Director/Coordinator, and all other team members.

1. Pre-Construction Conference: Prior to mobilization, each Project Manager, Superintendent, and foremen should attend a pre-construction conference held by the Superintendent and Safety Director. During this conference, any subcontractor is required to have on file with NFS a completed and approved Pre-Qualification Questionnaire for Contractors. A pre-construction project meeting is required to identify any additional safety expectations or special requirements relating to the scope of work on the project.

2. Safety Plan Review: Prior to mobilization each subcontractor performing certain activities may be required to submit a site safety plan for their scope of work and/or complete

scope specific safety plans. These activities include, but are not limited to, fire caulking, trenching, excavation, roofing, glazing, fall protection, controlled access zone, steel erection, pre-cast erection, demolition, masonry, or lockout/tag out (LOTO) etc. The subcontractor's site-specific safety plan should include an overview of what steps will be taken to manage the hazards associated with the scope of work. The plan must also identify competent persons or specific needs.

3. Safety information and updates: Each project Foreman will conduct a toolbox safety meeting with the field employees on a weekly basis. Attendance can be documented directly on the information sheet used to conduct the meeting. The Foreman is responsible for coordinating and leading these meetings. A copy of the toolbox talks topic and sign in sheet discussed with employees will be photographed and placed in Procore under the assigned project number. Topics will vary from week to week and should cover those areas of greatest concern to the immediate tasks or project.

4. Cell Phones and Radios: Communication is critical on any construction site and has a direct effect on the ability to maintain a safe workplace. Employees assigned two-way radios for jobsite communications are allowed. The use of cellular phones, radios or similar devices while working with tools, equipment or material is strictly prohibited. The use of earphones while working is strictly prohibited. Using any of these prohibited items, while working, will be grounds for immediate disciplinary action.

Responsibilities

The Employee's Responsibility includes

- Work in a safe and efficient manner and follow established safety regulations and NFS company policies.
- Ensure that each task given is understood.
- Report any unsafe conditions to the Safety Team, Superintendent/Foreman as soon as possible.
- Report even minor injuries to a supervisor in person and seek First Aid care immediately.
- Report to work physically and mentally able to perform the tasks assigned.
- Report to work without the presence of drugs or alcohol in his system which may affect work while under the influence.
- Report to the Foreman, Project Manager, Superintendent, NFS Safety Department, or immediate Supervisor if any prescription or nonprescription drugs taken which would affect the ability to work safely.
- Not perform work which the employee feels are unsafe; this is true even if the Foreman directs such work. No employee will be reprimanded for reporting to the supervisor's supervisor a request to work in what the employee believes is an unsafe condition. Every employee may seek out the supervisor's supervisor to report any unsafe condition.

First Level Supervision (Foremen)

- Ensure needed safety equipment and protective devices are provided and used for each job.
- Communicate and coordinate any risks likely to affect employees and ensure the risks are controlled or eliminate.
- Make new employees aware of any hazards in their work area.
- Take prompt corrective action whenever unsafe conditions or unsafe acts are noted.
- Teach employees that accidents are caused and can usually be prevented.
- Assure that all injuries are properly reported and treated.
- Instill safety awareness in each employee through personal contact and by group safety meetings.
- Provide full support of all safety activities and safety procedures.
- Assure that pre task plans (PTP) are filled out every day.
- Assure that safety meetings are conducted with all employees.
- Inspect the project for safe and unsafe activity.
- Attend safety meetings.
- Ensure the employees are trained in the jobs they are asked to perform.
- Do one Toolbox Talk (TBT) weekly with employees and have them sign off.
- Perform one weekly inspection of the job site power equipment, cords, etc.
- Ensure cords are properly color coded by placing the correct tape on the plug ends. Jan-March (White) April-June (Green) July-September (Red) October-December (Orange)
- Ensure all employees fill out a lift or equipment inspection card prior to use and maintain these onsite for the duration of the project.

Superintendents/Foreman

- Review the safety program and insure its implementation on the project.
- Lead safety meetings and give full support to all safety activities.
- Plan ahead for safety requirements and communicate those requirements to all foremen.
- Report close calls or accidents to NFS safety. Assist in all investigations and assist with any required reports.
- Oversee any assigned corrective actions and manage until 100% corrected.
- Give leadership and direction in the administration of safety activities.
- Require foremen to hold safety meetings as outlined in this Program and ensure a copy of each safety meeting topic and sign in sheet is loaded to Procore.
- Discuss all safety violations with foremen, document and require compliance.
- Ensure NFS's SDS binders on-site or electronically available.
- Participate in finding an acceptable muster point for all projects and communicating that information in the jobsite orientation when applicable.
- Participate in general contractor pre-construction reviews whenever possible.
- Issue any applicable hot work, confined space, excavation, and other like permits.
- Ensure proper on-site housekeeping at all times to include, trash, material storage, or anything else possibly affecting public safety around the project site.

- Ensure a First Aid kit, bloodborne pathogens kit, and eye wash stations are always onsite and readily available for use and check weekly to ensure they are full.
- Keep a current First Aid and CPR certification.
  Ensure cords on the jobsite are properly color coded by placing the correct tape on the plug ends. Jan-March (White-Winter) April-June (Green-Spring) July-September (Red-Summer) October-December (Orange-Fall).
- Ensure all employees are tied off properly 100% when using a scissor/boom lift onsite. Lanyards are not to be used only retractable lifelines.

Project Managers

- Review the safety program and ensure its application on the project.
- Participate in subcontractor pre-construction reviews.
- Review accident summary reports to keep informed on the project accident record.
- Assist in appropriate preventive action when accident trends are unfavorable.
- Give leadership and direction in the administration of safety activities.
- Consider recommendations and interpretation of policies and support.
- Require Superintendents to hold safety meetings as outlined in this Program Manual.
- Inspect the project for safe and unsafe activity while onsite.
- Attend safety meetings.

Operations Manager

- Assist in administrating the safety programs on all projects.
- Monitor all injuries and accidents. Ensure that serious injuries are investigated and coordinate information and procedures between Risk Management and Project Managers.
- Provide positive reinforcement to employees and subcontractors regarding NFS safety practices.
- Encourage employee participation in various aspects of the safety program.
- Involve middle and top management in safety awareness and support whenever possible as well as outside speakers/motivators.
- Promote incentive-based safety programs when applicable.
- Keep apprised of all serious injuries, special inspections and any major problem areas or ideas that could impact the projects and NFS.
- Interface with client/Owner to review and resolve safety concerns on the project.
- Inspect the project for safe and unsafe activity.

Corporate Safety Department

- Ensure compliance from NFS personnel regarding policies and procedures identified in this Safety and Health Manual.
- Assist operating personnel by preparing safety material, literature, training materials and maintaining general safety regulations.
- Accumulate and analyze accident data to develop corrective and preventive action.

- Provide periodic reports relating to the effectiveness of the program and accident and injury trends.
- Assist in establishing safety goals per project and the company.
  Resolve questions, approve and/or recommend necessary expenditures to correct unsafe conditions.
- Make regular job site visits to determine if safe work practices are being observed, and that unsafe conditions do not exist.
- Ensure all related safety paperwork from all subcontractors is being turned in to Project Superintendent as required.
- Participate in pre-construction meetings to identify any possible safety issues.
- Participate in post-construction meetings to discuss any safety matters of compliance to identify subcontractors who underperform with site safety rules and regulations.
- Analyze subcontractor questionnaires and ensure compliance.
- Write and enforce corporate policies and procedures.
- Ensure each project has each Subcontractors SDS Binder kept on the safety table.
- Train NFS employees in applicable disciplines as required by OSHA and regulatory agencies.
- Keep all projects up to date on the latest safety trends and requirements. Pass on good safety ideas from project to project.
- Perform documented site safety inspections on all projects.
- Ensure PPE is in place and any other safety related materials such as Danger and caution tape, Bloodborne Pathogens kit, eye wash station, 1st Aid Kit, SDS Folders for Subcontractors on site, daily Sign in Sheet, all OSHA and State signage, emergency contact information, muster point location, visitor PPE (Hard Hat, Safety Vest, safety glasses).
- Work with all staff on emergency response procedures.

Subcontractor Safety Submittals

The following submittals are required prior to the start of work. Each subcontractor shall submit the following to the NFS Project Manager, or Safety Director/Coordinator.

1. Completed and approved Safety questionnaire on file
2. Hazardous Communication Program:
   The subcontractor's hazardous communication program or HAZCOM is to include a list of all materials to be stored/used onsite and their related Safety Data Sheets (SDS). Each Subcontractor is responsible for the maintenance and accuracy of their Hazard Communication Program. (HazCom)
3. Written Site Safety Plan: (when applicable)
   The subcontractors' site-specific safety plan or Job Hazard Analysis (JHA) should include an overview of what steps will be taken to manage the hazards associated with the scope of work. The plan must also identify competent persons or specific needs, responsibilities for monitoring employee safety compliance, emergency procedures and work activity.

Subcontractors performing certain activities may be required to submit an additional safety plan (See Communications section 1.05) for their scope of work.
All Subcontracted employees must be properly trained for the work they are performing on any NFS project.

Subcontractor Safety Requirements

If the total number of employees/workers on-site for all tiered subcontractors is twenty (20) or more, a designated full-time safety representative must be assigned to the project for the duration of the project or until the overall subcontractor employee total count falls below 20. The designated full-time safety representative will have no other responsibilities other than safety supervision (non- production).
A designated full-time safety representative (when more than 20 employees/workers are on site, including tiered contractors) must have:

- Two (2) years of safety experience as a Safety Supervisor.
- Completion of OSHA 30-hour training.
- Current Fall Protection training certificate and be qualified to teach safety procedures.
- If designated as a competent person, the subcontractor must provide evidence of documented training in the subject for the designation.
- Be assigned no other responsibilities other than safety supervision (non-production). (The Safety person is subject to approval of the NFS Project Manager, Superintendent and Safety Director before being assigned to any NFS project).
- Additional full-time safety representative must be assigned to the project for each group of workers, including tiered contractors, the subcontractors have working onsite.
  *20-89 Workers = 1 Full-time Safety Coordinator
  *90-149 Workers = 2 Full-time Safety Coordinators
  *150+ Workers = 3 Full-time Safety Coordinators

NFS reserves the right to require a subcontractor or tiered contractor to provide a full-time onsite safety representative (regardless of crew size) based on scope of work, safety compliance, frequency of incidents or any other reason determined by the Project Manager, Superintendent or Safety Director. Including but not limited to special single day activities such as concrete pours, shutdowns, manpower increase of any kind for any length of time.

Accident Investigation

Purpose

To ensure all near misses, corrective actions, incidents, and accidents are reported and have an established system in place to document and improve our overall safety program.

Scope

NFS uses an effective system to accurately document, analyze for cause, report, and record data on job-related injuries, illnesses, and incidents. The primary reasons for this documentation are:

1. It allows for improvements in the safety and health program, which in turn reduces the frequency and severity of occupational injuries, illnesses, and incidents.

2. It allows corrective actions to be taken to remove the cause and eliminate further incidents, thus making every project a safer place to work.
3. It reduces the costs of workers' compensation and public liability insurance, property damage, and ultimately results in increased production.
4. It provides safety and health research data that can be used to develop programs to control or eliminate specific safety and health hazards and improve work methods.
5. It gives management the tools it needs to effectively educate employees in injury, illness, and incident prevention.

Root Cause Analysis

The safety department will complete a Root Cause Analysis on all incidents that are classified as injury, property damage or near-miss.

Project Incident Review

The safety department will coordinate a project incident review. The review will include a summary of the incident, review of the Root Cause and corrective actions.

- The project incident review will be conducted within two days after the incident.
- The project incident review includes the Project Manager, Superintendent, Foreman Safety Manager, and subcontractor involved.

Near-miss: Incidents that did not result in injury or property damage

- Notification of Incident.
- Root Cause Analysis.
- Record the incident for the specific project.

Injury, First-Aid or Medical Treatment: Any injury that requires treatment including First Aid.

Complete the following forms.

- Notification of Incident
- Treatment Refusal, if applicable
- First Report of Injury (provided by medical provider)
- Root Cause Analysis
- Record the incident for the specific project

Responsibility

Project Foreman is required to report all near misses, incidents, and accidents immediately to the NFS Safety Department.

Hazard Communication

Purpose

To ensure total compliance with OSHA and assist first responders by having the necessary paperwork in place to minimize potential exposure to harmful chemicals on all NFS projects.

Scope

A Hazard Communication Plan (HCP) will be developed and implemented for each project for the health and safety of all employees and first responders. The Hazard Communication Plan is available to anyone upon request.

The HCP organizes information regarding hazardous substances that may be encountered on the project. The information includes Safety Data Sheets (SDS).

The HCP identifies labeling requirements each container of hazardous substances. These labels must contain certain information to identify the contents, hazards, proper protection, and use.

The HCP provides for methods of informing and training of employees on hazardous substances they may encounter on the project.

Subcontractors are required to have their own HCP on-site that includes Safety Data Sheets (SDS). Copies of each subcontractor HCP must be provided to NFS and maintained in a central jobsite file.

Subcontractors are required to have all employees onsite trained in (GHS) or Globally Harmonized System as required by OSHA.

Subcontractors are responsible for updating and maintaining on-site SDS binders. These binders will be kept on the safety table prior to starting work on all NFS projects.

Any containers of hazardous material brought onto a NFS site must have the subcontractors name on each container. In some cases, secondary containment may be required for storage.

The SDS normally contains the following information:

1. A substance's chemical and trade name
2. Any hazardous ingredients
3. Physical data
4. Fire and explosion data
5. Health hazard data and first-aid procedures
6. Reactivity data
7. Spill and leak procedures
8. Special personal protection information
9. Other special precautions
10. Manufacturer's name, address, and phone number

If you have any questions about information contained in a SDS for a particular substance, please ask your supervisor or contact the Safety Department.

Responsibility

It is the responsibility of NFS Superintendents to ensure each subcontractor on his or her project has the applicable SDS binder readily available for review or use should an emergency occur.

OSHA Reference: Hazard Commutations
Cal OSHA Reference: Hazard Communications

Section 2: Procedures

Project Orientation and Safety Training Requirements

Purpose

To ensure uniformity across the board on all NFS projects.

Scope

To ensure compliance with OSHA regulations regarding training.

