Nielsen Construction

Workplace Injury & Illness Prevention Program

Nielsen Construction
8484 Wilshire Blvd., Suite M-500 Beverly Hills, CA 90211
March 11, 2013

TABLE OF CONTENTS

1. GENERAL SAFETY POLICY - TO BE POSTED AT EACH JOB SITE

The safety and health of employees at Nielsen Construction is of primary importance. It is the Company's policy to provide safe and healthful working conditions and operating practices that will ensure a safe work environment for everyone.

Accidents represent a needless waste of human resources and economic loss. A safe and healthful operation conserves human and material resources, and is essential to efficient production

All levels of management have a primary responsibility for the safety of all employees. The employee in turn is expected to adhere to the regulations and policy outlined by the company.

These responsibilities can be met only by working continuously to promote safe work practices among all employees and to maintain property and equipment in safe operating conditions. By working together, we can maintain a safe working environment for all employees.

Safety Program Goals

Nielsen Construction 's goal is zero accidents and injuries. At our company, accident prevention shall be of top importance in all of our activities. Nielsen Construction 's management will provide safe and healthy working conditions and expects safe practices by all of our employees at all times..

Every effort will be made to provide adequate training to employees. However, if an employee is ever in doubt about how to do a job or task safely, it is his or her duty to ask a qualified person for assistance.

Employees are expected to assist management in accident prevention activities. Unsafe conditions must be reported immediately. Fellow employees that need help should be assisted. Everyone is responsible for the housekeeping duties that pertain to their jobs.

Every injury that occurs on the job, even a slight cut or strain, must be reported to management and/or the Responsible Safety Officer as soon as possible. Under no circumstances, except emergency trips to the hospital, should an employee leave the work site without reporting an injury. When you have an accident, everyone is hurt. Please work safely. No job is so important that it cannot be done safely..

Kevin Nielsen
President

Nielsen Construction

Basic Safety Rules - TO BE POSTED AT EACH JOB SITE

1. All persons shall follow these safe practice rules, render every possible aid to safe operations, and report all unsafe conditions or practices to the foreman or superintendent.

2. Foremen shall insist on employees observing and obeying every rule, regulation, and order as is necessary to the safe conduct of the work, and shall take such action as is necessary to obtain observance.

3. All employees shall know and understand the general operating procedures. Safety meetings shall be attended at least every 10 working days. Nielsen Construction has determined that the daily job meeting shall include accident prevention discussions.

4. Anyone reporting for work under the influence of drugs or intoxicating substances which impair the employee's ability to safely perform the assigned duties shall not be allowed on the job. The employee shall immediately report to the clinic for drug and alcohol testing. Consuming alcohol or any intoxicating substance on a job or company property is grounds for immediate dismissal.

5. Horseplay, scuffling, and other acts which tend to have an adverse influence on the safety or well-being of the employees is prohibited.

6. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.

7. No one shall work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that it might unnecessarily expose the employee or others to injury.

8. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless all the parts of the confined space program are present and operational.

9. Employees shall be instructed to ensure that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies promptly to the foreman or superintendent.

10. Crowding or pushing when boarding or leaving any vehicle or other conveyance shall be prohibited.

11. Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties.

12. All injuries shall be reported promptly to the foreman or superintendent so that arrangements can be made for medical or first aid treatment, failure to report injuries immediately is grounds for termination.

13. When lifting heavy objects, the large muscles of the leg instead of the smaller muscles of the back shall be used.

14. Inappropriate footwear or shoes with thin or badly worn soles shall not be worn.

15. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.

16.. Always use the proper tools for the job. Do not use a tool to perform a task for which the tool is not suited.

17. Always make sure that the tools and equipment that you are using are in proper working order.

18. Goggles, eye shields, hearing protection, and other safety devices must be used whenever a supervisor directs you to do so, or whenever common sense or established procedure dictates that such devices be used.

19. Unsafe equipment, conditions, work practices, or other hazards must be reported promptly to your supervisor and written on **Report of Safety Hazard Form** (see appendix) the same day the condition is noticed. If in doubt, ask your supervisor. Don't take chances. It is each employee's responsibility to prepare and submit repair orders for machinery and equipment which the employee knows or believes to be in need of repair, whether or not he/she is the operator of that machinery or equipment.

20. If you feel ill on the job, advise your supervisor and request permission either to go home for the remainder of the day or to see your doctor.

21. Be constantly on the lookout for moving trucks, equipment, vehicles, and other hazards.

22. When operating equipment, be constantly aware of the whereabouts of your fellow workers. Make sure that all persons are outside the zone of danger before you start any machinery or equipment.

23. Only authorized personnel may drive the Company's vehicles or operate the Company's equipment.

24. Employees who drive Company trucks are required, both by Company policy *and by law*, to complete their vehicle inspections and to fill out a daily vehicle inspection report *every morning* before leaving the yard or field job site, and *every evening* before going home. Attention shall be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system for fork lifts (forks, chains, cable, and limit switches.) Daily vehicle inspection reports shall be turned in to the office or a supervisor at the end of each day. See Appendix for **Vehicle Inspection Sheet**.

25. Good housekeeping must be practiced at all times in the work area. Clean up all waste and eliminate any dangers in the work area.

26. Compressed air lines shall not be used for blowing dust off of clothing or cleaning up an area.

27. Do not throw tools, or material. Hand carry these items or provide containers for their transport.

28. Dispose of all waste carefully, insuring that sharp surfaces or nails are not exposed to persons removing the waste.

Naturally, the above list of safety rules is not and cannot be all-inclusive. Additional rules may be added, or some of the existing rules may be modified. As mentioned, common sense is usually the basis for all safety rules and regulations, and adherence to them is necessary to maintain a safe, productive work environment for everyone.

2. RESPONSIBILITIES

Every California employer must establish, implement and maintain a written Injury and Illness Prevention (IIP) Program and a copy must be maintained at each workplace or at a central work site if Nielsen Construction has non-fixed work sites. The requirements for establishing, implementing and maintaining an effective written injury and illness prevention program are contained in Title 8 of the California Code of Regulations, Section 3203 (T8 CCR 3203) and consist of the following eight elements:

Responsibility
Compliance
Communication
Hazard Assessment
Accident/Exposure Investigation
Hazard Correction
Training and Instruction
Recordkeeping

A President - Kevin Nielsen

1. Issue policy statements.
2. Evaluate overall safety program results
3. Provide support and assistance for safety program.
4. Coordinate entire safety program at the executive level.
5. Review safety activities and program results.
6. Review safety/maintenance service orders and safety violation monitoring.
7. Evaluate departmental workers compensation experience.
8. Participate in claims reviews and settlements.

B Safety Director - Kevin Nielsen

This person is responsible for implementing the directions and rules set forth by the Kevin Nielsen

1. Ensure that managers/supervisors are aware of their accountability for safety. Include Safety-Accident statistics in all salary considerations.

2. Ensure that safety rules are enforced and continually evaluated.

3. Ensure that each manager/supervisor has periodic meetings with their people.

4. Ensure that all our people receive adequate safety training.

5. Ensure that Nielsen Construction has adequate documented self-inspection programs for safety and health.

6. Have periodic meetings with the supervisory team to evaluate results and review progress.

7. Ensure that all accidents are reported and investigated, and that corrective action is taken in a timely manner.

8. Ensure compliance with Cal-OSHA and EPA regulations.

9. Ensure that safety committee recommendations are acted upon.

10. Include assessment for safety attitude and performance in all salary and wage reviews.

11. Implement reprimand system. Ensure that enforcement has been implemented through written records.

12. Provide adequate pre-placement screening. Evaluate employees who use respirators or are exposed to hazardous materials for job suitability.

13. Provide adequate return-to-work screening.

14. Maintain records of workplace monitoring. (e.g. air sampling, noise monitoring, etc.)

15. Develop adequate job descriptions, including physical requirements.

16. Notify all employees of workers' compensation rights.

17. Contact all injured employees, immediately after the injury and weekly until the person returns to work.

18. Assist management to return injured people to work as soon as possible, on limited duty if necessary.

19. Have all returning injured employees with restrictions evaluated to insure that they can safely return to their prior job.

20. Coordinate the claims management program with all levels of management.

21. Submit the safety program activities and results report to top management.

22. Post all required information for employees. (e.g. Notice of payday, wage and working condition posters etc.)

23. Conduct new employee safety orientation.

24. Perform safety surveys; issue Safety/Maintenance orders.

25. Ensure that management is enforcing safety rules and issuing written warnings.

26. Review equipment, material, and chemical acquisitions for safety and health requirements.

27. Obtain material safety data information for all chemicals and hazardous material. Ensure proper use and storage. File all reports for use and disposal with the EPA. Train employees in the use of the materials and document the training. Obtain the proper personal protective equipment for people using hazardous materials.