Project Orientation

All Employees/Workers who enter the construction site (other than visitors and office staff) are required to attend the project orientation when required prior to work on a NFS project. The project orientation consists of a verbal review of the following:

- Site specific hazards
- Location of safety table or other area's when applicable
- Safety expectations
- Site/Owner requirements – parking, site hours, etc.
- Emergency response
- Closest /hospital clinic location
- Drug testing when applicable
- Housekeeping expectations
- SDS locations
- Emergency contacts

Handouts

NFS site Rules and Regulations when applicable will be handed out to each subcontracted employee or company Foreman to review with all employees who arrive onsite prior to beginning work.

Scheduling

Orientations will be scheduled by the Project Safety Coordinator or project Foreman.

Additional Requirements

- Some projects may require pre-work or pre-access drug screening. When drug screens are required, they must be completed before the orientation. When possible, NFS may

coordinate an on-site drug screening service. Each subcontractor is responsible for scheduling employee drug screens and all costs associated with drug screening
- Some projects or Owners may require additional site-specific videos or training
- Each subcontractor is responsible for retaining proof of employee training

Documentation

Project Orientation documentation consists of being issued a site specific, numbered hardhat sticker when the orientation and drug screen, if required, are completed.

Training Verification

Each subcontractor is responsible for providing safety training for its employees. Safety training includes both general awareness and task specific training. Training should include the use of all tools, equipment and motorized vehicles for tasks assigned to employees. Training should comply with all state and federals rules and regulations.

Alcohol, Drugs, Prohibited Articles, Return to Work

Purpose

NFS is committed to protecting the safety, health and well-being of all employees and individuals in our workplace. To help ensure a safe, healthy, and productive work environment.

Scope

This policy restricts certain items and substances from being present on company premises, prohibits company employees and others working on company premises from working under the influence of drugs, alcohol, or other substances.

Assigned Responsibility

It is the responsibility of all employees working, representing, or conducting business for the organization to comply with this section. It applies while traveling, on call, paid standby, on company premises or property. This policy applies to anyone applying for a position or currently employed. Our policy includes, but is not limited to executive management, managers, supervisors, full-time employees, part-time employees, interns, and applicants. The policy applies to subcontractor or persons conducting business on NFS property as set forth herein. The term “company premises” or “company property” for purposes of this policy, includes all property owned, leased, or used by NFS, its affiliates and subsidiaries, including, but not limited to, vehicles, the jobsite of a customer, structures, buildings, offices, facilities, and installations.

Prohibited Behavior

It is a policy violation to use, possess, sell, distribute, trade, or transport any illegal drugs, intoxicants or prohibited articles.

- Alcohol is prohibited on all jobsites.

- Any employee convicted of a drug related offense (use, possession, selling or distribution) must inform Human Resources and the Safety Director of such conviction within five days of the adjudication. Failure to inform the Company subjects the employee to disciplinary action up to and including termination for the first offense.
- Any employee convicted of an alcohol related offense (DUI or DWI) assigned or authorized to drive a company vehicle, receiving an auto allowance, or using company equipment must inform Human Resources and the Safety Director of such conviction within five days of the adjudication.

Prohibited Articles

NFS prohibits the possession of any equipment or paraphernalia related to drug or substance use or the illegal drugs or use of prescription drugs which detrimentally influence job performance on its premises, or work locations. Prescription and over-the-counter drugs are not prohibited when taken in standard dosage or according to a physician's direction. Both prescription and over-the-counter medication must:

- Be in the original container.
- Have a clear legible label with the product name and date.
- Have a clear legible label with the prescription user’s name listed on the label.
- NFS reserves the right to limit access or work activity of employees using over the counter or prescription drugs if the use of those item(s) creates or could create a concern for safety.

Right to Investigate

As permitted by applicable law and the Contract Documents (Contract Documents include the Owner’s contract, the subcontracts and purchase orders) employees and persons entering company property as previously described, consent to drug and alcohol investigation. Anyone suspected of violating this policy may be asked by a NFS management representative to submit to an investigation at any time under the following circumstances:

- When there is reasonable suspicion that an individual’s work performance or on-the job behavior may have been affected by alcohol or drugs.
- When there is reasonable suspicion that an individual has sold, purchased, used, or possessed unauthorized alcohol, drugs, or drug paraphernalia on NFS premises.
- At any time when an individual is entering, departing or on NFS premises when there is reasonable suspicion of policy violation or an investigation of policy violation.
- Investigation may include an examination of the contents of pockets, clothing, wallets, purses, briefcases, lunch boxes, desks, workstations, vehicles, and equipment. Employees who refuse to submit to an investigation will be considered in violation of the policy and subject to disciplinary action. Subcontractor employees will be immediately reported to their employers.

At no time will persons be patted down, nor will any clothing be required to be removed by the company during these searches and inspections.

Policy Enforcement

Each employee, as a condition of employment, and individuals working at or on "company premises" or "company property", is required to participate in drug and alcohol tests if selected or requested by management or a supervisor. Examples of such drug/alcohol testing include:

- Pre-employment
- Pre-duty or pre-access
- Post-accident
- Reasonable suspicion
- Return-to-duty
- Follow-up testing

Examples of reasons testing may be required include but are not limited to the following:

- Upon application, all applicants will be required to successfully pass a pre-placement drug/alcohol screening as a condition of employment.
- Possibility of working under the influence of drugs or alcohol.
- After any job-related accident or injury that requires a medical visit, or which may have been caused by human error and which could be drug or alcohol related.
- Vehicle or property damage accidents exceeding $500 damage where it is reasonable that the employee could have reasonably avoided the incident.
- When an employee is found in possession of suspected illicit or unauthorized drugs, alcohol, drug paraphernalia, firearms, weapons, explosives, or other prohibited items.
- If a manager or supervisor request a drug and/or alcohol test of any employee or other individuals pursuant to this policy and the contract documents.

Designated Employer Representative

The Designated Employer Representative (DER) and Human Resources are the authorized persons to receive drug testing information. Human Resources and the Safety Director are the designated employer representative for salaried employees. The Project Manager, Project Engineer, or the Manager in charge of the Project may also be the DER for employees at construction sites. All test results are to remain confidential. Employees releasing drug testing results to unauthorized individuals are subject to disciplinary action.

Alcohol and Drug Testing

Any employee whose initial field drug screen results are other than negative, abnormal, invalid or who refuses to test will be directed immediately to a local clinic for additional or retesting. Additional or retesting may include rapid screening, other methods of testing, laboratory confirmation, Medical Review Officer (MRO) review or a combination of these.

At the clinic a new drug test may be performed. All first-test specimens, at the clinic, may be confirmed by a second test using gas chromatography and mass spectrometry (GC/MS) techniques. NFS will rely upon the services of a Medical Review Officer (MRO) to assist in the interpretation of a second test that has been confirmed as positive. The MRO is a licensed

physician who has appropriate medical training to interpret and evaluate an individual's positive test result as it relates to the employee's medical history

Return to Work: Laboratory results and/or MRO review

Employees sent to a local clinic for additional testing may be prohibited from returning to the work location until the laboratory results and MRO review are complete and received by the Designated Employer Representative. The Director of Human Resources or Safety Director will determine if the employee is prohibited from returning to the work location until the laboratory results and MRO review are complete. If the laboratory results and MRO review are negative, the employee will be paid for all time lost from work. If the laboratory results and MRO review are other than negative disciplinary action may be initiated. All disciplinary actions must be coordinated with Human Resources.

Company Vehicles

Employees who drive a company vehicle that are sent to a local clinic for additional testing may be prohibited from operating a company vehicle until the laboratory results and MRO review are complete and received by the Designated Employer Representative. The Director of Human Resources or Safety Director will determine if the employee is prohibited from operating a company vehicle until the laboratory results and MRO review are complete. Any or all the following disciplinary actions may be implemented for employees:

First offense:

- Termination of employment.
- Suspension without pay for two weeks.
- Employee may be required to sign a Return-to-Work Agreement, which may include a Successful completion of any recommended rehabilitation.
- Subject to ongoing, unannounced, monthly random testing for a period of one (1) year.
- Employees who drive a company vehicle or operate company equipment may lose their privilege for up to six (6) months or indefinitely depending on severity.

Second offense:

- Immediate termination of employment if he/she:
- Tests positive a second time within 18 months of the initial positive test o Violates the Return-to-Work Agreement, or o Fails to successfully complete any required rehabilitation. Subcontractors are required to implement and enforce drug policies for their own employees. Without exercising control over the subcontractors, the subcontractor's employee, when testing was performed or required by the Contract Documents or pursuant to subcontractor's drug policy, whose test results are other than negative or refuses to test may be subject to any or all of the following requirements of the Project and the employer of subcontractor:
- Suspended permanently from NFS work locations.
- Suspended from all NFS work locations for a defined period.

- If permitted by the Contract Documents, required to provide a negative drug test result dated at least fifteen (15) days after the initial test.
- If permitted by the Contract Documents, subject to approval to return to work by NFS.
- Suspended permanently from NFS work locations if test results are other than negative a second time within eighteen (18) months.
- If subcontractor employee is permanently or suspended from NFS projects, NFS shall notify the subcontractor of the same in writing.

Any employee who refuses the test, adulterates, dilutes, or substitutes the specimen with another specimen, sends an imposter, does not sign the required forms, or refuses to cooperate in the testing process in any way will be subject to termination. Nothing in this policy prohibits the employee from being disciplined or discharged for other violations and/or performance issues.

NFS Systems reserves the right to use any disciplinary actions, depending upon the seriousness of the violation. It is not required to complete all steps of the disciplinary procedure in every case.

Discipline may begin at any step appropriate to the situation. Discipline includes, but is not limited to:

- Minor - Verbal Reprimand
- Significant - Written Reprimand or Suspension
- Serious - Suspension or Termination
- **Flagrant -Termination of Employment (or permanent removal from the project)**

OSHA Inspections

Purpose

To establish a standard organized method of handling Occupational Safety and Health Administration (OSHA) inspections on NFS projects.

Scope

To provide direction on NFS projects for any Superintendent/Foreman in handling OSHA inspections when a compliance officer arrives on-site:

Procedure

1. Verify OSHA identification.
2. Determine the reason for the visit. (Programmed inspection, complaint, drive-by, etc.) 3. Call Corporate Safety Director at (512) 848-8045 or Safety Manager at (512) 800-4077
4. Call your direct supervisor.
5. Walk with the Compliance/Investigating officer.

It is NFS System's policy that a corporate representative or designee must attend all OSHA inspections and investigations.

The Corporate or Project representatives or designated alternates along with their general roles are as follows:

- Corporate Representative must attend and participate in all OSHA inspections.
- Safety Director - acts as spokesperson at the opening and closing conferences.
- Safety Director and/ Safety Manager or Superintendent will accompany the OSHA Inspector during the field inspection whenever possible.
- Safety Director/Superintendent/Project Manager - will document the inspection, take pictures, and will accompany the OSHA Inspector during the entire field inspection.

Assigned Responsibility

Safety Director or another designated representative will carry out the following tasks during an OSHA Inspection:

Opening Conference

1. Note the time Inspector arrives
2. Notify the Subcontractor if the investigation pertains to their company
3. Review the Inspector's credentials carefully and record exact full name.
4. Identify the type of inspection:
    a. Catastrophe and/or Fatality
    b. Complaint
    c. Referral
    d. Planned Inspection
    e. Focused Inspection
5. If complaint inspection, request a copy of the complaint
6. Determine which records the Inspector wishes to see. Only OSHA Form No.300, Hazard Communication Program and SDS sheets are to be made available without authorization from the Safety Director. (Copies of contracts are not to be given to OSHA)
7. Inform the Inspector if there are employee union representatives on-site
8. Ensure that if the client has a Plant Manager/Building Manager, they should advise the Inspector of restricted areas and requests the Inspector to advise if he wishes to photograph or make tests in these areas
9. Ensure that the Safety Assistant takes detailed notes of all the Inspector's comments, position on matters, beginning and ending of conferences, where they were held, who was present and follows the specifics regarding noise, chemical tests, etc.

Closing Conference

1. Record the discussion of all items covered in the closing conference by the Safety Director and Inspector.
2. If applicable, alleged violations should be identified as follows:
    a. Determine nature of the alleged violation.
    b. Determine standard, by number, allegedly violated.
3. Document the methods the Inspector believes will affect compliance.
4. Distribute one (1) copy to the Vice President; keep original on file at the project.

5. Send copy to the Safety Director on date received.

After the Inspection

1. Assist in preparing the written report on inspection which will be given to the Safety Director.
2. Review written report on inspection as prepared by the Safety Director/ Superintendent (or designated alternate).
3. Make any pertinent corrections, clarifications, additions, or deletions.
4. Distribute one (1) copy to the President; keep original on file at the project.

Photographs

If the OSHA Inspector takes photographs during the inspection:

- Take a picture of the same scene as the inspector.
- Ask the Compliance Officer what they photographed and take a photograph.
- Request an explanation of the purpose of photograph.
- Make detailed notes which must include Purpose of photograph of Time taken
  If it would be helpful in clarifying the subject of the picture, take additional pictures from different angles after the Inspector leaves.

Employee Interviews by OSHA Inspector During Inspection

- Should be done on request of Inspector only.
- Be sure that the notes taken contain the employee's name, occupation, and duration of interview.
- Do not question the employee at any time about the interview without expressed approval of the corporate office or local retained legal counsel.

Recordkeeping and Reporting

Purpose

Ensure each NFS project site maintains all required safety paperwork and ensure the proper steps are being consistently taken to ensure employee safety is always maintained.

Scope

Establish and maintain a safety file system. The safety file system consists of binders and shall contain the following items:

- Site Specific Safety Plan
- Identified Muster Point
- List of Emergency Contacts
- List of Hazardous Chemicals on-site used or controlled by NFS
- Safety Data Sheets (SDS) for each hazardous material used on the job site separated by company in binders or kept electronically on company safety badge system for review
- Job site safety-meeting sign in sheets

- Job site safety inspections sheet
- Orientation documentation
- Equipment inspections for each piece of motorized equipment or vehicle operated by NFS or subcontractor employees
- Safety permits & plans
- Hazard Communication Plans (HCP) when applicable

Responsibility

The NFS Foreman is responsible for the maintenance of the safety file system on each project.

Return to Work

Purpose

Ensure all steps are being taken to assist any employee working on a NFS project site to be able to return to work quickly should be or she become ill or injured.

Scope

It is a fact that an injured employee will generally recover faster when allowed to return to work in a limited capacity rather than being sent home during recovery from minor injuries. It is NFS's policy where feasible to return injured workers to productive work, although not necessarily to their pre- injury duties, as early as possible during their recovery. This type of work is often referred to as "modified-duty or "light-duty" work. NFS has adopted this policy because employees who remain off work for long periods of time not only affect the Company's productivity and workers' compensation costs, they also often experience slow healing and a loss of self-esteem. Within the requirements of their treating medical providers, the limitations of the law, and the economic and physical limitations of our own properties, the Company will make every effort to provide meaningful work.

On any **OCIP/CCIP/ROCIP** projects subcontractors are required to provide "modified-duty or "light duty" work for any injured employee either on or off site.

Responsibility

The responsibility for implementation of the plan falls on direct NFS site management employee.

Section 3: Specific Work Practices

Aerial Lift and Scissor Lift

Purpose

To ensure compliance with all required OSHA rules and regulations pertaining to this section on all NFS projects.

Scope

Anyone operating, using, or riding in aerial lifts must have documented training available upon request prior to operating, using, or riding in aerial or scissor lifts.

- User training for Aerial/Scissor lifts as required per OSHA
- All operators will have OSHA approved Fall Protection training available upon request
- All operators will use Fall Protection 100% of the time in any boom lift
- Lanyard's will not be allowed for use and only OSHA approved self-retracting lifelines, or fixed lanyards are to be used when tie off is required
- Operator must perform documented inspection prior to use.

Responsibility

All NFS employees and subcontractors must comply with all rules and regulations as required by OSHA.

OSHA Reference: Aerial Lifts

Cal OSHA Reference: Aerial Lifts

Demolition

Purpose

To ensure compliance with all required OSHA rules and regulations pertaining to this section on all NFS projects.

Scope

During structural demolition, the following will apply:

- The subcontractor conducting the demolition will provide a site-specific demolition plan
- All demolition must be conducted under the supervision of a competent person
- Demolition Company will ensure all energy sources have been disconnected prior to starting
- Precautions will be taken regarding plumbing water lines, fire protection systems, and building fire alarm systems to ensure no interruptions in service to other occupants.
- Fall protection must be in place and used, when necessary, prior to demolition at or near an edge with a fall greater than six (6) feet
- Dust protection and prevention steps shall be taken by the contractor performing the demolition and coordinated with the Superintendent
- Subcontractor performing the demolition shall provide and post all warning signs and barricades (in English and Spanish) securing the area prior to starting demolition
- Subcontractor performing the demolition shall control access to areas of demolition and will allow only authorized people in the area
- A charged fire extinguisher shall be used as primary fire protection during demolition
- Only those workers necessary for the performance of the operations shall be permitted in this area at any other time

Responsibility

NFS Project Manager shall verify (Owner's) building asbestos hazard survey had been completed (when applicable) prior to working in an area where demolition or renovations are taking place. All NFS employees and subcontractors must comply with all rules and regulations as required by OSHA:

OSHA Reference: Demolition

Cal OSHA Reference: Demolition

Environmental Controls

Purpose

To ensure the NFS Project Management team has the following measures and procedures implemented to control potential environmental hazards on each project.

Scope

All chemicals should be stored to prevent spills.

- Types of materials stored will dictate the space between storage areas to prevent contamination by other materials and possible reaction with materials in storage
- All chemical dispensing should be performed over a drip tray and the drip tray must be kept clean and free of debris
- When chemicals are not in use, the containers must be securely closed
  Storm Water Pollution Prevention Plan (SWPPP)
  The Notice of Intent (NOI) must be submitted prior to starting any construction activity where soil will be disturbed.
- A written plan developed by a consultant must be available on the project site
- Additional storm water permits may be required by local/City governments for construction operations
- The pollution prevention plan must also specify operation, maintenance, and inspection procedures to minimize pollution from storm water runoff
- Subcontractors are required to always minimize soil erosion and loose dust
- The SWPPP plan will specify applicable erosion control provisions and any modifications to the plan must be noted on the plan as required by the EPA

Responsibilities

Project Managers and Site Foremen must ensure all required project permits have been obtained prior to beginning work. All subcontractors must comply with all rules and regulations.

OSHA Reference: Environmental Controls

Cal OSHA Reference: Environmental Controls

Heavy Equipment

Purpose

To ensure employee safety and for all employees who operate or work near forklifts or heavy equipment.

Scope

- Never ride as a passenger on a forklift or heavy equipment
- Do not stand or pass under raised loads
- Never approach a forklift or heavy equipment without the operator's permission o Avoid standing on the blind side or behind forklifts
- Prior to operating the forklift or heavy equipment, the operator will inspect the equipment
- Defective equipment must be tagged out of service
- Maintain a safe distance from pedestrians
- Ignition keys will not be left in the equipment when it is unattended

Training

All forklift and heavy equipment operators must be able to always provide documentation of training certification on-site.

- Only authorized and properly trained employees shall operate forklift or other heavy equipment
- Training must meet the requirements of OSHA
- Operator must perform a documented inspection prior to use

Responsibility

All NFS employees and subcontractors must comply with all rules and regulations as required by OSHA:

OSHA Reference: Equipment 1926.600

Cal OSHA Reference: Equipment

OSHA Reference: Handling Materials 1910.176

Cal OSHA Reference: Handling Materials

OSHA Reference: Heavy Equipment 1926.602

Cal OSHA Reference: Heavy Equipment

OSHA Reference: Industrial Trucks 1910.178

Cal OSHA Reference: Industrial Trucks

Fire Protection and Prevention

Purpose

Our fire prevention policy is designed to ensure that all reasonable steps are taken to preserve life and property from exposure to fire hazards. The requirements listed here identify the basic elements of our fire prevention program. They should be a part of everyone's day-to-day responsibilities.

Scope

- In the event of fire notify someone before attempting to extinguish any fire
- NFS Superintendent and Safety Director must be immediately notified of any fire
- If the fire is not extinguished with a single fire extinguisher, call the Fire Department

Fire Extinguishers

- The area surrounding the extinguisher, as well as the pathway, shall be kept free of any debris or obstructions.
- Fire extinguishers should be provided at construction sites in the following locations at a minimum:
  a. Every 3,000 square feet of building area, travel distance from any point of area to extinguisher shall not exceed 75 feet
  b. On every floor of multistory buildings adjacent to stairways on each floor in multistory buildings within 50 feet of wherever more than five (5) gallons of combustible liquids or five
  c. (5) pounds of flammable gas are being used immediately available at all welding and cutting operations, in crane cabs or operator stations, in all industrial trucks
  d. Fire extinguishers should be inspected once a month to assure they are in proper working condition. These inspections shall be documented in the fire extinguisher inspection log monthly.

Hot Work "Flame" Permit

At times it may be required or necessary to issue a Hot Work "Flame" Permit. Hot Work Permits should be issued when work with an open flame or torch is required is an occupied building, substantially complete building, in areas that an open flame may cause damage or as required by the client. The Hot Work Permit is issued by the Superintendent and requires the person doing the "flame work" to comply with additional safeguards.

Responsibility

Project Superintendents will always ensure compliance with this section and perform monthly fire extinguisher inspections are completed and documented. All subcontractors must comply with all rules and regulations as required by OSHA.

OSHA Reference: Fire Protection and Prevention

Cal OSHA Reference: Fire Protection and Prevention

First Aid Procedures

Purpose

To ensure NFS site management employees can assist a person requiring medical assistance should the opportunity present itself.

Scope

All salaried NFS employees and hourly Foremen are required to have current First Aid/CPR training. First Aid/CPR should be renewed when certifications expire. Each subcontractor must have at least one person on-site with current First Aid/CPR training foreach work shift. Employees or workers who are injured at work are required to report the injury to the NFS Safety representative.

"First Aid" defined - First Aid is the immediate or temporary care given to a person who has suddenly taken ill or who has been injured. Everyone trained in First Aid/CPR is expected to help in the event of an emergency.

Responsibility

All NFS site supervising employees. All subcontractors must comply with all rules and regulations as required by OSHA as outlines in this section.

OSHA Reference: Medical Services/First Aid

Cal OSHA Reference: Medical Services/First Aid

Heat Stress Prevention Program

Purpose

This Heat Stress Prevention Program has been developed to provide workers with the training and equipment necessary to protect them from heat related exposures and illnesses.

Training

All employees who are or may be exposed to potential heat related illnesses will receive training on the following:

- The environmental and personal risk factors that cause heat related illnesses
- The employer's procedures for identifying, evaluating and controlling exposures to the environmental and personal risk factors for heat illness
- The importance of frequent consumption of small quantities of water
- The importance of acclimatization
- The different types of heat illness and the common signs and symptoms of heat illness
- The importance of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers
- The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary

- Procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider
- How to provide clear and precise directions to the work site

Supervisor Responsibilities

- All supervisors will be provided a copy of this program and training documents prior to assignment of employees working in environments where heat exposures may occur.
- Supervisors will be provided the procedures to follow to implement the applicable provisions of this program.
- Supervisors will be provided the procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Provision of Water

Employees shall have access to potable water. Water shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking the entire shift for a total of 2 gallons per employee per 8-hour shift. Employees may begin the shift with smaller quantities of water if effective procedures for replenishment of water during the shift have been implemented to provide employees one quart or more per hour.

Access to Shade

Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. Shade areas can include trees, buildings, canopies, lean-tos, or other partial and/or temporary structures that are either ventilated or open to air movement. The interior of cars or trucks are not considered shade unless the vehicles are air conditioned or kept from heating up in the sun in some other way.

Heat Stress Disorders

Heat Rash (Prickly Heat)

Symptoms:

- Red blotches and extreme itchiness in areas persistently damp with sweat.
- Prickling sensation on the skin when sweating occurs.
- Cool environment.
- Cool shower.
- Thorough drying.

Heat Cramps

Symptoms:

- Loss of salt through excessive sweating.
- Cramping in back, legs and arms.

Heat Exhaustion

Heat exhaustion occurs when the body can no longer keep blood flowing to supply vital organs and at the same time send blood to the skin to reduce body temperature.
Symptoms:

- Weakness.
- Difficulty continuing work.
- Headache.
- Breathlessness.
- Nausea or vomiting.
- Feeling faint or actually fainting.

Help the victim to cool off by:

- Resting in a cool place.
- Drinking cool water.
- Removing unnecessary clothing.
- Loosening clothing.
- Showering or sponging with cool water.

It takes 30 minutes to cool the body down once a worker becomes overheated and suffers heat exhaustion.

Heat Stroke

Heat stroke occurs when the body can no longer cool itself and body temperature rises to critical levels.
Symptoms:

- Confusion.
- Irrational behavior.
- Loss of consciousness.
- Convulsions.
- Lack of sweating.
- Hot, dry skin.
- Abnormally high body temperature.

Provide immediate, aggressive, general cooling.

- Immerse victim in tub of cool water or;
- Place in cool shower; or
- Spray with cool water from a hose; or
- Wrap victim in cool, wet sheets and fan rapidly.
- Transport victim to hospital.

Do not give anything by mouth to an unconscious victim.

Safe Work Procedures

Supervisors Responsibilities

Supervisors are responsible for performing the following:

- Give workers frequent breaks in a cool area away from heat. Breaks are scheduled at 0900 (5-15 mins), 1100 (1 hour), and 1400 (5-15 mins).
- Additional breaks may be taken as needed during exceptionally hot days.
- Adjust work practices as necessary when workers complain of heat stress.
- Oversee heat stress training and acclimatization for new workers and for workers who have been off the job for a period of time.
- Monitor the workplace to determine when hot conditions arise.
- Increase air movement by using fans where possible.
- Provide potable water in required quantities.
- Determine whether workers are drinking enough water.
- Make allowances for workers who must wear personal protective clothing (welders, etc.) and equipment that retains heat and restricts the evaporation of sweat.
- Schedule hot jobs for the cooler part of the day; schedule routine maintenance and repair work in hot areas for the cooler times of the day.

Workers

Workers are responsible for performing the following:

- Follow instructions and training for controlling heat stress.
- Be alert to symptoms in yourself and others.
- Determine if any prescription medications you're required to take can increase heat stress.
- Wear light, loose-fitting clothing that permits the evaporation of sweat.
- Wear light colored garments that absorb less heat from the sun.
- Drink small amounts of water – approximately 1 cup every 15 minutes.
- Avoid beverages such as tea or coffee or any other beverages that contain caffeine.
- Avoid eating hot, heavy meals.
- Use the buddy-system whenever possible; co-workers should pay attention to each other while working and report signs of heat stress.
- Do not take salt tablets unless prescribed by a physician.

Heat Illness Prevention Guidance for Workers

Awareness of heat illness symptoms can save your life or the life of a co-worker. The following provides valuable information concerning heat-related illnesses and preventative measures.

- If you are coming back to work from an illness or an extended break or you are just starting a job working in the heat, it is important to be aware that you are more vulnerable to heat stress until your body has time to adjust. Let your employer know you are not used to the heat. It takes about 5-7 days for your body to adjust.
- Drinking plenty of water frequently is vital for workers exposed to the heat. An individual may produce as much as 2 to 3 gallons of sweat per day. In order to replenish that fluid, you should drink 3 to 4 cups of water every hour starting at the beginning of your shift.
- Taking your breaks in a cool shaded area and allowing time for recovery from the heat during the day are effective ways to avoid a heat-related illness.
- Avoid the use of alcohol and caffeine during periods of extreme heat. Both dehydrate the body.
- If you or a co-worker start to feel symptoms such as nausea, dizziness, weakness or unusual fatigue, let your supervisor know and rest in a cool shaded area. If symptoms persist or worsen seek immediate medical attention.
- Whenever possible, wear clothing that provides protection from the sun but allows airflow to the body. Protect your head and shade your eyes if working outdoors.

- When working in the heat pay extra attention to your co-workers and be sure you know how to call for medical attention.

Flagging and Traffic Control

Purpose

To ensure and maintain a safe means of traffic control on all NFS projects.

Scope

NFS has set a high standard of expectations regarding flagging and traffic control activities taking place on any NFS project. NFS must ensure the proper measures are in place to always ensure the safety of all employees and to public roadways. We must adhere to the guidelines outlined below and referenced in this section.