28. Document all special permit, or certification programs.

    a. Lock out procedures.
    b. Power actuated tool use training.
    c. Forklift driver training.
    d. Hazardous waste abatement (HAZWOPER)
    e. Hazardous operation training-various
    f.. Confined space entry.
    g. Lead paint abatement training

    h. Heavy equipment operator - various
    I. Rigging
    j. Asbestos Procedures (See Special SOP for Asbestos Work)

29. Document emergency guidelines for fire, earthquake, accidental material spill or other catastrophe.

30. Coordinate the safety committee.

C Supervisor - (Site Specific - Per Assignment)

1. Train new employees to work safely and recognize hazards.

2. Teach each employee safety rules that apply to him and the consequences of non-compliance.

3. Contact all injured employees, visit all seriously injured employees to ensure that they have the best care possible. Follow up weekly until the person returns to work.

4. See that safety equipment and protective devices are available and used for all work.

5. Enforce safety rules. Issue written warnings.

6. Conduct an inspection of all equipment, vehicles and fire extinguishers.

7. Take prompt corrective action when unsafe conditions or acts are identified.

8. Investigate all accidents and develop corrective action.

9. See that all injuries are reported promptly to the Safety Director..

10. Provide daily for tool box (field safety)safety meetings with their people.

11. Give full support to all safety and health activities.

12. Maintain daily log records, and document all activities at client sites or at Company premises. See special requirements for Asbestos Related work. Daily checklists inspections, etc.

D Employees

1. Comply with all company safety and health rules.

2. Report all injuries and accidents to your supervisor, immediately.

3. Submit recommendations for safety and efficiency to your supervisor.

4. Report any health or safety hazards to your supervisor immediately.

5. Stop work if any health or safety hazards are apparent, if someone is working in an unsafe or causing a hazard, it is every person's responsibility to stop the work and prevent the hazard or unsafe work practice from becoming an injury.

E Safety Committee

1. Management / Employee Safety Committee

   a. Composition: President, Safety Director, Any professional members, Hourly Representatives.

   b. Duties: - Meet quarterly via teleconference, or other clear communication tool, including but not limited to physical meetings to:

      (1) Review all injuries

         (a) First aid and near miss incidents

         (b) Injury accidents

            Safety Director must present accident cause and present current changes to rectify the management system that allowed the accident to occur.

         (c) Status reports of injured by Safety Director.

      (2) Evaluate recommendations of employee representatives. Respond to any suggestions or recommendations.

      (3) Evaluate any training needs.

      (4) Evaluate safety rules and standard operating procedures.

      (5) Develop recommendations on corrective action, procedure changes, or protocol.

(6) Review monthly safety survey-- for evaluation of the facilities, equipment, and programs (Medical Surveillance, Respiratory Protection, Site Safety). Fire and other emergency equipment must be checked. Members can rotate on a staggered basis to keep a core of trained members.

3. COMMUNICATION

A Safety Meetings, Schedule and Agenda

Safety meetings are held at least once every four months and are to be at least 30 minutes long so as to cover all agenda items and allow employees an opportunity to express safety related items. **All** employee representatives are *required* to attend unless work schedules require that they be off site at this time. Minutes of the meetings will be placed in employee's mailboxes within one week following the scheduled meeting. All non-attendees are required to read, sign and return the accompanying form to the Safety Director.

At the safety meetings, the following topics will be discussed:

1. Any new company safety policies
2. Any recent accident reports, how the accident occurred, what can be done to prevent it from happening again
3. Continuing training of safety programs
4. Employee suggestions

An agenda shall be available for each meeting as well as sign-up sheets with all in attendance. Tail Gate Safety Meetings will be held by the crew foreman on a regular basis with specific topics relating to their particular crew.

B Posting

1. Policy Changes: Copies of changes to company safety policies will be posted at each work area. They will be placed in a prominent position and will remain in place for a period of not less than 10 days.

2. Injury and Illness Summary: All injuries and illnesses are recorded onNielsen Construction 's Report of Injury or Illness (Form 5020) and a summary form posted at each work area from February 1 to March 1.

3. Posters and signs: Appropriate safety reminder posters and signs will be placed at tool storage areas for employees required to use power tools, or equipment which may require additional safety measures besides common sense. General safety posters, Nielsen Construction 's General Safety Policy, General Safety Rules and other information will be posted at the shop.

C Safety Suggestion Box

The safety suggestion box is located in the shop. All employees are encouraged to submit recommendations regarding work practices. All suggestions will be reviewed by the safety committee and the results discussed at the next safety meeting.

D Employee Safety Handbook

An employee handbook has been developed and issued to all employees (in Spanish and/or English) to assist and communicate the company commitment to a safe environment. A copy of this handbook is included in this Workplace Injury and Illness Prevention Program. The safety handbook will be revised and changed as necessary.

4. HAZARD ASSESSMENT & CONTROL

A Safety Inspections

1. Routine: All employees are expected, as part of their daily responsibilities, to encourage safe work practices, and to be vigilant in preventing potential hazards. Those inspections shall be documented. Any corrections shall be documented.

2. Periodic: Out of House Inspections: A yearly hazard assessment survey, identifying any possible hazards in the workplace will be conducted by Dan Napier, CIH. At this time, a review of standard operation procedures for each division will be completed and an assessment of possible safety improvements given to **Kevin Nielsen** In addition, approximately every eight to twelve weeks, a Certified Safety Professional will conduct an unscheduled site visit. Any minor discrepancies will be corrected within 3 working days. An imminent hazard shall be corrected immediately, if the problem cannot be immediately corrected all workers not directly active in the correction of the problem shall be removed from the work area until such time that the problem is corrected. Any workers correcting the problem shall be provided with the appropriate equipment to ensure that they are provided the highest level of protection feasible.

In House Inspections: Unscheduled site inspections will be conducted by **Kevin Nielsen** to ensure that safe work practices are enforced. The Inspections shall occur at least twice a month. The inspections and any corrective action shall be documented. Any discrepancies will be corrected as soon as possible but not less than within 3 working days. An imminent hazard shall be corrected immediately, if the problem cannot be immediately corrected all workers not directly active in the correction of the problem shall be removed from the work area until such time that the problem is corrected. Any workers correcting the problem shall be provided with the appropriate equipment to ensure that they are provided the highest level of protection feasible.

Review Process: All safety inspection reports will be reviewed by the Executive Safety Committee. This review should assist in prioritizing actions and verify completion of previous

corrective actions. Overall inspection program results should be reviewed for trends.

3. Review — All safety inspection reports will be reviewed by the Safety Committee. This review should assist in prioritizing actions and verify completion of previous corrective actions. Overall inspection program results should be reviewed for trends.

B Disciplinary Action

The following disciplinary action will be taken for safety violations of anyone failing to comply with the appropriate safety rules:

Written Warning
Suspension Warning
Dismissal

All infractions shall be documented on the form on the next page. There are no verbal warnings. All infractions shall be documented. The Disciplinary program is enforced across all levels of management or labor. Safety practices are not optional or non-mandatory for any person or entity working on Nielsen Construction jobs. Failure to follow the rules or stop work if a hazard becomes imminent will lead to termination of your position or contract.

Rule Infraction Warning Notice
Nielsen Construction

WARNING

YOU HAVE BEEN OBSERVED DISREGARDING OR BREAKING A COMPANY RULE

[] THIS IS THE FIRST WRITTEN WARNING, ANY FURTHER WARNINGS DURING THE NEXT TWELVE MONTHS WILL RESULT IN TIME OFF WITHOUT PAY.

[] THIS IS THE SECOND WRITTEN WARNING, YOU WILL NOT BE PERMITTED TO WORK NEXT TUESDAY, WEDNESDAY AND THURSDAY, YOU WILL NOT BE PAID FOR THOSE DAYS.

[] THIS IS A FINAL WARNING, YOU HAVE BEEN TERMINATED FOR FAILURE TO OBEY THE RULES. YOU MUST RETURN ALL COMPANY PROPERTY AND PICK UP YOUR FINAL PAYCHECK AT THE END OF THIS SHIFT.

Date:

Employee: Supervisor:

Violation:

Date/s of previous warning/s:

I understand this warning and agree to the facts set forth.

Employee Signature _____

[] I have retrained the above employee and have fully explained the significance of disregarding the company regulations.

[] I have completed all necessary records for the termination of this employee.

Supervisor Signature _____

cc: Kevin Nielsen
Kevin Nielsen

C Safety Incentives

Nielsen Construction employees who have worked a full year without one lost time accident will be presented with a safety award

D Hazardous Materials Storage

All hazardous materials are to be stored in properly marked containers, in an appropriate storage area (as stated in the MSDS). It is a severe violation of company policy to place hazardous materials in unmarked containers (even for a short period of time). Employees are required to wear appropriate personal protective equipment.

Material Safety Data Sheets (MSDS's) for all hazardous substances which Nielsen Construction employees may come in contact with at specific sites are to be obtained from the Host Safety and Health Representative and kept at a designated place at the site. Copies of these MSDS's are to be kept in the Safety Director's office at the main shop. Each MSDS is to be reviewed with all of Nielsen Construction 's employees who will be required to be on site.