Flagging

- Flaggers must be trained and should understand what the operation involves anticipating traffic demands. Some states require flaggers to be certified by the state. If the State does not have a minimum requirement the flagger should be trained in accordance with the most recent Manual on Uniform Traffic Control Devices (MUTCD)

Flaggers should be equipped with the proper equipment to perform their job. This includes approved paddle, class II reflective vest and hardhat. They should give clear and definite signals to control traffic

- Flagmen working in or near a public roadway must wear class II high visibility vest
- Each subcontractor shall furnish flagmen as necessary to control the work traffic

Traffic Control

- All traffic control operations used on any public roadway must be under a Traffic Control Plan (TCP)
- Any changes, due to construction activity, to existing roadways or traffic lanes must be made under a traffic control plan. This plan must be developed by a qualified person prior to affecting roadways or traffic lanes
- Traffic control devices or lane closures should be inspected daily, and inspections documented weekly. The location of all traffic control devices should be marked for quick realignment and inspection
- Detours and channelization procedures should be planned and well defined to cause no confusion to drivers
- During operations that will disrupt traffic on adjacent streets, a qualified flagman will be used to direct traffic traveling in each direction and in areas entering and exiting the site. The subcontractor disrupting traffic will be responsible for assigning flagman necessary signage and equipment
- Pre-approved traffic areas are established. Parking in unauthorized area will result in the vehicle being towed at the Owner's expense

Responsibility

All NFS Superintendents are responsible for any self-performed work activities and or deliveries that may fall under this section. All subcontractors will comply with all rules and regulations pertaining this section.

OSHA Reference: Work Zones Signs, Signals, and Barricades

Cal OSHA Reference: Work Zones Signs, Signals, and Barricades

Housekeeping

Purpose

Maintain a workplace free of trash and or debris that may compromise the safety of employees on all NFS projects.

Scope

Housekeeping has a direct relationship to safety and will be addressed as a safety issue. Housekeeping is a primary concern for everyone throughout the project. Good housekeeping tends to minimize fire potential and reduce potential slip and fall injuries. Housekeeping includes removing trash, debris, materials, and equipment from the site daily and ensuring proper storage of materials and equipment.

Failure to maintain adequate housekeeping conditions will result in a warning, possibly followed by clean-up services charged back to the subcontractors involved. Repeated failure to maintain adequate housekeeping will be grounds for further disciplinary action, including the shutting down of the activities and/or removal of the Project Foremen from the project.

Combustible storage of building supplies, materials and/or equipment shall be kept to a minimum within buildings. Unless threatened by inclement weather, such storage shall be maintained outdoors. Any indoor storage should be limited to a two (2) day supply of materials.

- Man-made trash receptacles are not allowed on any NFS project at any time
  During construction all construction related debris or trash (including form and scrap lumber with protruding nails) should be kept clear from all work areas, passageways, and stairs and in or around the construction area
- NFS personnel and/or subcontractor's supervisors are responsible for the immediate disposal and removal of their employee's lunch and break trash
- All Project Foremen must ensure that any combustible scrap and debris is removed at regular intervals using safe means
- Clean up and housekeeping activities shall be "clean-as-you-go". Allowing scrap and debris to accumulate does not meet our expectations. Trash must be removed daily
- Floors are to be kept in a clean, and where possible, dry condition
- All hazardous waste must be stored and collected in special areas
  No waste haulers, disposers, recyclers, or scavengers are allowed on the job site without the Superintendent's approval.

Responsibilities

All NFS Superintendents, Foremen, employees, and subcontractors are responsible for maintaining good housekeeping on a regular basis throughout the workday.

OSHA Reference: Housekeeping

Cal OSHA Reference: Housekeeping

Inspections

Purpose

Perform regular site safety inspections to strengthen the safety program and prevent losses.

Scope

Identify physical hazards (i.e., unprotected floor openings, etc.) and unsafe acts (i.e., missing Personal Protective Equipment, etc.) that can be improved or corrected before an accident occurs. It is also an ideal time to complement those who are doing their jobs safely and well.

Responsibility

- NFS Project Foreman must routinely inspect the site to identify and correct any safety hazards (whether caused by NFS or Subcontractor) and coordinate with subcontractor to correct any violations. This is to include a documented site inspection once per week and kept in our NFS project binder
- NFS Foremen will ensure all Subcontractors perform a documented site safety inspections weekly and turn in to NFS for review

NFS Foremen shall walk the job site daily to inspect and monitor compliance with our safety program to include proper use of PPE.

Job Hazard Analysis/Pre-Task Plan

Purpose

To work in partnership with Subcontractors to identify and eliminate hazards before they exist when possible. By providing a detailed JHA at the start of all projects and performing daily PTP's employees working onsite will have more knowledge of the hazards associated with their own work and identify hazards they may be required to work around.

Scope

The Job Hazard Analysis (JHA) section of the safety program is designed as a guide for describing the overall job to be performed and breaking it down into tasks. The Job Hazard Analysis addresses the tasks that will be performed, the hazards involved, and the actions and tools used to prevent those hazards from causing injury or accident. A Job Hazard Analysis will be

submitted prior to beginning work to the NFS safety department for review. Each subcontractor will be required to complete a JHA, and it must be approved prior to starting work. The JHA must be documented, maintained on-site and available for review or audit.

The Pre-Task Plan (PTP) is used daily to identify the work area, what tools are needed, what PPE is required and what safety measures need to take place to avoid the hazards identified. A Pre-Task Plan shall be used to identify a minimum the possible hazards to the employee's immediate working area and task they are performing.

Selecting the Job is used when the job/task has a higher degree of danger or hazard to the employee(s)/worker(s) engaged in the job/task. Any work that involves the following job/task must complete a PTP or Pre-Task Plan:

- The use of personal fall protection equipment
- The use of a ladders
- Entering a trench, excavation, or confined space
- When a person is using motorized mechanical equipment
- Using power tools that have sharp blades

Responsibilities

Immediate NFS Foreman or subcontractor supervisor is responsible for:

- Completing the required PTP with the work crew
- Reviewing the PTP with the work crew prior to them starting work
- Keeping a copy of the PTP available at the work location
- Having the crew sign the PTP
- Monitoring work crew for compliance with PTP
- Reviewing and updating the PTP when necessary

Employee/Worker

- Review and sign the PTP prior to starting job/task
- Ask question if the instructions are unclear or confusing
- Ensure the required materials, tools and equipment are available
- Additional Pre-Task Plans will be required if crews are working in multiple areas/floors/buildings, performing different job tasks, or working further than 50 yards apart

Ladders

Purpose

To ensure the safe use of ladders on all NFS projects.

Scope

The following general requirements apply to all ladders, including job-made ladders:

- A double-cleated ladder or two or more ladders must be provided when ladders are the only way to enter or exit a work area having twenty-five (25) or more employees, or when a ladder serves simultaneous two-way traffic

Portable Ladders

- Portable ladders should be 300# Type 1 A ladders or above
- All portable ladders will be placed so that the horizontal distance of the bottom of the ladder is not less than one-quarter of the vertical distance (4:1) to the top support. If the ladder must be positioned less than one-quarter of the vertical distance, it should be fastened to prevent tipping
- Single portable ladders in excess of thirty (30) feet in length are not to be used. If greater heights must be attained, multiple ladders with intermediate landing platforms will be utilized
- Each ladder must have a rope to allow workers to lift tools, equipment, or material
- All metal ladders are prohibited, and wood ladders should not be painted except for an identification mark
- Standing or sitting on the top two steps of any ladder does not meet our expectation
- The belt buckle rule must be always followed while on an A-frame ladder. The belt buckle should never be higher than the top of the ladder
- All ladders should have all required safety/weight capacity sticker legible for inspection
- Each subcontractor will use the following color-coding system to identify quarterly inspections have occurred
- **Electrical tape of the corresponding color is to be used on each portable ladder**

  White - January through March
  Green - April through June
  Red- July through September
  Orange- October- through December

Job-Built Ladders

Job-built ladders must meet ANSI A14.4 requirements for construction, installation, care, and use of job-built ladders

- Job-built ladders must be assigned and labeled with a unique number to be used for inspection
- All job-built ladders must be inspected weekly by the contractor or subcontractor who built or provided the ladder
- Inspections must be conducted by a competent person with inspection tag prominently posted on the ladder

Responsibility

All Superintendents or NFS supervising employees always ensure compliance with this section. All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Ladders

Cal OSHA Reference: Ladders

Vehicles on Site: Cars, Trucks, Golf Carts, etc.

Purpose

To ensure the safe use of vehicles motorized or otherwise on and NFS projects.

Scope

Vehicles and equipment brought on site must be in safe operating condition. Any vehicle or equipment deemed unsafe by will be immediately removed from site until repairs are complete and equipment is re-inspected.

Pickup trucks and cars – requirements:

- The speed limit on project site is not to exceed ten (10) mph
- At no time shall personnel ride in the back of any pick-up or other vehicle. Riding in the bed area of a pickup or truck does not meet our expectations
- Parking of vehicles on or around the jobsite is at the discretion of the NFS Project Manager or Superintendent
- Employee parking shall be in designated areas only; any vehicle found not in designated areas may be towed at Owner's expense.

Powered Carts - Golf Carts and ATV requirements:

- Carts and ATVs must not be driven with more people than seats provided. Seatbelts must be used (if provided on vehicle)

Any powered carts must be approved by NFS management

Vendors and Delivery Vehicles – requirements:

Each subcontractor will be responsible for their vendors and delivery personnel to ensure the compliance with the site safety policies; site speed limit and PPE to include hardhat, safety glasses, vest, etc.

Responsibility

NFS superintendent/foremen will always ensure compliance with this section on their jobsites.

Personal Protective Equipment (PPE)

Purpose

To ensure employees on all NFS projects are always wearing all required PPE.

Scope

Personal Protective Equipment (PPE) is used to protect personnel from dangerous objects, substances, and processes. Site rules require at a minimum all employees wear a hard hat, safety glasses, hard soled boots, and a safety shirt or vest with company logo for identification

purposes 100% of the time. Hard hats can be removed only after a (TCO) Temporary Certificate of Occupancy has been awarded.

Supervisors

- Determine the appropriate PPE for each task of the project
- Provide adequate supplies of appropriate equipment are available on-site. (NFS only)
- Ensure all NFS, and subcontractor employees use and wear the required PPE.

All Employees Have the Responsibility to

- Keep assigned PPE clean and in good working order
- Remove damaged PPE from use immediately
- Wear PPE
- Request additional PPE, if needed
- Provide feedback to Superintendent on PPE

All Employees/Workers Will

- Maintain assigned PPE in good, unaltered condition
- Inspect each piece of PPE before each use, paying particular attention to possible damage and excessive wear
- Never use damaged or defective equipment but obtain a replacement before starting work
- Immediately removed from service any damaged or defective PPE.

Eye and Face Protection

- Eye protection will be worn 100% of the time on the construction site. Eye protection must meet ANSI Z87.1. Prescription glasses must also meet ANSI Z87.1 unless worn in conjunction with safety glasses or goggles)
- Face shield must be worn when chipping, cutting concrete or metal, grinding concrete or metal, or transferring liquid from one container to another or where operations present potential eye or face injury from physical, chemical or radiation agents
- When a welding helmet provides the filtering lens, impact protective lenses will be worn inside the helmet to prevent injury when the helmet is raised

Head Protection

- Hard hats will be worn 100% of the time on the construction site
- NFS hourly employees who are not assigned supervisor responsibilities will wear white hard hats and green safety vests
- All hard hats must meet ANSI/ISEA Z89.1-2014 (Class E, Type I) Head Protection. Hard hats must be worn correctly with the bill forward
- NFS prohibits Western style hardhats to be worn on projects due to the difficulty in identifying approved Western style hardhats from non-approved Western style hats

- Long hair must be contained to prevent being entangled in equipment.

Hand/Arm Protection

All NSF jobsites the employee is required to carry a pair of gloves and use those gloves when doing work or any activity where cuts or abrasions are likely to the fingers or hands.

- Employees are required to wear the proper hand or arm protection when working in areas where a hazard exists that could cause injury to hands, fingers, or arms due to skin absorption of chemicals, severe cuts, lacerations, abrasions, punctures, burns or temperature extremes
- Hand protection must meet the following minimum requirements:
  - Adequately protect against the hazard for which they were designed
  - Fit properly without interfering with hand and finger movement
  - Be durable, kept clean and in good condition
  - Fingerless, half-length, and open tip gloves are prohibited
- Gloves must be with the employee and available for immediate use
- If a greater hazard exists and the employee can demonstrate that wearing gloves would create a greater hazard to the employee, then wearing gloves will be exempt. An example might be using rotating machinery where the glove, if caught, would cause a more extensive injury

For tasks that require fine dexterity skills, like adjusting controls or measuring devices, gloves are not required

- This policy is also applicable to all NFS or subcontractor's employees when working on any NFS project

Hearing Protection

- Hearing protection is required in all areas where excessive noise occurs, i.e., air chipper, jackhammer, rotor-hammers, grinding, drilling, cutting and air compressors in confined areas
- Supervisors are required to have an adequate supply of hearing protection devices onsite.

Clothing

- Full length pants must be worn. No large holes or tears that could catch on material or equipment will be allowed. Pajamas, sweatpants, sweat suits, and/or shorts are not allowed
- Pants are to be worn with the waist band of the pants above the hips and around the waist. Sagging or excessive length pants are prohibited
- Shirts must be always worn. Shirt sleeves must be at least 4" in length. No obscene, vulgar, or inappropriate displays on shirts will be allowed and will be at the discretion of the NFS Superintendent/Foreman

- High visibility reflective safety vests or shirts are required at all times, with the company logo displayed across the back for identification purposes
- When working on or near (within 50 feet) of a public road or right-of-way employees/ workers will wear a D.O.T approved class II high visibility reflective vest
- Superintendents must enforce the use of high visibility vests or safety T-shirts with company logo throughout construction. This is always a NFS requirement
- Additional PPE may be required depending on the specific job hazard or task may include specialty clothing that protects employees from specific hazards. (Kevlar Sleeves)

Foot Protection

- Footwear - Closed toe, hard toe/sole boots are required in all work areas
- Work style leather boots with leather uppers that cover the ankle must be worn
- Athletic or jogging style footwear are not permitted.
- Metatarsal guards and toe protection for using compaction equipment and other operations where the feet are subject to higher-than-normal impact.

Respirators

In areas where excessive dust, fumes or mist are present, every effort must be taken to engineer controls measures to limit exposure. In areas where engineering controls are not feasible personnel may be provided and required to wear appropriate protection where there is an exposure to inhalation, ingestion, skin absorption or contact with any material or substance that is deemed to be of a hazardous nature. Personnel required to use respiratory protection must follow OHSA 29 CFR 1910.134 Respiratory Protection standard. Personnel must be trained to select, use, clean and store all PPE properly. For projects that require the use of respirators, a written respiratory protection plan must be implemented. The safety department will provide and administer the written plan.