E Gas Detection

A properly calibrated Explosive meter will be utilized before entering any confined spaces. Oxygen Level and LEL will be determined. No employee will be allowed into a confined space without a confined space entry permit documenting that O2 and LEL levels have been checked. O2 levels must be within (20.5-21.5%) and consistent with background levels. LEL levels not to exceed 2%.

F Equipment and Tool Inspection

All safety equipment and tools will be inspected daily before use and placed on a regular maintenance schedule in accordance with manufacturer recommendations. A special inspection and evaluation will be conducted each month by the Safety Committee to insure that the equipment and tools inspection and maintenance program is being properly implemented.

G Personal Protective Equipment

Personal Protective Equipment General

1. Where there is a danger of flying particles or corrosive materials, employees must wear protective goggles and/or face shields provided [or approved] by Nielsen Construction .

2. Employees are required to wear safety glasses at all times in areas where there is a risk of eye injuries such as punctures, contusions or burns.

3. Employees who need corrective lenses are required to wear only approved safety glasses, protective goggles, or other medically approved precautionary procedures when working in areas with harmful exposures, or risk of eye injury.

4. Employees are required to wear protective gloves, aprons, shields, impervious coveralls and other means provided in areas where they may be subject to cuts, corrosive liquids and/or harmful chemicals.

5. Hard hats must be worn in areas subject to falling objects, and at all times while at construction sites.

6. Appropriate footwear including steel toed shoes or boots must be worn in an area where there is any risk of foot injuries from hot, corrosive, poisonous substances, falling objects, crushing or penetrating action. Steel toed boots or shoes must be worn at all times while at construction sites.

7. When necessary employees must use the approved respirators which are provided for regular and emergency use. Please refer to Nielsen Construction 's Respiratory Protection Program

8. All safety equipment must be maintained in sanitary condition and ready for use. Report any defective equipment immediately.

9. An eye wash facility is located in the Crew trucks. If any irritant gets into an employee's eyes, call for medical assistance immediately and flush the eye out with clean water. It may be necessary to assist the employee to keep his eyes open. Continue rinsing for 15 minutes or until medical assistance arrives.

10. A shower will be provided for emergencies at hazardous sites. If this item is needed at a specific site, its location will be identified in the site safety plan (SSP).

11. Food may not be eaten in work areas, or in places where there is any danger of exposure to toxic materials or other health hazards. Safe eating places will be identified in the site safety plan (SSP)

12. In cases where loud noise exceeds certain levels, hearing protection is required. See Nielsen Construction 's Hearing Protection Program.

13. In cases of cleaning toxic or hazardous materials, protective clothing provided must be worn.

5. ACCIDENT INVESTIGATION

In order to identify and recognize the areas responsible for accidents, a thorough and properly completed accident investigation is essential. It is the responsibility of the supervisor at the job site to complete an accident investigation form (included in this section) to be completed within 24 hours of the accident. The information from this accident report will be discussed at the next scheduled safety meeting. The following questions are to be asked and answered in detail:

1. What happened? The investigation should describe what took place: an injury to an employee, an incident that caused a production delay, damaged material or any other conditions recognized as having a potential for losses or delays.

2. Why did the incident happen? The supervisor must obtain all the facts surrounding the occurrence; what caused the situation to occur; who was involved; was/were the employee(s) qualified to perform the functions involved in the accident or near miss; were they properly trained; were proper operating procedures established for the task involved; were procedures followed, and if not, why not; where else this or a similar situation might exist, and how it can be corrected.

3. What should be done? The person conducting the investigation must determine which parts of the operation require changes or attention. It is important to note that the purpose here is not to establish blame, but to determine what type of constructive action can eliminate the cause(s) of the accident or near miss.

4. What action has been taken? Actions already taken to reduce or eliminate the problem should be noted, along with actions in progress or suggested. Any temporary precautions should also be noted.

5, All serious accidents must be reported to CAL OSHA within 24 hours of the incident. In cases of hospitalization or death, a full investigation with copies to governmental authorities will be required. In less serious cases, the investigation report must be presented by the supervisor to the President for disclosure to its insurance carrier and for remedial action at the work site.

6. OSHA Records Required

   Copies of required accident investigations and certification of employee safety training shall be maintained by the Safety Director. A written report will be

maintained on each accident, injury or on-the-job illness requiring medical treatment. A record of each such injury or illness is recorded on OSHA Log and Summary of Occupational Injuries Form 200 according to its instructions. Supplemental records of each injury are maintained on OSHA Form 101, or Employers Report of Injury or Illness Form 5020. Every year, a summary of all reported injuries or illnesses is posted no later than February 1, for one month, until March 1, on OSHA Form 200. These records are maintained for five years from the date of preparation.

The Safety committee will be review the submitted information to assist in recommending corrective actions to prevent a similar problem in the future.

6. SAFETY AND HEALTH TRAINING

A Training Policies:

A successful injury and illness prevention program gives top priority to Employee safety training. All employees will be required to read the safety manual and are encouraged to discuss any problems or safety concerns with their direct supervisor.

B Safety and Health Training

Training is required for both supervision and employees alike. The goal of each training session, though different topics will be covered, will be to stress the following:

1. The success of Nielsen Construction 's injury and illness prevention program depends on the combined actions of individual employees and commitment by management.

2. Each employee will have the safe work procedures unique to his job reviewed with him by his immediate supervisor or the Safety Director. This review will occur when the employee first starts the job, and when there is a change in procedure or new elements are added. The employee will be shown how these safe work procedures protect against injury.

3. The Safety Director will provide training to employees so that they may become familiar with personal protective equipment, learn when it is required, and become competent in its use and maintenance.

4. Each employee will learn what is expected of him in the event that an emergency occurs in the workplace.

5. Direct supervisors are the strongest link in the success of Nielsen Construction 's injury and illness prevention program. They must become instilled in the program in order to implement it on the job. The concept that safety is an integral part of each task must be communicated to their employees on a day to day basis.

6. Supervisors must be familiar with the safety and health hazards to which their employees are exposed, how to recognize them, the potential effects of these hazards, and rules and procedures for maintaining a safe workplace. Supervisors shall review this information with their employees at the worksite and shall investigate accidents according to Nielsen Construction 's accident investigation procedures.

C Permit or Certified Training

Training which is required or recommended by regulatory agencies for operating certain equipment or performing specific tasks will be scheduled and implemented by Nielsen Construction for its employees prior to their being assigned to these tasks. Re-training or Refresher courses in required subjects will be scheduled in a timely manner. The Safety Director is responsible for scheduling and ensuring that documentation is kept in the employee's file. Examples of this type of training may include:

Hazardous waste operations (HAZWOPER)
Fork Truck Drivers
Heavy Equipment Operators (various)
Hazardous operations (various)
Lead Paint Abatement
Rigging
Power Tools (various)
Burning and Welding
Asbestos Awareness/Abatement
Fire Brigade

This training is performed by qualified persons who have the credentials and expertise to conduct it. Sometimes this training is conducted off site in a formal classroom or hands-on lab setting.

D Periodic Safety Training Meetings

Nielsen Construction has safety meetings during daily job site and facility planning sessions. The main goal of the meeting is to exchange information and concerns regarding safety. The purpose of most meetings will be to review, in language understandable to every employee, various sections of the injury prevention program, special hazards at the work site, hidden dangers, and material safety data sheets. A selection from the company's safe work practices will be reviewed and discussed at each meeting. New practices, procedures or machinery introduced into the workplace, will be thoroughly reviewed for safety. Employees will document their presence at all training sessions and minutes of the meeting will be distributed to attendees. Employee attendance is mandatory and is compensable unless part of an official state approved training program or pre-employment requirement.

E Review of Site Safety Plans (SSP)

Nielsen Construction engages in a variety of activities which take place at remote sites owned and/or operated by clients. These jobs may range from demolition to hazardous waste clean up and disposal. For this reason, Nielsen Construction will ensure that a specific Site Safety plan is prepared and reviewed with the work crew before proceeding to each job. Each crew member assigned to the site will document that the SSP has been reviewed with him and that he understands it. Signed copies of the SSP will be kept on file by the Safety Director.

The SSP will describe the tasks which Nielsen Construction has been contracted to perform at the site, outline specific procedures to be undertaken to accomplish these tasks safely, and provide detailed information concerning hazardous materials or unsafe

conditions at the site and how the employees can protect themselves and others. In addition, the SSP will specify the types of personal protection to be worn for each task, and any training requirements needed by personnel at the site. An Emergency plan which describes how anticipated emergencies at the site will be handled should they occur, such as fire, medical emergency, or chemical spill, will be provided. Emergency Phone numbers for that site will be listed, directions to hospital or first aid facilities near or on the site, and the precise location of emergency equipment on site. Specific directions for conducting and performing a site evacuation, should it be necessary, will be provided.