High Visibility Vests

Class II High visibility vests or safety T-shirts with company logo must be always worn on a NFS jobsite.

- Hard hats must be worn if there is any work or activity that exposes workers to falling objects
- Eye protection must continue to be worn at all times even if hard hats are not required.

Responsibility

All NFS Superintendents will enforce rules detailed in this section for all NFS personnel and all subcontracted employees' onsite.

OSHA Reference: **Personal Protective Equipment**

Cal OSHA Reference: Personal Protective Equipment

Drinking Water and Sanitation

Purpose

To ensure drinking water and proper sanitation practices are in place and available to all employees on a NFS project.

Scope

Potable Water for Drinking

- Each NFS Superintendent or Foreman and Subcontractors shall ensure that there is an adequate supply of fresh drinking water for their employees at each job site
- The container should only be used for storing the drinking water. All containers must be clearly marked as "water", dated, and taped shut
- Portable type containers used to dispense drinking water will be tightly closed, taped, and equipped with a tap
- Employees should not dip cups directly into the container. Each subcontractor will supply disposable drinking cups for its employees. Unused single use service cups (to be only used once and by a single employee) are to be kept in sanitary containers. Used cups shall be disposed of in a trash container.

Non-Potable Water

Containers used for non-Potable water storage (such as water to mix mortar) shall have company name and be properly marked to indicate that the water is not to be used for drinking.

Toilets

- All facilities must be kept clean and sanitary at all times
- Any employee caught defacing or misusing toilets will be removed from the project
- Portable toilets shall be provided (for each job site) using the following guidelines

Number of Employees

o 20 or less - 1 toilet
o 20 or more - 1 toilet seat and 1 urinal per 40 workers
o 200 or more - 1 toilet seat and 1 urinal per 50 workers

When Handling Hazardous Materials

- Adequate washing facilities must be provided if employees are engaged in the application of paints, coatings, herbicides, insecticides, etc.
- Disposal of or cleaning of equipment which contain paints, cement-based materials, flammable liquids, herbicides, insecticides etc. into any drainage system, gutters or on the ground is strictly prohibited. These materials must be disposed of properly by the contractor

Responsibility

NFS Superintendents and Foreman are responsible for ensuring compliance with this section. All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Water Sanitation
Cal OSHA Reference: Water Sanitation

Scaffolding

Purpose

Ensure any and all scaffolding on a NFS project at a minimum always meets all OSHA requirements for safety.

Scope

Scaffolding and elevated platforms must be installed only by trained and qualified persons who are supervised by a competent person. All scaffolds, regardless of type, should be designed to carry four times the maximum intended load.

Pre-Installation Meeting

Prior to erecting any scaffolding or elevated work platform the subcontractor installing the scaffolding or elevated work platform will meet with a NFS project representative and review the location, type of scaffolding or elevated work platform to be installed.

All Scaffolding must be erected and dismantled under the supervision of a competent person.

In addition, the following must be completed:

- Contractor's designated competent person shall perform a daily inspection
- Contractor must identify their competent person in writing prior to start of work
- Inspection tags apply to mobile scaffolding as well
- All employees/workers working on scaffolding must be trained prior to using scaffolding
- Each subcontractor must have documentation of employee training available for review

Installation

During the installation of scaffolding or elevated work platform the following will apply:

- All scaffolding systems must be installed according to the manufactures recommendations
- Worker's erecting, moving, or dismantling any scaffold system must be trained in the specific type of system they are working on and any erecting, moving, or dismantling must be completed under the supervision of a competent person

- Scaffolds with work platforms or decks more than six feet (6') above the ground must have standard guardrails and toe boards attached on all open sides and ends.

Use

- Each contractor using any scaffolding must provide a competent person to perform a daily inspection. Inspections must be documented by tagging the scaffold
- Inspection tags must be attached at each access point
- No employee shall use or work on scaffolding unless they have received user training on the specific scaffold type to be used, this includes all assembled scaffolding, exterior and interior scaffolding, all mobile scaffolding, and Baker type scaffolding
- No employee shall work on scaffolding, of any type, unless it has been inspected and properly tagged
- Ladders must be used to always climb scaffolds. Both hands should be free of tools/materials when ascending or descending a scaffold
- When freestanding mobile scaffold towers are being used the height of the work platform shall not exceed four times the minimum base dimension.

Mobile Scaffolding

- All mobile scaffolding shares the same requirements for use as regular frame scaffolding
- Mobile scaffolding must be inspected and tagged prior to each use
- All mobile scaffold over six (6) feet MUST HAVE GUARDRAILS
- Casters shall be properly designed for strength and dimensions to support four times the maximum intended load. All casters shall be provided with a positive locking device to hold the scaffold in position. All casters must be in the locked position when scaffold is occupied.
- A ladder or stairway shall be provided for proper access and exit and shall be affixed or built into the scaffold and so located that when in use it will not tend to tip the scaffold
- Employees should not propel themselves while working on scaffolds.

Non-Stop Scaffolding

Non-stop Scaffolding that requires the worker to access the scaffold platform by climbing the tower frame must provide a fall protection method for workers while they climb the tower. The fall protection method used must not interfere with the raising or lowering of the platform.

Responsibility

All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Scaffolds

Cal OSHA Reference: Scaffolds

Site Security

Purpose

Site Security is used to control unauthorized access, limit losses due to theft and helps segregate construction activities from other activities.

Scope

Office and Storage Security

- Each project should, when feasible, enclose the project site with fencing
- The designated trailer compound must be completely fenced
- Gates, storage, or access points should have a chain or lock and include the local "KNOX" box for emergency services accessibility
- Subcontractors are responsible for securing their own equipment, office trailers and storage areas
- All projects must be locked and secured at the end of each day by a NFS employee

Aggressive Behavior and Workplace Violence

It is our policy to maintain a safe and healthy work environment for all employees and workers and to promote high quality standards. As part of this policy, everyone on the job site is expected to display respect and cooperation with coworkers and management. Employees and workers will be held accountable for aggressive behavior.

Employees/workers are required to report all "threatening" behavior to their direct supervisor. Any supervisor receiving a report of aggressive behavior must immediately report it to the Project Manager or Superintendent. All reports of aggressive or potentially violent behavior will be investigated.

Workers are to Refrain From

- Abusive language
- Threats
- Verbal or physical intimidation
- Assaults, fighting or other physical contact
- No weapons of any type are allowed on the jobsite

Responsibility

NFS project Superintendent and Foreman is responsible for the site safety and security on all projects.

Steel Erection

Purpose

To ensure steel erection activities are safe and 100% OSHA compliant on all NFS projects.

Scope

Steel erection activities include hoisting, laying out, placing, connecting, welding, burning, guying, bracing, bolting, plumbing, and rigging structural steel, steel joists and metal buildings, installing metal decking, curtain walls, window walls, siding systems, miscellaneous metals, ornamental iron, and similar materials; and moving point-to-point while performing these activities.

1. Notification before Erection

The Project Manager must certify in writing to the steel erector that:

- Concrete in footings, piers, or walls have reached 75% of design strength or are of sufficient strength to support imposed loads
- Any repairs, replacements, or field modifications to anchor bolts must have approval by Structural Engineer of record and must provide written notification to the erector

2. Site Layout

The Superintendent will coordinate with the steel erector to provide:

- Adequate access roads for crane
- Properly maintained work areas
- Pre-plan hoisting activities to minimize lifts over workers
- Exceptions: Worker engaged in initial connection and hooking or unhooking loads

3. Fall Protection

The steel erection subcontractor is required to always provide 100% fall protection.

- Perimeter fall protection must be installed during initial structural assembly
- 100% fall protection must be provided when working above 6’ with no exceptions.

4. Multiple Lift Rigging

Prior to conducting multiple lift rigging the steel erector shall provide a written lift plan. The multiple lift plans must include the following:

- Components of the multiple lift rigging assembly shall be specifically designed and assembled with a maximum capacity for total assembly and for each individual attachment point
- This capacity, certified by the manufacturer or a qualified rigger, must be based on the manufacturer's specifications with a 5 to 1 safety factor for all components
- The total load does not exceed the rated capacity of the hoisting equipment specified in the hoisting equipment load charts or the rigging capacity specified in the rigging rating chart
- A maximum of five members are hoisted per lift
- Only beams and similar structural members are lifted

- The multiple lift rigging assembly shall be rigged with members:

- Attached at their center of gravity and maintained reasonably level
- Rigged from top down
- Rigged at least seven (7) feet (2.1 m) apart
- The members on the multiple lift rigging assembly shall be set from the bottom up
- Controlled load lowering shall be used whenever the load is over the connectors
- All employees engaged in the multiple lift have been trained
- No crane is permitted to be used for a multiple lift where such use is contrary to the manufacturer's specifications and limitations

5. General Provisions o Prior to starting steel erection activities, the steel erection subcontractor must submit a site-specific erection plan developed by a qualified person and be available at the work site

- All columns shall be secured with a minimum of four anchor bolts before beam erection begins. If the erection method is direct weld, the minimum weld for erection is to be determined by the design engineer
- Fall protection training is required by the employer and must be documented.

Responsibilities

All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Steel Erection
Cal OSHA Reference: Steel Erection

Tools – Hand and Power

Purpose

To establish safety protocol for all hand and power tools to be used properly and in a safe manner on all NFS projects.

Scope

- Power tools shall not be used if safety equipment, such as shields, tool rests, hoods and guards have been removed or otherwise rendered inoperative
- All gas-powered tools must be turned off before being refueled
- Portable grinders must have hood-type guards and side enclosures that cover the spindle and at least 50% of the wheel. All wheels should be inspected regularly for fractures, etc.
- Hoses supplying pneumatic tools shall have couplings secured to prevent accidental disconnection
- Additional face protection shall be worn by all personnel exposed to the use of this type of tool

- Tools shall not be loaded until immediately before use. Loaded tools shall not be left unattended
- Tools shall not be used in an explosive or flammable atmosphere. Cartridges (powder source) shall be kept separated from all other material
- Powder-actuated tools used on this project shall meet all applicable requirements of ANSIA10.3-1970
- Warning signs will be posted throughout the area warning of the use of powder actuated tools
- Shot strips must be properly discarded
- Job-made tools or tools that have been modified are not allowed
- Table saws, including "Hand-fed crosscut table saws" or "Hand-fed ripsaws" must be equipped with “flesh indicating” sensor that immediately stop the rotating blade if contact is made with the blade when running

Responsibility

All NFS employees and subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Tools – Hand and Power Tools

Cal OSHA Reference: Tools – Hand and Power Tools

Welding and Cutting Procedures

Purpose

To establish safety rules and procedures to minimize the possibility of burns, fires, or injuries from welding and cutting activities.

Scope

Cutting and welding are two integral parts of most projects. They are also the most common ignition source for construction fires. The following general guidelines should be adhered to:

- Subcontractor will provide additional fire protection
- All cylinders must be in an approved carrier or stand
- All cylinders will be stored according to OSHA guidelines. Any cylinder found improperly stored will be removed at the Subcontractor’s expense
- Oxygen and fuel gas cylinders shall not be stored together, including bottles in carts unless they are separated by at least twenty (20) feet or by a five (5) foot tall, thirty (30) minute fire barrier
- Perform cutting and welding in designated safe areas whenever possible
- Fire retardant floor covering must be placed to catch slag and debris
- Combustibles should be moved or covered with a welding blanket to prevent ignition. All floor and wall openings should be covered
- No cutting or welding should be done within 50 feet of flammable liquids

- A fire watch, equipped with an approved extinguisher (minimal rating 2A:10 BC) or a charged hose, will be posted during and up to 60 minutes after the welding or cutting operation
- At times it may be required or necessary to issue a Hot Work "Flame" Permit. Hot Work Permits should be issued when work with an open flame or torch is required in an occupied building, substantially complete building, in areas that an open flame may cause damage or as required by the client. The Hot Work Permit is issued by the Superintendent and requires the person doing the "flame work" to comply with additional safeguards.

Responsibility

All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Welding and Cutting

Cal OSHA Reference: Welding and Cutting

Bloodborne Pathogens

Purpose

To plan and protect workers from exposure to human blood on any NFS project.

Scope

Bloodborne Pathogens (BBPs): Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Exposure Control Plan

All NFS projects will have a Bloodborne Pathogens exposure kit available at the jobsite office. If used or missing, the Project Superintendent will have it replaced immediately. All NFS employees will receive training for Bloodborne Pathogens.

Responsibility

All subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Bloodborne Pathogens

Cal OSHA Reference: Bloodborne Pathogens

Confined Space

Purpose

To identify and ensure safety working procedures are followed at all times in an area defined as "confined space" on all NFS projects.

Scope

A confined space is space that is large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy.

Permit Required Confined Space (PRCS)

A Permit Required Confined Space is defined as a confined space that has one or more of the following characteristics:

- It contains or has the potential to contain a hazardous atmosphere
- It contains a material that has the potential for engulfing an entrant
- It has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor, which slopes downward and tapers to a smaller cross-section
- It contains any other recognized serious safety or health hazard.
  All NFS employees or subcontractors required to enter defined confined spaces must have completed a confined space entry course and documentation of confined space training must be available on-site prior to employee entering any confined space.

Any employee who discovers or questions whether an area may be a "confined space" as defined by OSHA shall immediately contact the designated competent person for that specific project or contact the Corporate Safety Director or representative prior to entering that area.

Each subcontractor is responsible for developing, implementing, and maintaining their own confined space entry program, including permitting and training.

Responsibility

All NFS employees and subcontractors will comply with OSHA rules and regulations pertaining this section.

OSHA Reference: Confined Space
Cal OSHA Reference: Confined Space

Excavation and Ground Penetration

Purpose

The purpose of this policy is to ensure that all reasonable steps are taken to identify all known utilities and underground hazards prior to penetrating the ground (example: silt fence stakes, post holes, piers, foundations, utility and trenches, excavations, mass excavations, etc.).