A copy of an SSP master form is provided in the appendix

F Employee Responsibility for Training

It is our goal that all of our employees become so familiar with job safety that it becomes second nature to be alert to possible hazards at all times on the job. The following general rules apply in all situations:

1. No employee is ever required to undertake a job that appears to be unsafe. You have the right to refuse to do the job until you have contacted your supervisor, safe job procedures have been discussed, and hazards have been corrected or unsafe equipment repaired.

2. No employee is expected to undertake a job until he/she has received adequate safety instructions, and is authorized to perform the task.

3. Each employee should thoroughly understand the hazardous properties of any chemical he/she works with and how to use these chemicals safely.

4. Mechanical safeguards must be kept in place.

5. Employees must report any unsafe conditions to the job site supervisor and/or the Safety Director. Any person on any site can stop work if they recognize an imminent safety hazard. It is the policy of Nielsen Construction to practice safe work habits at all times.

6. Report any work-related injury or illness to your direct supervisor at once.

7. Personal protective equipment must be used when and where required. Each employee is responsible for wearing the equipment properly, if it is for his/her personal use, seeing that it is properly maintained and stored.

7. MEDICAL POLICIES

A Medical Surveillance:

All employees working within hazardous substances areas shall participate in a Medical Surveillance program. This program involves medical monitoring prior to employment, on an annual basis and at termination of employment. For workers in the Asbestos Abatement Department specific medial examination procedures are required.. Details of the Nielsen Construction Medical Surveillance Program are outlined below.

1. Medical Monitoring Plan

   All employees whose job requires them to;
   a. Enter a hazardous waste site;
   b. Otherwise come in contact with hazardous materials (e.g., contaminated equipment, laboratory samples);
   c. Perform physical activities more strenuous than normal; must be included in a medical surveillance program.
   d. This program should involve medical monitoring prior to employment, on an annual basis and at termination of employment as specified by 29 CFR 1910.134 and 29 CFR 1910.120.

2. Fitness Requirements

   All employees who may come in contact with hazardous materials at sites where Nielsen Construction has contracted to perform work shall be medically fit to wear respiratory protection as required in (OSHA Respiratory Protection Standard 29 CFR 1910.134) and Hazardous Waste and Emergency Response Operations Standard (HAZWOPER) (29 CFR 1910.120). All on-site personnel must ensure medical fitness with OSHA respiratory protection protocol and respiratory fit-testing (qualitative or quantitative).

   In addition, all on-site personnel must be actively involved in a comprehensive medical surveillance program as required in HAZWOPER Standard (29 CFR 1910.120) to ensure physical capabilities.

3. Medical Surveillance Program

   The Nielsen Construction medical surveillance program includes the following examinations:

a. Physical Examination - During this physical examination the physician considers the individual's capability to wear respiratory protection. Pulmonary function, cardiovascular status and weight carrying capacities is evaluated. Ability to detect odors is also be included. A licensed Occupational Physician performs the examination. The physician provides a written certification that each employee is medically fit to wear respiratory protection. Additional testing protocol include:
b. Audiogram
c. Wellness blood profile - including complete blood count (CBC), SMAC-24, coronary risk profile.
d. Spirometry
e. Urine for heavy metals
f. Blood lead with ZPP (Zinc Protoporphren)
g Respirator certification (by examining physician)
h. Red blood cell (RBC) cholinesterase
I. Serum PCB
j. Titmus and Snellen Vision Screen
k. Electrocardiogram - resting
l. Chest x-ray
m. Methemoglobin
n. Urinalysis
o. Physician's written medical opinion

8. EMERGENCY PLAN - GENERAL

This plan for evacuation from Nielsen Construction has been prepared for your safety. It is important that you learn all the exit routes as well as the procedures which must be followed in case of fire, earthquake, or other events that may require building evacuation. Each **Site Safety Plan** will include an emergency plan and evacuation route tailored for that specific site. Please refer to it for site specific instructions.

MEDICAL EMERGENCIES

1. In the absence of an infirmary, clinic, hospital or physician, that is reasonably accessible in terms of time and distance to the worksite which is available for the treatment of injured employees, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training shall be available at the worksite to render first aid.

2. Proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service, shall be provided.

3. First Aid Kits

The first aid kit shall consist of a weather proof container with individual sealed packages for each type of item. Individual packaging and sealing shall be required only for those items which must be kept sterile in a first-aid kit The contents of the first-aid kit shall be checked byNielsen Construction before being sent out on each job and at least weekly on each job to ensure that the expended items are replaced.

First-aid kits shall contain at least the following items:

10 Package Kit

1 Pkg. Adhesive bandages, 1" (16 per pkg.)

1 Pkg. Bandage compress, 4" (1 per pkg.)

1 Pkg. Scissors* and tweezers (1 each per pkg.

1 Pkg. Triangular bandage, 40" (1 per pkg.)

1 Pkg. Antiseptic soap or pads (3 per pkg.)

5 Pkgs. of consulting physician's choice

16 Package Kit:

1 Pkg. Absorbent gauze, 24" x 72" (1 per pkg.)

1 Pkg. Adhesive bandages, 1" (16 per pkg.)

2 Pkgs. Bandage compresses, 4" (1 per pkg.)

1 Pkg. Eye dressing (1 per pkg.)

1 Pkg. Scissors* and tweezers (1 each per pkg.)

2 Pkgs. Triangular bandages, 40" (1 per pkg.)

1 Pkg. Antiseptic soap or pads (3 per pkg.)

7 Pkgs. of consulting physician's choice

24 Package Kit:

2 Pkgs. Absorbent gauze, 24" x 72" (1 per pkg.)

2 Pkgs. Adhesive bandages, 1" (16 per pkg.)

2 Pkgs. Bandage compresses, 4" (1 per pkg.)

1 Pkg. Eye dressing (1 per pkg.)

1 Pkg. Scissors* and tweezers (1 each per pkg.)

6 Pkgs. Triangular bandages (1 per pkg.)

1 Pkg. Antiseptic soap or pads (3 per pkg.)

9 Pkgs. of consulting physician's choice

36 Package Kit:

4 Pkgs. Absorbent gauze, 24" x 72" (1 per pkg.)

2 Pkgs. Adhesive bandages, 1" (16 per pkg.)

5 Pkgs. Bandage compresses, 4" (1 per pkg.)

2 Pkgs. Eye dressing (1 per pkg.)

1 Pkg. Scissors* and tweezers (1 each per pkg.)

8 Pkgs. Triangular bandages, 40" (1 per pkg.)

1 Pkg. Antiseptic soap or pads (3 per pkg.)

13 Pkgs. of consulting physician's choice

Scissors shall be capable of cutting 2 layers of 15 oz. cotton cloth or its equivalent. The first-aid kits are maintained at the ten, sixteen, twenty-four or thirty-six package level.

EMERGENCY EYE WASH, SHOWER

Where the eyes or body of any person may be exposed to injurious chemicals and/or materials, suitable facilities for quick drenching or flushing of the eyes and body are provided, within the work area, for immediate emergency use.

EMERGENCY NUMBERS - General. Refer to a Site Specific Safety and Health Plan prior to beginning work at any jobsite.

A poster shall be fastened and maintained either on or in the cover of each first- aid kit and at or near all phones plainly stating, the phone numbers of available doctors, hospitals, and ambulance services within the district of the work site.

Emergency Response Contacts

Agency/Facility	Phone #
Ambulance	**911**
Fire Department	**911**
Police Department	**911**
State Emergency Response	
National Response Center	**1-800-424-8802**
Chemtrec	**1-800-424-9300**
Poison Control Center	**1-800-382-9097**

EMERGENCY COMMUNICATION CODES

A communication system will be established in order for personnel to communicate with each other on-site, as well as off-site.

Hand signals, mobile phones. Emergency hand and audible signals which can be used in the event of an emergency include:

Clutching throat - Personal distress.

Three short blasts - Indicates a potential emergency within the exclusion zone.(specific area where potentially hazardous operations are being performed)

One long blast on air horn indicates major emergency and complete evacuation of the site.

A phone system will be available to communicate to off-site locations.

*An air horn will be used only for large projects requiring teams of larger then 6 persons working in different areas within the same work area. Otherwise, the use of hand signals and verbal warnings will be more effective.

GENERAL GUIDELINES

1. Any person who discovers a fire or other emergency, should call 911 and use the fire alarm. The nature and location of the emergency should be specified.

2. All employees are required to know the location of the exits leading from their work area. Learn the exit designated for evacuation to help you follow the correct route in case of emergency.

3. All exit routes should be kept clear to and from the building. Report any locked exit doors or obstructions to your supervisor so the problem can be corrected.

4. Once you leave the building or site, DO NOT RETURN. Report to your supervisor at the designated meeting place. Do not leave the premises until instructed by your supervisor.

5. DO NOT return for personal belongings.

6. Remain calm and quiet. Noise will add to the confusion and will make it difficult to hear instructions.

7. Once outside, continue moving away from the building to allow room for those following behind. Report to your supervisor.

8. Assemble outside in an area away from the danger, leaving access for fire fighting or emergency response personnel and equipment. Assemble in your work units (the location you should assemble at is noted on the escape map) so that everyone who has left the building can be identified. The Emergency response personnel cannot rescue any one unless they know where they are or were last seen.

9. EMERGENCY PLAN - FIRE

1) If you find a fire first:
   a. If a fire is in the incipient stage, take the nearest fire extinguisher and try to extinguish it.

   b. Notify your immediate supervisor or the nearest fellow worker to call the fire department.

2) Notifying the Fire Department.
   Give the following information:
   a. Location of fire at the site
   b. Site location:
   c. Name of material that is burning
   d. Leave our phone number: **[Phone Number]**
   e. Number of fire victims (if any)

3) When you hear the fire alarm
   a. If you are not in the fire area, follow evacuation procedures and meet at the designated area. DO NOT ATTEMPT TO ENTER THE FIRE AREA FOR ANY REASON!

   b. If you are in the fire area:
      (1) Alert other people around you
      (2) If the fire is incipient (just started, is quite minor) take the nearest fire extinguisher and help to extinguish it.
      (3) Follow evacuation procedures and report to the designated area. DO NOT RETURN TO THE AREA FOR ANY REASON!

4) Primary and secondary responsible persons for Nielsen Construction are Kevin Nielsen and Kevin Nielsen: Their responsibilities are:

   a. Keeping the emergency exit doors, stairs and ladders clear and in proper condition at all times.
   b. Training all regular workers to evacuate through designated routes from the possible positions of their area.
   c. Training workers on how to use emergency exit ladders (if applicable)
   d. Be aware of persons who are slow moving or handicapped
   e. Keep all training records (fire drill information)

5) Evacuate the Building or site **COMPLETELY**

a. Follow the route to the emergency exit closest to you.
b. If you do not know the evacuation routes, follow the movement of others.
c. If no one can be seen around, and you do not know the route to exit, LET OTHER PEOPLE KNOW your location by making a loud sound by any means.
d. DO NOT run or walk toward fire or smoke during the evacuation
e. Allow other people entering the exit routes or stairways to merge into the movement of people.
f. Upon exiting the emergency area, proceed to the pre-determined safe location, taking care to avoid falling or flying objects from the emergency area, if any.
g. Do not leave the area until you have been counted. The fire fighters cannot rescue anyone unless they know where they are or were last seen.
h. Primary and secondary responsible persons must see that everyone has left their area before evacuating themselves.

6) TOXIC SMOKE

The average employee is not familiar with the effect of smoke on their body. Therefore, it is necessary that anyone who may be exposed to smoke be informed of its potential danger. The nature, quantity and physiological effects of fire gases have not been fully evaluated, but it is known that most gases emitted in a fire are toxic.

a. Fire produces smoke, heat and toxic gases. Smoke generated by a fire might be the toxic gases which can result in fatality upon short exposure. 97% of fire fatalities are normally caused by smoke inhalation and suffocation, rather than burns.

b. Most combustible materials consists of hydrocarbons, which burn to form carbon dioxide if there is sufficient air supply; or carbon monoxide - poisonous - when air supply is restricted. This carbon monoxide is odorless and colorless but it is one of the most toxic of all fire gases.

c. A common example of a fire which causes death by suffocation is the burning of upholstered furniture or mattresses which produce smoke containing Nitrous Oxide, Carbon monoxide and other gases which are not only nauseous but highly lethal. The number of people suffocated yearly from fires occurring in beds and upholstered furniture bears witness to this fact.

7) PANIC CONTROL

a. Of the many causes of panic, fire is perhaps the most prevalent.

b. Panic affects the emotional habits of congregated people. To most untrained people and temporary visitors, fire is a very frightening thing and panic is easily

resulted. People will have irrational reactions, such as jumping out of buildings when the fire is nowhere near them, hiding in the corner of structures or in a closet which increases the chances that they will be overcome by smoke.

c. In order to prevent panic, it is necessary to understand the basic causes:

Normally panic results from a sudden overpowering terror - explosion (sound), fire, earthquake, etc.

It could be inspired by some trifling cause or misapprehension of danger. If it is allowed to continue, it will be followed by frantic efforts to secure safety.

Panic stricken persons usually do the wrong things in attempting to seek safety; in some cases, people have drawn others with them into danger.

The best way to prevent panic is to provide security in mind by training under strict supervision.

8) ANNUAL FIRE DRILL PROGRAM

Program

a. Every person in the company will be involved.
b. Simulate actual fire conditions as closely as possible (activate alarm system).
c. Observe total evacuation plan.
d. Have employees practice actual fire extinguishing by using portable extinguishers.
e. Fully document and evaluate the total drill.
f. Total coordination of the Annual Fire Drill will be the responsibility of the Safety Director.

Section Responsibilities

Primary and Secondary responsible persons Kevin Nielsen and Kevin Nielsen are responsible for:

a. Workers in their area to know where the primary and alternative fire exits are.
b. Keeping all fire exits, aisles and fire doors (including regular entrances) clear from any kind of debris (accumulated for whatever reasons) at all times.
c. All workers in their area should be able to handle portable fire extinguishers.
d. Maintaining all fire fighting equipment in good condition (all fire extinguishers should be inspected monthly -- see inspection form)

e. Keeping a minimum of 24" clearance from and to the fire fighting equipment at all times.
f. Workers in their area to identify what to do and what NOT to do in the event of an emergency.
8. Upon the completion of each fire drill, complete a full report and keep on file.

10. EMERGENCY PLAN - EARTHQUAKE

1) If there is time, move away from exterior walls and crouch under a table or desk while the earthquake is in progress.

2) Stay under cover until the shaking has stopped.

3) Do not leave the building until it is safe. Many injuries occur when people run from buildings and are struck by falling objects.

4) Once you have exited the building, get as far away from the building as you possibly can while keeping a close look out for falling objects.

5) Follow emergency evacuation procedures.

Evacuate the Building or site **COMPLETELY**

a. Follow the route to the emergency exit closest to you.
b. If you do not know the evacuation routes, follow the movement of others.
c. If no one can be seen around, and you do not know the route to exit, LET OTHER PEOPLE KNOW your location by making a loud sound by any means.
d. DO NOT run or walk toward fire or smoke during the evacuation
e. Allow other people entering the exit routes or stairways to merge into the movement of people.
f. Upon exiting the emergency area, proceed to the pre-determined safe location, taking care to avoid falling or flying objects from the emergency area, if any.
g. Do not leave the area until you have been counted. The fire fighters cannot rescue anyone unless they know where they are or were last seen.
h. Primary and secondary responsible persons must see that everyone has left their area before evacuating themselves.

11. EMERGENCY PLAN - CHEMICAL SPILL

EMERGENCY NUMBERS - Refer to a Site Specific Safety and Health Plan prior to beginning work at any jobsite.

Emergency Response Contacts

Agency/Facility	Phone #
Ambulance	**911**
Fire Department	**911**
Police Department	**911**

State Emergency Response

National Response Center	**1-800-424-8802**
Chemtrec	**1-800-424-9300**
Poison Control Center	**1-800-382-9097**

EMERGENCY COMMUNICATION CODES

A communication system will be established in order for personnel to communicate with each other on-site, as well as off-site.

Hand signals, mobile phones. Emergency hand and audible signals which can be used in the event of an emergency include:

Clutching throat - Personal distress.

Three short blasts - Indicates a potential emergency within the exclusion zone.(specific area where potentially hazardous operations are being performed)

EVACUATE PEOPLE FROM THE AREA

1) Any person who discovers a spill or other emergency, should call 911 and use the fire alarm. The extent, location and nature of the spill should be specified.

2) All employees are required to know the location of the exits leading from their work area. Learn the exit designated for evacuation to help you follow the correct route in case of emergency.

3) All exit routes should be kept clear to and from the building. Report any locked exit doors or obstructions to your supervisor so the problem can be corrected.

4) Once you leave the building or site, DO NOT RETURN. Report to your supervisor at the designated meeting place. Do not leave the premises until instructed by your supervisor.

5) DO NOT return for personal belongings.

6) Remain calm and quiet. Noise will add to the confusion and will make it difficult to hear instructions.

7) Once outside, continue moving away from the building to allow room for those following behind. Report to your supervisor.

8) Assemble outside in an area away from the danger, leaving access for fire fighting or emergency response personnel and equipment. Assemble in your work units (the location you should assemble at is noted on the escape map) so that everyone who has left the building can be identified. The Emergency response personnel cannot rescue any one unless they know where they are or were last seen.

ISOLATE THE AREA

(2) Erect barricades and demarcate zones of contamination. Ensure that only people authorized to perform spill clean up enter the area.

(3) If the material is flammable, turn off ignition and heat sources.

(4) Wear appropriate personal protective equipment.

CLEAN UP SPILL

1) If authorized to do so, pour appropriate neutralizing agent on spill.
Clean up; place waste in plastic bag or drum for disposal.