Scope

Excavations or Ground Penetrations

- Subcontractors are required to identify all known conflicts within twenty-five (25) feet of their planned work

- Each identified conflict must have a surface marks or indicators twenty-five (25) feet and five (5) feet from the conflict and should be installed in a manner that notifies work crews when approaching within twenty-five (25) feet and five (5) feet of the conflict
- Surface marks or indicators on the ground surface may include flagging, caution/danger tape or cones
  The use of paint alone on the surface as a visual indicator is inadequate. If paint is used additional marking methods must be included.

  When excavations or ground penetrations are within five (5) feet horizontally or vertically all excavations or ground penetrations must be dug by hand until the conflict is uncovered and protected

- When the excavation or ground penetration falls within five (5) feet of any identified hazard (conflict) the subcontractor must notify the NFS Superintendent and review the planned work practice and protective measures Excavations: sloping and benching requires the knowledge of soil type to understand benching requirements. Please see the OSHA section listed below to determine site requirements.

Responsibility

NFS Project Manager, Superintendent, and subcontractors.

Section 4: Specific Work Programs

Crystalline Silica Exposure Control Program

Purpose

The Silica Exposure Control Program is to minimize employee exposure to respirable crystalline silica by providing controls and/or respiratory protection, training and medical surveillance to all persons conducting work with materials containing crystalline silica.

Scope

This program applies to all employees who could be exposed to respirable crystalline silica concentrations at or above 25 micrograms per cubic meter over a time weighted average of 8hours under any foreseeable conditions. A copy of this program will be maintained by all affected departments. This program serves to help the company and its employees comply with Occupational Safety and Health Administration (OSHA) respirable crystalline silica requirements as found in 29 CFR 1926.1153.

Assignment of Responsibility Employer

The subcontractor is responsible for limiting silica exposure through engineering and/or administrative controls for NFS employees only. If control methods are not sufficient, NFS

Systems is responsible for providing respirators to all NFS employees. NFS Systems will provide respirators that are applicable and suitable for the intended purpose at no charge to affected

NFS employees. NFS will also offer medical exams to highly exposed NFS employees. Any expense associated with training, medical evaluations and respiratory protection equipment will be borne by the company. Duties of the subcontractor include:

- Identifying job tasks that require engineering or administrative controls to be in place
- Identifying work areas, processes or tasks that require workers to wear respirators.
- Evaluating hazards
- Selecting respiratory protection options
- Arranging for and/or conducting training
- Ensuring proper storage and maintenance of respiratory protection equipment
- Conducting quantitative or qualitative fit testing
- Administering the medical surveillance program
- Maintaining records required by the program
- Evaluating the program
- Updating written program, as needed

Competent Person

The competent person is responsible for ensuring that the Crystalline Silica Exposure Control Program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, the competent person must also ensure that the program is understood and followed by the employees exposed to respirable crystalline silica. Duties of the competent person include:

- Ensuring that employees exposed to respirable crystalline silica (including new hires) receive appropriate initial and annual training on the components of this silica policy statement
- Ensuring the availability of appropriate respirators and accessories
- Being aware of tasks requiring the use of engineering controls or respiratory protection.
- Ensuring tools and engineering controls are in good working conditions as directed by the manufacturer
- Ensuring the proper work methods and use of respiratory protection when necessary
- Ensuring that respirators are properly cleaned, maintained, and stored according to this program
- Ensuring that respirators fit well and do not cause discomfort
- Continually monitoring work areas and operations to identify silica exposure hazards.
- Coordinating with the Program Administrator on how to address silica exposure hazards or other concerns regarding this program.

Employees

Each employee is responsible for following proper work methods as laid out by the program. Each employee is also responsible for wearing his or her respirator when and where required and in the manner in which they are trained. Employees must also:

- Care for and maintain their respirators as instructed, guard them against damage and store them in a clean, sanitary location

  Inform their supervisor if their respirator no longer fits well and request a new one that fits properly

  Inform their supervisor or the Program Administrator of any respirable crystalline silica hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding this program

- Use the respiratory protection in accordance with the manufacturer's instructions and the training received
- Complete and sign a Pre-Task Plan (PTP) prior to starting work

Exposure Assessment

NFS Systems will follow the approved control measures listed in OSHA's Construction Respirable Crystalline Silica Standard Table chart for any task that could produce respirable crystalline silica, whenever possible.

If following Table 1 guidelines is not possible, then one of the following will be conducted:

- Air monitoring will be conducted using a representative sample of employees in each work area that has respirable silica exposure. The employees will wear personal dosimeters for eight hours and equipment will be sent to an industrial hygiene lab for analysis. All results will be reviewed as a time weighted average over an 8-hour period.
  o If results indicate concentrations of respirable crystalline silica below 25 µg/m3 then no further action is necessary

  - o If results indicate concentrations of respirable crystalline silica between 25 µg/m3 and 49 µg/m3 then retesting will be conducted within six months of receiving the results
  - o If results indicate concentrations of respirable crystalline silica equal to or above 50 µg/m3 then retesting will be conducted within three months
  - o Where the most recent (non-initial) exposure monitoring indicates that employee exposures are below the action level, repeat monitoring shall be conducted within six months of the most recent monitoring until two consecutive measurements, taken seven or more days apart, are below the action level, at which time monitoring may be discontinued.

Exposure will be assessed based on any combination of air monitoring data or objective data sufficient to accurately characterize employee exposure to respirable crystalline silica.

Objective Data Includes

- The crystalline silica-containing material in question
- The source of the objective data
- The testing protocol and results of testing
- A description of the process, task, or activity on which the objective data were based
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based

Reassessment of exposure will be conducted whenever a change in production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the action level (25 µg/m3). Respiratory protection

If control measures for a work task include the required use of a respirator, a respiratory protection program will be developed.

Housekeeping

Housekeeping practices will be used to limit the amount of respirable crystalline silica dust at worksites. The following methods should not be followed when cleaning up respirable crystalline silica dust:

- Dry brushing or dry sweeping unless wet sweeping and HEPA-filtered vacuuming are not feasible
- Cleaning of surfaces or clothing with compressed air, unless it is used with a ventilation system that captures the dust cloud o If cleaning with compressed air, it must either be reduced to less than thirty (30) psi, or the outlet or source must be fitted with a relief device that drops the pressure to less than thirty (30) psi if the flow is dead ended o Employees shall not be allowed to use compressed air for cleaning themselves or their clothing.

Written Exposure Control Plan

Prior to beginning a work task that creates respirable crystalline silica, a written exposure control plan will be developed. The plan will include the following:

- A description of workplaces that involve exposure to silica
- An explanation of control measures in place
- Specific housekeeping practices to be used at each work site and for each work task
- Documentation of how and when employees will receive medical surveillance
- Confirmation that the employees will be informed whenever air sampling indicates they have been over-exposed to silica
- Confirmation that warning signs have been posted at the entrance to areas containing silica exposure and maintain records of medical exams and air monitoring data
- A designation of a competent person.

A review of the exposure control plan will be conducted at least annually and will be updated, as necessary.

Medical Surveillance

Any employee required by the OSHA Silica Standard to wear a respirator for thirty (30) or more days per year will be provided with baseline and annual medical exams at no cost to the employee. The medical examination will consist of the following:

- A medical work history with an emphasis on past, present and anticipated exposure to respirable crystalline silica, dust and other agents affecting the respiratory system
- A physical examination with special emphasis on the respiratory system
- A chest X-ray (a single poster anterior radiographic projection) or radiograph of the chest at full inspiration.

A pulmonary function test to include forced vital capacity and forced expiratory volume in one second.

Testing for latent tuberculosis infection.

- Any other test deemed appropriate by the PLHCP.

Recordkeeping

The following records will be maintained:

- Records of exposure assessments
- Written exposure control plans.
- Medical surveillance records.
- Records of training conducted under this policy.

Responsibility

Subcontractor is responsible to comply will all OSHA rules and regulations pertaining to this scope of work on a NFS project.

OSHA Reference: Crystalline Silica Exposure Control

Cal OSHA Reference: Crystalline Silica Exposure Control

Asbestos or Lead Based Paint in Existing Building

Purpose

The goal for NFS is to ensure all employees on a NFS jobsite are working in safe conditions on all projects.

Scope

Renovation of existing buildings presents unique and difficult challenges. Two of the most common problems encountered are Asbestos and Lead Based Paint. Thermal system insulation and surfacing material found in buildings constructed no later than 1980 are presumed asbestos containing materials (PACM). Buildings constructed prior to 1978 are presumed to contain lead-

based paint. Federal and State regulations have very specific requirements when workers work around or may disturb asbestos or lead-based paint. Federal and State waste disposal regulations also control how asbestos and lead-containing waste must be handled and disposed.

The following is a guide for renovation projects that may contain asbestos or lead based paints.

Policy for Asbestos and Lead Abatement Projects in Existing Buildings:

1. If the project is a renovation and asbestos or lead paint abatement is required, regardless of if it is a contractual condition or not, NFS shall not enter into a contract to provide Environmental Consulting, asbestos and/or lead abatement without approval by the VP of Operations and Director of Safety and Risk Management prior to signing the contract or beginning any work on-site.
2. All individuals working on a project where the building and/or systems are known or suspected to contain asbestos or lead-based paints must have a basic level of asbestos and/or lead awareness and training if the building and/or systems are partially abated, or abatement is on-going during construction. The only exclusion is for buildings that have been completely abated. This includes all project management staff, Superintendents, subcontractors, and labor.
3. Procedures for abatement of asbestos and lead in existing buildings are to be specified by the Primary Environmental Consultant, not NFS.
4. The Primary Environmental Consultant should be hired directly by the Owner when the Owner is contracting the abatement. NFS may choose to hire a Secondary Environmental Consultant in this situation for verification purposes. This would be considered ‘cost of work’.
5. The Primary Environmental Consultant should be hired directly by NFS when NFS is responsible for contracting the abatement.
6. NFS may choose to hire a Secondary Environmental Consultant to represent NFS in a legal or warranty claim.
7. NFS must request in writing from the Owner all prior and current environmental surveys. These surveys must be reviewed by the NFS project team.
8. NFS shall not authorize asbestos and lead abatement nor direct a subcontractor to perform asbestos and lead abatement without an approved abatement procedure/ protocol, this protocol is typically established by an Environmental Consultant.
9. NFS shall not allow its employees or subcontractor’s employees into a containment area unless those employees are trained and authorized for entry. Further, NFS shall not allow its employees or subcontractor’s employees into an area which has been abated until we have received a written document of clearance that the area has been visually inspected for no visible asbestos and air samples are at, a minimum, below the EPA clearance standard for re-occupancy of the containment / work areas. This is typically done by the Environmental Consultant.
10. NFS may assist the Owner, Architect, Environmental Consultant, or other Owner’s consultants to investigate asbestos and lead contamination, but NFS shall not accept the contractual responsibility to determine the source of asbestos and lead contamination in an existing building. Nor shall NFS accept the responsibility of determining the scope of work to correct asbestos and lead contamination.

11. Asbestos and lead abatement and removal should be performed only by State approved asbestos and lead abatement personnel and not by NFS labor or personnel. The scope of work/abatement procedures for this subcontractor must be provided by the Environmental Consultant. Clearance criteria (air sampling, certificate of visual inspection and owner consultant certification) must be included. The specifications for this work should also include the scope of abatement, Personal Protective Equipment to be used by the trade partner, containment procedures, and special precautions for working in an occupied facility, and any other special conditions.
12. Whenever asbestos and lead abatement is planned in a facility that is partially occupied, precautions must be taken to protect those occupants from exposure to asbestos and lead. Asbestos and lead contaminated materials should be contained and removed under a controlled process to prevent contamination of non-contaminated areas. The asbestos and lead abatement subcontractor must document their procedures for protecting all occupants of the area.
13. Owner shall always remain listed as the generator of waste materials from the asbestos and lead abatement and disposal process.
14. NFS should not provide the Owner with a lump sum quote to abate the entire building without conducting complete investigation and testing by an Environmental Consultant. Any lump sum quote must exclude the discovery, investigation or abatement of previously unknown, unidentified ACM or LBP. Abatement requirements must be specified by the Environmental Consultant to include locations, limits, and quantities of materials to be abated. NFS should try to limit its risk by placing as much responsibility as possible on the asbestos and lead abatement subcontractor.

Pre-Construction Meeting

- The asbestos and lead survey must be reviewed by project staff (NFS's third party consultant should be a part of this meeting). Inspect areas where abatement work is noted and compare it to the planned work in the same area to ensure that the Owner's abatement scope will allow work to be completed safely.
- The condition of ACM and LCM must also be reviewed during the pre-construction meeting by the project team (NFS's third party consultant should be a part of this meeting). Any damaged insulation should be brought to the Owner's attention and their environmental consultant should then test adjacent construction materials for debris, or particulate/fiber contamination. If ACM and LBPs are found this should be added to the Owner's abatement procedures.
- Pre-construction meeting shall also include review and discussions of abatement protocols, procedures, and clearance documentation for abatement process. Owner's Environmental consultant is the authority providing documented clearances to work. (NFS's third party consultant should be a part of this meeting).
- All employees must provide documentation of asbestos and lead awareness training prior to beginning work.

Construction

- Prior to beginning construction in the first (spot check several) abated ACM and LBP area, the NFS third-party consultant shall be brought in to review the completed ACM and LBP removal for thoroughness, cleanliness (visual confirmation) and documentation
- NFS should not allow anyone to enter and work in the abated areas until the Environmental
- Consultant provides the required written document of clearance.
- To ensure safe working conditions and establish a working baseline, it is recommended that during the first five days of construction in the initially abated ACM and LBP areas, the NFS third-party consultant shall be brought in to provide air-monitoring to confirm no ACM and LBP contamination is present during the construction process. These monitoring tests should be processed via a 24-hour turnaround.
  If results during this baseline testing are found to be above the action level for either asbestos or lead, work must immediately cease in that area and the area must be isolated. The Project Manager must notify the NFS Safety Director immediately.
- Any ACM and LBP that is present in construction spaces, but not to be removed, must be well marked and in good condition. The Environmental Consultant should determine if the subcontractor's method of work will disturb the existing ACM or LBP.
- All NFS supervisors and workers must maintain an awareness of the changing conditions of the workspace and how that can create exposure to ACM and LBP even though the space was originally cleared to work (chases discovered, hard ceilings removed, vibrations jarring loose existing insulation or paint chips, etc.)
- If any suspect conditions or materials are observed, all work stops in the area of concern until proper clearances are received from the Owner's Environmental Consultant. These clearances may be obtained from a job visit by the Owner's Environmental Consultant to verify construction techniques are not creating incidental exposure or testing materials encountered during the construction or other methods to confirm no ACM or LBP hazard is present.
- Consider having a third-party Environmental Consultant spot-check/ visually verify each of the different types of abatement processes (glove-bagging, removal utilizing Resilient Floor Covering Institute (RFCI) guidelines), small containment areas, large containment areas, etc. conducted by the abatement contractor for compliance.
- All abatement areas should be left dry and visibly free from contamination and debris by the abatement contractor.