2) Chemical spill cleanup materials shall be on site where there is the possibility of a chemical spill.
Several types are available listed below:

Flammable solvent spill kit
Flammable solvent absorbent
Acid spill kit
Acid spill absorbent
Caustic (base) spill kit
Caustic (base) absorbent

Safety equipment kit (contains scoops, sponge, safety glasses, disposal bags, etc.)
Container to hold kits

12. STANDARD OPERATING PROCEDURES - GENERAL

These Standard Operating Procedures have been prepared for your safety. It is important that you be aware of all the minimum safety guidelines which must be followed in the event that Nielsen Construction performs these operations. These SOPs form the basis of safe working rules and procedures.

Nielsen Construction may need to amend these SOPs to consider additional hazards at specific work sites. A Site Specific Safety and Health Plan should be completed prior to beginning work at any jobsite. Please refer to it for specific instructions for a particular site or job.

13. HAZARD COMMUNICATION PROGRAM

Nielsen Construction has developed a Hazard Communication Program to enhance our employees' health and safety.

As a company we intend to provide information about chemical hazards and other hazardous substances, and the control of hazards via our comprehensive Hazard Communication Program which includes container labeling, Material Safety Data Sheets (MSDS) and training.

The Following Program outlines how we will accomplish this objective.

1) CONTAINER LABELING

1 It is the policy of this company that no container of hazardous substances will be released for use until the following label information is verified:

(1) Containers are clearly labeled as to the contents
(2) Appropriate hazard warnings are noted.
(3) The name and address of the manufacturer are listed.

2 This responsibility has been assigned to Kevin Nielsen.

3 To further ensure that employees are aware of the hazards of materials used in their work areas, it is our policy to label all secondary containers.

4 The supervisor at each site will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with generic labels which have a block for identity and blocks for the hazard warning.

2) MATERIAL SAFETY DATA SHEETS (MSDS)

1 Copies of MSDS for all hazardous substances to which employees of this company may be exposed are kept in the office at 1111 E. Commonwealth Ave., Suite E., Fullerton, CA. and at each work site where the substance is used. Kevin Nielsen will be responsible for obtaining and maintaining the data sheet system for the company.

2 Kevin Nielsen will review incoming data sheets for new and significant health/safety information. He will see that any new information is passed on to the affected employees.

3 MSDS will be reviewed for completeness by Kevin Nielsen. If an MSDS is missing or obviously incomplete, a new MSDS will be requested from the manufacturer. Cal/OSHA will be notified if a complete MSDS is not received.

4 MSDS are available to all employees in their work area for review at each site. If MSDS are not available or new hazardous substances in use do not have MSDS, please contact Kevin Nielsen immediately.

3) EMPLOYEE INFORMATION AND TRAINING

Employees are to attend a health and safety orientation set up by Kevin Nielsen prior to starting work for information and training on the following:

1 An overview of the requirements contained in the Hazard Communication Regulation, including their rights under the Regulation.

2 Inform employees of any operations in their work area where hazardous substances are present.

3 Location and availability of the written hazard communication program.

4 Physical and health effects of the hazardous substances.

5 Methods and observation techniques used to determine the presence or release of hazardous substances in the work area.

6 How to lessen or prevent exposure to these hazardous substances through usage of engineering controls, work practices, and/or the use of personal protective equipment.

7 Steps the company has taken to lessen or prevent exposure to these substances.

8 Emergency and first aid procedures to follow if employees are exposed to hazardous substances.

9 How to read labels and review MSDS to obtain appropriate hazard information.

10 When new hazardous substances are introduced, Kevin Nielsen will review the above items as they are related to the new material in your work area safety meeting.

The following general safety precautions should be observed when working with chemicals:

(a) The work area should be kept clean and orderly.

(b) Follow the Site Safety Plan for use of the safety equipment necessary to do the job.

© Insure that every container is labeled with the identity of its contents and the appropriate hazard warnings.

(d) Incompatible chemicals must be stored in separate areas.

(e) Whenever possible, substitute less toxic materials.

(f) Limit the volume of volatile or flammable material to the minimum needed for short operation periods.

(g) Insure that means are provided for containing the material if or containers should break or spill their contents.

(h) Insure that methods for shutting off heat sources or power are redundant.

(I) Read and understand the material Safety Data Sheets. If there are questions, call the manufacturer of the product or consult with your supervisor.

4) LIST OF HAZARDOUS SUBSTANCES

The following is a list of all known hazardous substances likely to be present at any site. Specific information on each noted hazardous substance can be obtained by reviewing the Material Safety Data Sheets.

HAZARDOUS SUBSTANCE **WORK PROCESS**

Gasoline waste	Fuel, Underground storage tank
Diesel Fuel waste	Fuel, Underground storage tank
Motor Oil waste	Lubricant, Underground storage tank
Solvents storage	Contaminated soil, underground tank waste
Metals	Paint removal, contaminated soil
Asbestos	Buildings under remediation, repair

Most hazardous substances to be listed depend on work to be done at a specific site. The Client is responsible for informing the contractors about hazardous substances on site which they may contact and providing MSDS. Nielsen Construction is responsible to see that information about all hazardous substances on a site is obtained and reviewed with employees.

5) HAZARDOUS NON-ROUTINE TASKS

It is likely that employees are required to perform hazardous non-routine tasks. These may include working in an area which contains hazardous substances already on site. Prior to starting work on such projects, each affected employee will be given information by their supervisor about hazards to which they may be exposed during such an activity.

This information will include:

(a) Specific hazards
(b) Protective/safety measures which must be utilized.
© Measures the company has taken to lessen the hazards including ventilation, respirators, presence of another employee and emergency procedures.

6) HAZARDOUS SUBSTANCES IN UNLABELED PIPES

To ensure that our employees who work on unlabeled pipes have been informed as to the hazardous substances contained within, the following policy has been established:

Prior to starting work on unlabeled pipes Kevin Nielsen will obtain the following information from the Client regarding unlabeled pipes at the specific site.

(a) The hazardous substance in the pipe.
(b) Potential hazards
© Safety precautions which shall be taken.

7) INFORMING CONTRACTORS

To ensure that subcontractors work safely at our sites, it is the responsibility of Kevin Nielsen to provide subcontractors the following information:

a. Hazardous substances to which they may be exposed while on the job site.
b. Precautions the employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

8) CHEMICAL STORAGE

Classes of chemicals must remain separated during storage to reduce the possibility of dangerous chemical reactions caused by accidental mixing.

Use either distance or barriers to isolate chemicals into the following groups:

(a). Explosives should be stored separately outdoors.

(b) Flammable liquids such as acetone, aromatics ethers, and alcohols should be placed in approved fire lockers.

© Other liquids such as chloroform and trichloroethane should be stored separately.

(d) Acids such as nitric, sulfuric, hydrochloric. Store acetic acid separately as it is flammable.

(e) Bases such as sodium hydroxide, and ammonium hydroxide

(f) Oxidizing substances such as peroxides.

Chemicals must not be stored in the same refrigerator used for food storage. Refrigerators used for storing chemicals must be identified by labeling.

9) CHEMICAL DISPOSAL

Federal and state regulations mandate strict disposal procedures for chemicals. To comply with these regulations all Nielsen Construction employees must observe these procedures:

Routine Disposal of Chemicals

(a) The disposal of hazardous chemicals to the sanitary sewer is not permitted. The Safety Director will advise on the proper disposal of chemical wastes.

(b) Incompatible chemicals must not be mixed in the same container (e.g., acids should not be mixed with bases; organic liquids should not be mixed with strong oxidizing agents).

© Waste oils must be collected in 55-gallon drums. Solid materials must be stored in separate containers.

If any one has questions about this plan contact Kevin Nielsen. Our plan will be monitored by Kevin Nielsen and Kevin Nielsen to ensure that the policies are carried out and that the plan is effective.

_____

Kevin Nielsen, President

SAFETY CHECKLIST - HAZARDOUS SUBSTANCES COMMUNICATION

___ Is there a list of hazardous substances used in your workplace?

___ Is there a written hazard communication program dealing with Material Safety Data Sheets (MSDS), labeling and employee training?

___ Who is responsible for MSDS's, container labeling, employee training?

___ Is each container for a hazardous substance (i.e.) vats, bottles, storage tanks) labeled with product identity and a hazard warning?

___ Is there a Material Safety Data Sheet readily available for each hazardous substance used?

___ How will you inform other employers whose employees share the same work area where the hazardous substances are used?

___ Is there an employee training program for hazardous substance?

Does the Program include:

___ An explanation of what an MSDS is and how to use and obtain one?

___ MSDS contents for each hazardous substance or class of substances?

___ Explanation of "Right to Know:?

___ Identification of where employees can seeNielsen Construction 's written hazard communication program and where hazardous substances are present in their work area?

___ The physical and health hazards of substances in the work area, how to detect their presence, and specific protective measures to be used?