Post-Abatement Documentation/Close-Out

- NFS must ensure that they have received all clearances from the Owner or their Environmental Consultant
- NFS must distribute clearance information to all subcontractors, these documents must include a cover letter stating that the attached clearance document from the Owner's environmental consultant shows that the abatement is complete and the air in the area is below acceptable ACM and LBP limits.
- NFS must file the clearances in a binder, job file, or Procore.

When NFS SYSTEMS IS Contractually Responsible for Asbestos and/or Lead Abatement Estimating.

- Include cost for NFS to hire a third-party consultant to review the quality of the survey and compare to condition of existing ACM and LBP in the building during the estimating phase of the project.
- NFS will assume all responsibility for contracting the Environmental Consultant when NFS is responsible for the asbestos and lead abatement.
- Include a repair cost for minor damages incurred during the abatement process to finishes and nearby MEP systems, equipment, etc. especially when abating large areas of containment

NFS's Environmental Consultant shall provide at a minimum verification of the asbestos and lead survey and spot check/visual verification and five (5) days of air monitoring during construction of the initial completed abatement areas.

Owner/NFS Contract Negotiations

- If site conditions change from the initial survey or the abatement scope increase beyond the original bid scope, this increase will be at the Owner's expense.
- If initial survey furnished by the Owner did not comprehensively deal with accessing or working in ceiling plenums, pipe chases and other areas where construction is to occur in close quarters, NFS's environmental consultant must survey these areas prior to any construction beginning. Exclude all cost associated with this the demolition and build back of any additional investigation. This work will be at the Owner's expense.
- Additional time required for surveying previously inaccessible areas and subsequent increases in the abatement scope may result in increases to the project schedule.

Pre-Bid/Post-Bid/Scope Clarification Meeting

- NFS subcontractors shall be made aware that the project contains ACM and LBP, the amounts and locations as identified by the environmental survey performed by NFS's Environmental Consultant.
- However, the subcontractor is responsible for determining the potential impact of any ACM and LBP in their scope of work
- Subcontractor must notify NFS as a part of their bid the potential impact their work has on any identified ACM and LBP.
- The building survey shall be made available to the trade partners either in hard copy or electronic or internet distribution during the pre-bid process. The bid package must include documentation of receipt of the building survey by each subcontractor.
- NFS subcontractors must be made aware that while the survey has been provided, ACM and LBP may be found in areas not listed or made accessible on the survey.
- Subcontractors must notify NFS of any materials they suspect may be ACM and LBP prior to disturbing those materials so they may be tested by NFS's Environmental Consultant.

Pre-Construction Meeting

- The asbestos and lead survey must be reviewed by project staff prior to the abatement pre-construction meeting. Inspect areas where abatement work is noted and compare it to the planned work in the same area to ensure that the Environmental Consultant's abatement scope will allow work to be completed safely.
- The condition of ACM and LBP must also be reviewed during the pre-construction meeting by the project team. Any damaged insulation should be brought to NFS's attention, and the Environmental Consultant should then test adjacent construction materials for debris, or particulate/fiber contamination. If any ACM and LBPs are found this should be added to NFS's abatement procedures.
  Pre-construction meeting shall also include review and discussion of abatement protocols, procedures, and clearance documentation for abatement process. NFS's Environmental Consultant is the authority providing documented clearances to work.
- All employees must provide documentation of asbestos and lead awareness training prior to beginning work.

Construction

- To ensure safe working conditions and establish a working baseline, it is recommended that during the first five days of construction in the initially abated ACM and LBP areas, the NFS Environmental Consultant shall be brought in to provide air-monitoring to confirm no ACM and LBP contamination is present during the construction process. These monitoring tests should be processed via a 24-hour turnaround.
- If results during this baseline testing are found to be above the action level for either asbestos or lead, work must immediately cease in that area and the area must be isolated. The Project Manager must notify the NFS Safety Director immediately.
- Any ACM and LBP that is present in construction spaces, but not to be removed, must be well marked and in good condition.
- All NFS supervisors and workers must maintain an awareness of the changing conditions of the workspace and how that can create exposure to ACM and LBP even though the space was originally cleared to work (chases discovered, hard ceilings removed, vibrations jarring loose existing insulation, etc.).
- If any suspect conditions or materials are observed, all work stops in the area of concern until proper clearances are received from the NFS's Environmental Consultant. These clearances may be obtained via a job visit by NFS's Environmental Consultant to verify construction techniques are not creating incidental exposure or testing materials encountered during the construction or other methods to confirm no ACM or LBP hazard is present.
- All abatement areas should be left to dry and visibly free from contamination and debris by NFS's abatement contractor.

Post-Abatement Documentation

1. NFS must ensure that they have received all clearances from their Environmental Consultant.
2. NFS must distribute clearance information to all subcontractors; these documents must include a cover letter stating that the attached clearance document from NFS's Environmental Consultant shows that the abatement is complete and the air in the area below acceptable standards from ACM and LBP.
3. NFS must file the clearances in a binder or job file.
4. Provide a copy of the clearance's binder to the Owner as a part of the close-out documentation.

SPECIAL CONSIDERATIONS AND NOTES

- Asbestos may be found in (but not limited to) the following materials Duct and Pipe Insulation
- Pipe, Duct and Floor Tile Mastics
- Ceiling and Floor Tiles
- Ceiling Tile Mastic (when tiles glued directly to the deck)
- Joint compound
- Roofing mastics
- Caulk
- Transited Wall Panels
- Paint

Lead

Lead detection kits found at local hardware stores are effective in determining if paint contains lead, however they do not indicate the level of lead. Should paint be found to contain lead, the Owner's environmental consultant must provide testing to determine the amount of lead within the paint.

Lead may be found in other materials on the jobsite besides paint; disturbing these materials by cutting, grinding, sanding, and welding may create an airborne release of lead; lead may be found in (but not limited to) the following materials:

- Paint
- Piping
- Solder
- Stained glass
- Batteries
- Lead-lined walls in x-ray rooms

OSHA Reference: Asbestos and Lead

Cal OSHA Reference: Asbestos and Lead

Cranes, Hoists and Rigging

Purpose

It is our goal to assure that vertical transportation equipment including tower cranes, motor cranes, derricks, personnel, and material hoists that require assembly or erection on the jobsite are in good operating condition and free from hazardous conditions.

Scope

All vertical transportation equipment is required to have the following inspections: preassembly / installation, post-assembly/installation, scheduled maintenance inspections, annual, monthly, daily and/or pre-shift.

Any qualified inspection service can be used to inspect leased/owned, subcontractor, leased/owned cranes, derricks and/or personnel/material hoists. If a local/state ordinance requires more frequent inspections, then local rules apply.

- The contractor performing the erection of mobile cranes may elect to choose their own qualified inspector provided the inspector was not part of the erection crew.
- A copy of a current annual inspection must be made available to the Project Manager or Superintendent prior to assembly/installation.
- A pre-assembly/installation inspection by the subcontractors is conducted on leased equipment to ensure the equipment and components are free from defect or damage prior to installation.
- A post-assembly/installation inspection is conducted to ensure the equipment was installed correctly according to manufactures guidelines. An independent inspection must be performed after setup is complete of all cranes assembled on site (excluding hydraulic cranes). The person providing the post-installation inspection cannot have been involved in the installation or delivery of the crane assembled on-site. A copy of the inspection report must be provided to NFS before the crane is authorized for use.
- A daily inspection at the beginning of each shift by the operator ensures the equipment is operating normally. If any deficiencies are notice they are to be reported on the daily inspection form. Deficiencies must be corrected prior to equipment operation.

Mobile Cranes

All manufacturer specifications and limitations concerning the operation of cranes and other hoisting equipment must be followed.

- A copy of the crane insurance certificates, and annual inspection and lift plan must be filed with the Project Manager prior to using of any crane on-site.
- Cranes with outriggers must have all outriggers fully extended and padded at all times while crane is in use.
- The crane manufacturer recommended minimum guidelines for padding or cribbing must be followed.
- NSF may deny the use of any cribbing that appears inadequate or unsafe.

Tower Cranes

The following applies to all tower cranes erected on NFS projects including 3rd party, subcontractor provided or joint venture.

Assembly/disassembly of any tower crane must be directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons. This person is considered the A/D director.

- Pre-assembly/installation meeting o Prior to pre-assembly/installation the Project Manager and Superintendent must conduct a pre-assembly/installation meeting with the crane supplier, erector, operator, 3rd party inspector and the electrician. The purpose of this meeting is to identify the installation sequence, hazards, and controls to be used to safely and properly install the tower crane.
- Foundations and structural supports o Tower crane foundations and structural supports (including both the portions of the structure used for support and the means of attachment) must be designed by the manufacturer or a registered professional engineer.
- 3rd party independent inspection o A 3rd party independent inspection by a qualified inspection service must be performed on tower cranes. o A copy of the inspection report will be provided to TGB before the crane is authorized for use. The subcontractors Project Manager or Superintendent will schedule the required equipment inspections by a qualified inspector.

  Subcontractors leasing a crane are responsible for scheduling their initial equipment inspections and providing NFS with a copy of all inspections and lift plans.
- Tower Crane Inspections: There are 5 (five) distinct tower crane inspections that are required.
  - Pre-installation.
  - Post-installation.
  - Periodic Maintenance*
  - Jumping
  - Immediately after dismantling and/or lease termination
  - Post-installation inspection must include a load test using certified weights or scaled weights using a certified scale with a current certificate of calibration. The load test must be conducted in accordance with the manufacturer's instructions when available. Where these instructions are unavailable, the test must be conducted in accordance with written load test procedures developed by a registered professional engineer familiar with the type of equipment involved.
- Maintenance o It is NFS's policy to follow all tower cranes manufactures recommendations on installation, erection, and maintenance. In the event the manufacture does not provide a specific maintenance schedule the following will apply:

1. At approximately 40 initial operating hours the tower crane will be inspected by the supplier, installer or 3rd party inspector and preventative maintenance completed.
2. At approximately every 720 operating hours (after the initial 40 hours) the tower crane will be inspected by the supplier or installer and preventative maintenance completed.

- Jumping or extending a tower cranes height, also known as “jumping”, is considered a critical lift operation. A 3rd party independent inspector must be on-site, inspect the new sections to be added, observe the installation or “jumping” process, and provide a post-erection inspection.
  - o Pre-assembly/installation requirements as listed above must be followed.
  - o The Corporate Safety Director must be notified when the installation, jumping or dismantling date for any tower crane has been established for each tower crane.
- Operation Tower cranes shall be allowed to weathervane when not in operation. Tower cranes (including affiliated transformers and power supply equipment) must be surrounded by a security enclosure when possible. o Base enclosure should be at least sixteen (16) feet high, made of 5/8” plywood and positioned six (6) to eight (8) feet from the sides of the tower crane base or vertical tower sections. The enclosure should have a lock-controlled entrance. The turntable access hatch, if equipped, must be locked at the end of each shift. Crane Operation Crane operations are considered a hazardous activity and all operations involving a crane should be planned.
- The operator is considered the competent person for that crane. The competent person has the final authority in all operations involving the crane. NFS requires all crane operators to consider safety the first and foremost priority in operation of the crane.
- The operator is responsible for the safe operation of the crane and may refuse any pick that is questionable due to, but not limited to, improper flagging, weight limits or improper rigging
- Any attachments utilized with the piece of equipment shall not exceed the capacity, rating or scope recommended by the manufacturer.
- A copy of the manufacturer’s operator manual and the load chart must be located in the crane at all times.
- The operator must inspect his or her assigned machine before each shift. This includes operating controls, all cables, sheaves and pulleys, booms, and boom angles. A copy of the daily operator’s inspection must be located in the crane at all times.
- All crane operators on-site are subject to random drug testing each month.
- Blind picks are prohibited without radio contact or a clearly visible spotter.
- The swing radius at the rear of the crane should be barricaded in such a manner to prevent anyone from being struck or crushed by the crane.
- Any time loads cannot be kept within the confines of the project, the contractor utilizing the crane shall be responsible for all traffic control including but not limited to flagman, barriers, barricades, and street rentals.
- Cranes and rigging equipment are not permitted to work closer than 30 feet to any power line.

Rigging & Hoisting

- All rigging devices should have permanently affixed identification stating size, grade, rated capacity, and manufacturer.
- Specialty slings and hooks shall not be used to set steel or move materials over workers. “Shop-made” grabs, hooks, clamps, or other lifting devices are prohibited unless designed by a registered engineer. Shop drawings stamped by the design engineer must accompany these devices.
- Each “pick” or hoisted load must be rigged by a qualified rigger. Qualified riggers are required to have evidence of training available on-site.
- Loads shall not be lifted without tag lines. Tag lines should hang a minimum of ten (10) feet below the load and have no loops or knots.

Signaling

- Crane signal person will wear a red high visibility vest during crane operations.
- Crane signal person will be responsible for verifying that loads are properly tagged prior to being lifted.
- Only approved standard hand signals or verbal command for crane, derrick and boom equipment shall be used.
- Each signal person must be a qualified signal person.
- The signal person must have documentation from a third-party qualified evaluator showing that the signal person meets the Qualification Requirements, or
- The employer's qualified evaluator assesses the individual and determines that the individual meets the Qualification Requirements and provides documentation of that determination.
- The employer must make the documentation for whichever option is used available at the site while the signal person is employed by the employer. The documentation must specify each type of signaling (e.g., hand signals, radio signals, etc.) for which the signal person qualified to use.

Personnel Hoists

Following assembly and erection of hoists, and before being put into service, an inspection and test of all functions and safety devices shall be made under the supervision of a competent person, as well as, required following major alteration of an existing installation. Scheduled maintenance and inspections of the hoists should not be more than three-month intervals.

Records shall be maintained and kept on file for the duration of the job.

- The hoist operator is responsible for completing a daily inspection of the cab, tower, hoisting equipment and door openings and latches. Daily inspections should be kept in a notebook or affixed to the inside of the cab.
- Any tower erected inside of a structure must be fully enclosed on all sides throughout the height of the tower.