___ Details of the hazard communications program including how to use the labeling system and MSDS's?

___ How employees will be informed of hazards of non-routine tasks, and hazards of unlabeled pipes?

14. HEARING CONSERVATION PROGRAM

(1) RESPONSIBILITIES

a. The Safety Director, Kevin Nielsen will be responsible for scheduling audiometric tests, providing training re: the mandated training required by the Hearing Conservation Program, and selection of the proper hearing protection and training in its use. The Safety Director will keep on file all training documentation. Audiometric testing information will be kept in the employees' medical file.

b. Supervisors will be responsible for insuring that their employees are wearing the proper hearing protection for tasks which produce high noise levels or when they must work in noisy environments and that they are using the equipment properly.

c. Employees are responsible for correctly using the appropriate hearing protection, and ensuring that it is kept clean, repaired, and/ or replaced when needed.

(2) Most cases of hearing loss are caused by exposure to high levels of noise. At first, this loss seems to be temporary. Temporary hearing loss may occur after only a few minutes exposure to loud noise but, hearing is recovered after a period of rest and quite. If the noise exposure is repeated over time, only a partial recovery of hearing occurs and permanent hearing loss will become evident. Noise induced hearing loss is insidious. Often the employee is unaware that it is happening because loud noise causes high frequency hearing loss first, typically in the frequency range of 3,000 to 6,000 hertz (Hz). Losses in this range are not noticeable to the employee. As the exposure continues, over months or even years, the damage spreads to lower frequencies which are needed for speech perception. Workers' Compensation regards hearing losses in this range (the speech frequency range of 500 to 3,000 Hz) as being compensable.

(3) All cases of hearing loss should be evaluated by an otiological examination. The evaluation of hearing loss may be complicated by several factors, such as loss associated with aging, infections, tumors or other degenerative diseases.

(4) Cal/OSHA prescribes both the sound pressure limits and the duration of the noise exposure which cannot be exceeded without the use of employee hearing protection. The sound pressure levels are expressed as dBA or decibels A-weighted. A-weighting means that sound levels have been measured by special

filters which more accurately reflect the way the human ear responds to sound at different frequencies.

(5) When the daily noise exposure is composed of two or more periods of noise of different levels, the combined exposure must be computed, not the individual measurements.

(6) Both noise sound pressure and duration are important when assessing noise exposure. The louder the continuous noise exposure is, the shorter the period of time permitted without hearing protection.. Thus, an employee can be exposed to a continuous noise level of 90 dBA for 8 hours (TWA), but he can be exposed only 15 minutes to a noise level of 115 dBA. It is good practice to provide hearing protection to any employee who will be exposed to noisy environment for any extended length of time. A small but significant portion of the population is very sensitive to noise and may suffer hearing damage at levels of exposure below the protection mandated 90 dBA.

(7) Employees must not be exposed to impact noises (occurring at intervals greater than one per second) exceeding 140 dBA.

(8) HEARING CONSERVATION PROGRAM:

Employees exposed to 85 dBA TWA must be in a hearing conservation program. The requirements of this program are as follows:

a. All employees whose exposure equals or exceeds the action level (85 dBA TWA) must be offered hearing protection at no cost to themselves, properly fitted, and trained in its use.

b. Audiometric testing shall be made available to all employees whose exposure equals or exceeds the action level (85 dBA TWA).

c. Audiometric testing for baseline hearing acuity will be performed by a certified audiologist, within 6 months of an employee's initial exposure to 85 dBA or above. Audiometric testing will then be scheduled annually.

d. If it has been determined that a standard hearing threshold shift has occurred compared to an employee's baseline audiogram, then: An employee not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.

An employee already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing

protectors offering greater attenuation, if necessary. with hearing protectors

(9) TRAINING PROGRAM

a. All employees whose exposure equals or exceeds the action level (85 dBA TWA) must participate in a training program for all employees included in the hearing conservation program. This training program must be repeated annually and employee documentation of this training must be obtained and kept on file.

b. The training program shall consist of informing the employees of the following:

The effects of noise on hearing.

The purpose of hearing protectors, the advantages, disadvantages, and protection factors of various types, and how to select, fit, use, and care for them.

The purpose of audiometric testing and how it works.

The hearing standard (CCR Title 8, Article 105) shall be posted in the workplace and be available to any employee on request.

(10) Noise exposure can be reduced by using engineering controls, administrative procedures, or personal protective devices.

Engineering Controls include:

a. Proper design, repair, and upkeep of equipment.
b. Modification of noise transmission through mufflers, vibration dampeners, sound insulation on ceilings and walls, and barriers between noise and personnel.

Administrative Procedures include:

a. Rescheduling of jobs.
b. Rotation of personnel

Personnel Protective Devices: include:

a. Ear plugs
b. Earmuffs

(11) Safety and Health regulations require that engineering controls be instituted first as a method to control noise exposure. Then administrative controls may be instituted. Finally, if these control measures cannot accomplished, personnel must be protected with suitable personal hearing protection devices.

___ Are there areas in the workplace where continuous noise levels exceed 85 dBA?

___ Are noise levels being measured using a sound level meter or an octave band analyzer, and records being kept?

___ Have you tried isolating noisy machinery from the rest of your operations?

___ Have engineering controls been used to reduce excessive noise levels?

___ Where engineering controls are determined not feasible, are administrative controls (i.e. worker rotation) being used to minimize individual employee exposure to noise?

___ Is there an ongoing preventive health program to educate employees in safe levels of noise and exposure, effects of noise on their health, and use of personal protection?

___ Is the training repeated annually for employees exposed to continuous noise above 85 dBA?

___ Have work areas where noise levels make voice communication between employees difficult been identified and posted?

___ Is approved hearing protective equipment (noise attenuating devices) available to every employee working in areas where continuous noise levels exceed 85 dBA?

___ If you use ear protectors, are employees properly fitted and instructed in their use and care?

___ Are employees exposed to continuous noise above 85 dBA given periodic audiometric testing to ensure that you have an effective hearing protection system?

15. AIR MONITORING AND LEVELS OF PPE

The following equipment may be used to monitor conditions at specified sites.. See the specific Site Safety Plan for the equipment to be used at that project..

LEL/O2 monitor	HNU	OVA
Aerosol Monitor	H2S Monitor	Radiation Meter
Detector Tubes	Heat Stress Monitor	Dupont Sampling Pumps
High Volume Sampling	Charcoal Tubes	Silica Gel Tubes
PVC Filters	ORBO Tubes	Impingers

Criteria for Worker and Surrounding Population Protection - Specific levels of airborne contaminants at the site will be identified. Exposure levels will be compared to each chemicals' respective Threshold Limit Value (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) or established Action Level. The TLV will be used to determine the amount of chemical exposure permissible to an unprotected worker. There are three categories of TLV's:

a. Threshold Limit Value - Time Weighted Average (TLV-TWA) is the average concentration during a normal 8 hour work day or 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day without adverse effect.

b. Threshold Limit Value - Short Term Exposure Limit (TLV-STEL). The maximum concentration to which workers can be exposed for a period of up to 15 minutes continuously without suffering from 1) irritation, 2) chronic or irreversible tissue change, or 3) narcosis of sufficient degree to increase accident proneness, impair self-rescue, or materially reduce work efficiency, provided no more than four excursions per day are permitted, with at least 60 minutes between exposure periods, and the TLV-TWA also is not exceeded. The STEL should be considered a maximum allowable concentration, or ceiling, not be exceeded at any time during the 15 minute excursion period.

c. Threshold Limit Value - Ceiling (TLV-C). This is the concentration that should not be exceeded even instantaneously.

Action Levels have been established as a guidance to determine the appropriate respiratory and other personal protective equipment to be worn by site personnel. The Action Levels used will generally be one-tenth (1/10) each contaminant's respective OSHA Permissible Exposure Limit (PEL) or ACGIH Threshold Limit Value (TLV), whichever is lower for personnel monitoring and indicator chemicals.

For Nielsen Construction activities, the general Action Levels for personal protective equipment are:

Level D - Level D is the basic uniform and will be worn for all site operations. Level D protection will be selected if monitoring indicates that:

a. no airborne volatile organic compounds above background are present; and

b. nuisance dust concentrations are below 5 mg/m^3 in the breathing zone;

c. other contaminant concentrations are less than 50% of the respective PEL or TLV, whichever is less.

Level C - Level C protection will be selected if monitoring indicates that:

a. airborne volatile organic compound levels for unknowns are 5 ppm above background for two successive readings; or

b. particulate concentrations are above 5 mg/m^3 above background in the breathing zone or 50% of the respective PEL or TLV.

c. other contaminant concentrations are greater than 50% of the TLV or PEL, and less than 10 times the TLV or PEL.

Level B - Level B protection will be selected if monitoring indicates that:

a. total unknown volatile organic compound levels are 50 ppm above background in the breathing zone; or

b. other contaminant concentrations are greater than 10 times the TLV or PEL.

The Air Monitoring Plan defines long term monitoring procedures. However, when long term air monitoring is not performed to determine airborne contaminant concentrations, the direct reading aerosol monitors total organic and LEL/O_2 will be utilized to evaluate contaminant exposures. Should the real time aerosol monitor indicate dust levels in excess of the 1.5 mg/m^3 action level or 5 ppm above background for Total Organic vapors, engineering/administrative controls will be implemented. Should ambient levels of indicator chemicals be identified at concentrations above 10% of PEL, notification procedures will be implemented. All air monitoring results will be present at the weekly safety meeting. In addition, quantitative air monitoring will be implemented to determine employee exposures and environmental concentrations.