- Normal and final terminal stopping devices shall be provided. Limits or preprogramming must not be overridden. o A critical lift plan must be completed and submitted to the Safety Director for approval at least five (5) working days prior to the lift. o A pre-lift meeting must be conducted prior to the lift being started.

Special Considerations

Prior to crane erection or use NFS shall secure an FAA permit or verify the subcontractor service has completed this task.

Crane supported worker platforms shall not be used unless the NFS Project Manager or Superintendent and Corporate Safety Department approves their use, in advance of each case. Platforms must be designed and stamped by a registered engineer.

For construction sites that lies within an Airport Control Zone (within five (5) statute miles of an airport) ensure that crane boom's lighting, flagging, raising, and lowering comply with FAA rules. All cranes shall be boomed down below 175 feet above ground level (AGL) during the hours of sunset to sunrise to provide clearance for air traffic. However, if this is not possible and temporary construction cranes are either left up during this time period or utilized in support of construction activities, then all cranes shall be obstruction lit in accordance with FAA Advisory Circular 70/7460-1, "Obstruction Marking and Lighting.

Responsibility

All NFS and subcontractors' employees will comply with OSHA rules and regulations pertaining this section:

OSHA Reference: Cranes, Hoist & Rigging
Cal OSHA Reference: Cranes, Hoist & Rigging

Fall Protection

Purpose

This policy is designed to protect all workers from injury resulting from falls from elevations six (6) feet or greater. NFS requires 100% fall protection whenever workers are exposed vertically or horizontally to falls six (6) feet or greater.

Violating The 100% Fall Protection Policy is Grounds for Immediate Removal. NFS WILL NOT LOAN OR PROVIDE ANY PERSONAL FALL PROTECTION EQUIPMENT INCLUDING HARNESSES, LANYARDS OR ANCHOR POINTS TO ANYONE

Scope

NFS is Responsible For

- Ensuring NFS employees are properly trained prior to using personal fall protection equipment. Communicating to subcontractor their responsibility to meet the fall protection

requirements. o Conduct ongoing inspections of all guardrails systems. FP will provide anchorage points for NFS employees only.

Subcontractors are Responsible For

- Securing adequate quantities of fall protection equipment for the persons involved in work from elevated surfaces. o Reviewing the use of the equipment with the wearers, observing the proper use of fall protection equipment, notifying affected personnel and Supervisors of any failure to use the equipment or failure to use it correctly. Provide a proper anchor point for employees using personal fall protection equipment. All anchorage points must be engineered and install properly. Each trade partner will provide anchorage points for their employees. o Subcontractors who install guardrail systems must conduct a daily inspection of each guardrail system installed. o Subcontractors are responsible for maintenance and repairs to all guardrails they install. Subcontractors who alter, remove, or damage any guardrail must:
    - Notify NFS Superintendent, of damage or prior to removing guardrail and provide alternative fall protection for employees.
    - Control access to immediate area until guardrail has been reinstalled.
    - Responsible for replacing guard rail, per OSHA standards, before leaving the area.

Employees/Workers are Responsible For

- Using fall protection whenever employees are exposed to a six (6) foot fall or greater.
- Inspecting fall protection equipment before each use. o Removing damaged and/or defective fall protection equipment from use and tagging it immediately. o Removing fall protection equipment that has stopped a fall from use and tagging it immediately as damaged.
- Immediately report any unprotected fall hazard and/or defective fall protection equipment to the NFS Superintendent.

Types of Protection

Guardrails: NFS's first choice of fall protection is an approved guardrail system. A guardrail system means a barrier erected to prevent employees and workers from falling to lower levels 6' or more.

An Approved Guardrail System Consists or Line System

- All wooden guardrails and stanchions attached to concrete must be secured with concrete screws or appropriate anchors. The use of nails to secure wood to concrete does not meet our expectations.
- If wire rope is used for top rails and mid rails the wire rope must be flagged at six (6) foot intervals with high-visibility material. Wire rope must be at least one-quarter inch nominal diameter.
- When guardrails are used around holes which are used as points of access (such as ladder openings), they must be provided with a gate, or be so offset that a person cannot walk directly into the hole.

- All hoist areas must be protected by guardrail systems or personal fall arrest systems. If guardrail systems are removed to facilitate hoisting operations and an employee or worker must lean through the access opening or out over the edge of the access opening that employee or worker must be protected from fall hazards by a personal fall arrest system.
- Covered Floor and Roof Openings (Hole Covers): Guarding and/or covers are not to be removed until other means of fall protection are in place. Employees installing or removing guarding or covers must be protected by alternative fall protection. Employees are prohibited in any area that could expose them to a fall unless proper fall protection procedures are in place.
- Covers may be used on all openings 20.0 square feet or less in area when dimension is 3.0 feet or less.
- Wire mesh or rebar spaced with less than six (6) inch openings should be poured in place in openings as an alternative to covering holes.
- For openings 20.0 square feet or greater the openings shall be barricaded with standard guardrails and toe boards or be covered as a temporary deck reinforced with a minimum of 4X4" and all ends covered with a toe board.
- In areas where scissor lifts or other mechanical equipment can contact a "covered hole" two (2) inches or greater in diameter the hole cover must be built as a raised cover.
- Each subcontractor shall be responsible for covering all floor openings it has created for its use. The following requirement shall be followed: o If the holes are to be used for access or to pass material through, they should then be barricaded with a handrail, complete with gates, removable guardrails, or chains.
- All covers shall be made from a minimum of three quarter (¾)inch PLYWOOD with a minimum of 6-inch overlap on all sides.
- All covers shall be fully painted with high visibility paint or marked "HOLE" with contrasting color.
- The cover shall be securely fastened on at least two sides using a minimum of a 3/16 hole with two 8D nails.

Personal Fall Protection Equipment: Employees using Personal Fall Protection (harness, lanyard, and anchor point) must be trained on the proper use and inspection of the equipment. Personal Fall Protection is a system used to arrest an employee in a fall from a working level. It consists of an anchorage point, connectors, body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations.

Warning Line System

Means a barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of guardrail or other system to protect employees in the area.

- The warning line shall be erected around all sides of the roof work area.
- The warning line shall be erected not less than 15 feet from the roof edge.
- Points of access, materials handling areas, storage areas and hoisting areas shall be connected to the work area by an access path formed by two warning lines.

- The rope, wire or chain shall be flagged at not more than 6-foot intervals with high visibility material.
- No employee or worker is allowed in the area between a roof edge and a warning line unless the employee or worker is performing roofing work in that area.

Responsibility

All NFS employees and subcontractors will comply with OSHA rules and regulations pertaining this section:

OSHA Reference: Fall Protection
Cal OSHA Reference: Fall Protection

Lighting and Electrical Safety

Purpose

To ensure all project lighting and electrical work of any kind, whether permanent or temporary, must conform to the requirements of the National Electric Code, NFPA 70E and other applicable federal, state, and local codes.

Scope

NFS understands the importance of electrical safety and proper lighting on all projects. It is imperative all items below are followed at all times by all NFS or Subcontracted employees. Additional reference material codes and standards are identified to supplement each bullet point to ensure compliance at all times.

Electrical Operations

- When working close to energized power circuits, the circuit must be deenergized and grounded or guarded through insulation to prevent a potential electric shock. Each disconnecting means for a piece of equipment and any service meter or branch circuit (at its point of origination) will be legibly marked to indicate its purpose.
- Circuits in excess of 120 volts will be marked with "Danger -- High Voltage" signs whenever unauthorized personnel may come in contact with live parts. All DC circuits in excess of 50 volts will be identified with volt and amperage and marked with “Danger” signs.

NFPA 70E

- It is NFS’s general policy to avoid “energized” work.
- NFS requires all Electrical subcontractors to comply with the most current NFPA 70E safety standards. NFPA 70E specifically outlines the minimum requirements for any work on “energized” electrical circuits.
- Only electricians trained and qualified with NFPA 70E requirements will be allowed to perform energized electrical work.
    - o In the event that energized electrical work is requested or required by the client a detailed Energized Electrical Work Permit must be completed.
    - O Energized electrical work must be approved by the Owner, Manager of MEP, and the Safety Department.

Responsibility

The electrical subcontractor is responsible for the installation, maintenance and inspection of the temporary lighting and electrical systems. All employees and workers are responsible for identifying defective tools, cords and equipment and removing them from service until repaired and tested.

The electrical subcontractor will conduct a weekly inspection of all temporary electrical power distribution units (spider boxes, receptacle panels) and receptacles. Each temporary electrical power distribution unit must be marked with an individual identification number, the date of each inspection and inspector's name. The electrical subcontractor is responsible for properly securing all electrical equipment and circuits.

Daily Visual Inspection

- This program applies to all cords and receptacles not part of the building or structures permanent power. o Prior to each day's use everyone using extension cords and power tools must perform a visual inspection to determine if any external defects exist (deformed or missing pins, insulation damage) or indications of internal damage exists.
- Equipment found damaged or defective shall be immediately removed from service, destroyed, or tagged "out of service" and shall not be used until repaired.

Lighting

- The electrical subcontractor will provide temporary lighting for all areas of construction activity. All temporary task lighting not installed by the electrical subcontractor must be UL approved. o Temporary lighting systems will be maintained at all times by the electrical subcontractor to ensure they are operative and in good repair.
- Temporary lighting shall provide a minimum of five (5) foot-candles in all areas. o All light bulbs shall be protected from accidental contact or breakage (bulb protectors). o All temporary light stringers must be manufactured with light sockets molded into the stringer, UL approved (or similar approval) and should be new corded (SO, SJO) and each socket suspended individually by the molded socket with non-conductive material.
- Job built light stringers are prohibited. Temporary light systems made with Romex are prohibited. o Temporary lights are not to be hung from any new or existing fire protection systems.

Temporary Electrical Supply

- All 120-volt, single-phase, 15- and 20-ampere outlets shall have approved (GFCI) ground- fault circuit interrupters for personnel protection. GFCI USE IS

MANDATORY

- Any tools or equipment connected to permanent wiring of the building with an extension cord shall use individual (GFCI) protection installed between the receptacle and the extension cord.

Extension Cords

- All extension cords shall be heavy duty type - U.L. listed for outdoors o Extension cords must be a minimum of 12-gauge.

- Extension cords shall be used in continuous lengths without splices or modifications.
- All electrical cords and equipment must be UL approved. o All extension cords must be marked with company or personal identification.
- Any cord found defective must be taken out of service and removed from the site immediately.
- Splices or repairs between the ends of an extension cord are prohibited.

Responsibility

All NFS employees and subcontractors will comply with OSHA rules and regulations pertaining this section:

OSHA Reference: Lighting and Electrical Safety
Cal OSHA Reference: Lighting and Electrical Safety

Colorado Cost Containment Program

Purpose

The Division of Workers' Compensation partners with employers to protect and promote the integrity, vitality, and safety of Colorado's workforce through the Premium Cost Containment Program. Through joining this program, NFS will find ways to reduce workplace injuries and insurance-related costs.

CCCP Safety Policy Declaration

"*For the loss prevention/loss control program to be effective, there must first be a total commitment to safety from top management. This commitment is expressed in the policy statement. The policy declaration should be signed and dated by top management and conspicuously posted where all employees may frequently read it*."

NSF Response of Compliance

NFS has written and provided top management level employees with our company policy declaration. This can be provided upon request from a member of the Colorado Department of Labor and Employment.

Safety Coordinator / Committee Requirements

"*The Safety Committee or Safety Coordinator is created to foster loss prevention through communication. The Safety Coordinator/Committee responsibilities should be clearly defined with a list of tasks and objectives. Documentation of agenda and meeting minutes should be recorded."*

NSF Response of Compliance

All NSF safety meetings are documented and filed, this includes training topics, matters discussed, and meeting minutes. This can be provided upon request from a member of the Colorado Department of Labor and Employment.

CCCP Safety Rules Requirements

"*To effectively prevent losses, safety rules me be clearly defined. In the training phase, employees must be made aware of the rules. When possible, rules should be posted in appropriate and conspicuous areas. Your safety rules should be general as well as job specific. The Premium Cost Containment Board suggests that employees sign and date a document acknowledging their awareness and understanding of the safety rules. "*

NSF Response of Compliance

During onboarding all NSF employees receive a copy of the Company Handbook, this reviews the standards of safety and the rules of the company. The employee is required to sign the acknowledgment documents and provide them to the hiring manager or HR department and is filed in their employee folder. This can be provided upon request from a member of the Colorado Department of Labor and Employment.

Safety Training Requirements

"*Make all employees aware of the hazards inherent to their specific duties and all measures to do the job safety. Documented new employee safety orientation occurs upon hire. Safety training is on-going, and attendance is documented with employee signatures. The premium Cost Containment Board suggests employee training take place at a minimum on a quarterly basis."*

NSF Response of Compliance

NSF is committed to the overall health and safety of every team member in the organization. Regularly scheduled safety training is performed throughout all locations. In addition, all new employees are provided online training allowing them basic knowledge of the industry and the trade they are committed to. This can be provided upon request from a member of the Colorado Department of Labor and Employment.

Designated Medical Provider List (Colorado Specific)

"By designating medical providers, the employer will have an immediate source of treatment and care for the injured employee. This same facility can manager all workers' compensation claims. This fosters a better line of communication with the employer, insurer, and attending physician."

NSF Response of Compliance

NSF have set up local medical providers allowing us to ensure the employee can receive immediate care if needed. NSF also has a dedicated safety and risk department allowing for more personal management of any potential claims. Contact information is directly below.

Written Claims Management Procedures

"Claims Management is the activity that takes place after an injury has occurred. It is important to have clearly written and easy to follow procedures on claims management which include:

- *Accident Investigation Procedures*
- *Completed Accident Investigation Form for all employee injuries regardless of apparent severity*
- *Return to Work Program"*

NSF Response of Compliance

NSF has a dedicated safety and risk department allowing for more personal management of any potential claims. In addition, thought out the safety and health manual there are programs in place for accident investigating along with a return-to-work program. Please see the appropriate topic for reference as needed.

Section 5: National Fire & Safety, Safety Department Contacts

For any further information or clarification on all things related to this manual please contact the National Fire & Safety, Safety Department.

Bob Perkins | **Director, Safety and Risk Management**

6400 South Fiddlers Green Circle, Suite 1900, Greenwood Village, CO 80111

c. 512.848.8045 l **24 hr. Emergency Hotline**. 833.SAF.TBOB

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