Personal Protective Equipment (Levels of):

The following is a brief description of the personal protective equipment which may be required during various phases of the project. Although there is some flexibility to custom fit the actual items of protective equipment to the real-life situation, in general the levels of protection are defined as follows.

LEVEL A - The highest level of protection used when:

Unknown chemicals are involved and there is high risk for chemical release.
Chemical concentrations are known to be above safe levels (IDLH atmospheres).
Extremely hazardous substances are present or suspected.
Chemicals and/or vapor and mists are destructive to tissue.
Oxygen deficient atmospheres or confined space conditions.

LEVEL B - The second highest level of protection used when:

Concentrations of chemicals in the air are IDLH or above the protection factor provided by a APR with full-face mask.
Oxygen deficient atmospheres or confined space conditions.
Vapor absorption or contact with skin not critical.

LEVEL C - An intermediate level of chemical protection used when:

Air concentrations of chemical are potentially above or known to be above ACGIH TWA-TLVs and APR will provide adequate protection
Non-IDLH atmospheres
Chemicals are not destructive to skin

LEVEL D - Minimum level of chemical protection used when:
No concentrations of chemicals in excess of ACGIH TWA-TLV's
No hazardous effect from skin contact or inhalation

Minimum OSHA-recommended Requirements for Worker Protective Levels

Protection Level	Equipment
Level A	(1) Pressure-demand, full-face SCBA[1] or pressure-demand air-supplied respirator with escape SCUBA (2) Fully encapsulating, chemical-resistant suit (3) Inner and outer chemical-resistant gloves (4) Chemical-resistant safety boots (5) Hard hat
Level B	(1) Pressure-demand, full-face SCUBA or pressure-demand air-supplied respirator with escape SCUBA (2) Chemical-resistant clothing (overalls and long-sleeved jacket; hooded one- or two-piece chemical splash suit; disposable chemical-resistant one-piece suit)

	(3)	Inner and outer chemical-resistant gloves
	(4)	Chemical-resistant safety boots
	(5)	Hard hat
Level C	(1)	Full-faced, air-purifying, canister-equipped respirator
	(2)	Chemical-resistant clothing (overalls and long-sleeved jacket; hooded, one- or two-piece chemical splash suit; disposal chemical-resistant one-piece suit)
	(3)	Inner and outer chemical-resistant gloves
	(4)	Chemical-resistant safety boots
	(5)	Hard hat
	(6)	Safety glasses, goggles, or face shield as necessary
Level D	(1)	Safety boots
	(2)	Safety glasses or splash goggles
	(3)	Hard hat
	(4)	Gloves as necessary
	(5)	Standard work uniform or coveralls

[1]SCBA = Self-contained breathing apparatus

16. ELEVATED WORK SURFACES

General

(1) Avoid use of makeshift work platforms by providing portable ladders and scaffolds.

(2) Insure that job-built elevated work surfaces are inspected by a competent person other than the individual who erects it.

(3) Avoid working from elevated surfaces where possible. Consider use of wands for spraying water or scrapers with extended handles.

Ladders

1 Ladders must be in good repair, made of the proper material, and be the right length and type of ladder for the job. Never use a damaged ladder. Destroy it. Never paint a wooden ladder. If the ladder is to be used near electrical equipment, it must be non conducting. Store ladders in a designated area which is easily accessible, away from harsh weather and excessive heat. Provide supports when storing ladders horizontally.

2 Portable ladders must be used as ladders only. Do not use as substitutes for horizontal platforms, runways, or scaffolds. Do not place in front of doors, or on unstable bases such as boxes, drums, etc. A worker on the ladder should be able to reach the work without using the top or next to the top steps. Only the step parts of the ladder should be used for climbing.

3 The proper placement of a ladder can be effected by placing the base of the ladder to that its distance from the vertical wall is equal to one quarter of the vertical distance from the base of the ladder to the place where it rests on the building. Ladders must be climbed up or down facing the ladder while holding on with both hands. Carry tools in a tool belt or raise them up to the job with a line attached to the top of the ladder. Tie extension ladders in place to insure they cannot slip sideways.

4 Ladders should have safety feet in good condition to keep the ladder from slipping.

5 Make a visual inspection of ladders before each shift.

Scaffolds

1 All scaffolds, whether fabricated on site, purchased, or rented must conform with the specifications found in ANSI A10.8, Safety Requirements for Scaffolding. Rolling scaffolds must maintain a 3:1 height to base ratio (use smaller dimension of base).

2 The footing or anchorage for a scaffold must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks must not be used to support scaffolds or planks. No scaffold may be erected, moved, dismantled, or altered unless supervised by competent persons. Scaffolds and their components must be capable of supporting at least four times the maximum intended load without failure.

3 Provide guard rails around the perimeter of the work surface regardless of scaffold height.

4 Wire, synthetic, or fiber rope used for suspended scaffolds must be capable of supporting at least 6 times the rated load. No riveting, welding, burning, or open flame work may be performed on any staging suspended by means of fiber or synthetic rope. Treated fiber or approved synthetic ropes must be used for or near any work involving the use of corrosive substances. All scaffolds, bosun's chairs, and other work access platforms must conform with the requirements set forth in the Federal Occupational Safety and Health Regulations for Construction, 29 CFR 1926.451, except where the specifications in ANSI A10.8 are more rigorous.

5 Ensure vertical members are braced to keep the scaffold plumb and level.

6 Deck the entire top portion of the work surface in lieu of using minimum planking dimensions.

7 Extend planks at least 6" over their supports and cleat or restrain them from movement.

8 Maintain mobile scaffold casters in good condition with position locking devices secured when employees are working the scaffold.

9 Never interchange scaffolding parts from different units.

10 Designate only competent persons to perform scaffolding repairs.

Fall Arrester Systems Required

When workers are required to work from surfaces that are in excess of 7-1/2 ft above an adjacent safe work place and are unprotected by railings, the following procedures and guidelines must be applied:

1) Before selecting personnel for work at elevated work stations, supervisors must consider the workers' physical condition, such as medical problems, fear of heights, and coordination.

2) Approved fall-arrester systems are required for all work at heights of 10 or more feet. A recommended fall-arrester system consists of a full body-harness, a lanyard consisting of ½ inch nylon rope or equivalent with a breaking strength of 5400 lb and a maximum length to provide for a fall no greater than 6 feet, and an anchored hook-up location.

3) Fall-arrester systems are recommended for light work at heights between 7-1/2 and 10 feet.

4) Fall-arrester systems are not required when work is being done while standing on a ladder. Ladders should be tied off.

5) Use of a controlled descent device is not necessary unless it is impossible to reach a stranded person by another means.

Personnel Platforms

1 Work may be performed from a crane-suspended platform where another procedure is not possible because of structure design or work site conditions.

2 Personnel platforms must be designed by a qualified engineer and reviewed by the Safety Director. The suspension system must minimize tipping. The platform must be designed

with a minimum safety factor of 5 based on the ultimate strength of the members, and the design must conform to 29 CFR 1926.550(g).

___ Are signs posted, when appropriate, showing the elevated surface load capacity?

___ Are surfaces elevated more than 30 inches above the floor or ground provided with standard guardrails?

___ Are all elevated surfaces (beneath which people or machinery could be exposed to falling objects) provided with standard 4-inch toe boards?

___ Is required headroom provided where necessary?

___ Is material on elevated surfaces piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading?

___ Are dock boards or bridge plates used when transferring materials between docks and trucks or rail cars?

___ Are all ladders maintained in good condition, joints between steps and side rails tight, all hardware and fittings securely attached, and moveable parts operating freely without binding or undue play?

___ Are non-slip safety feet provided on each ladder?

___ Are non-slip safety feet provided on each metal or rung ladder?

___ Are ladder rungs and steps free of grease and oil?

___ Is it prohibited to place a ladder in front of doors opening toward the ladder except when the door is blocked open, locked or guarded?

___ It is prohibited to place ladders on boxes, barrels, or other unstable bases to obtain additional height?

___ Are employees instructed to face the ladder when ascending or descending?

___ Are employees prohibited from using ladders that are broken, missing steps, rungs, or cleats, broken side rails or other faulty equipment?

___ Are employees instructed not to use the top step of ordinary stepladders as a step?

___ When portable rung ladders are used to gain access to elevated platforms, roofs and the like, does the ladder always extend at least 3 feet above the elevated surface?

___ Is it required that when portable rung or cleat type ladders are used, the base is so placed that slipping will not occur or it is lashed or otherwise held in place?

___ Are portable metal ladders legibly marked with signs reading "CAUTION" "Do Not Use Around Electrical Equipment" or equivalent wording?

___ Are employees prohibited from using ladders as guys, braces, skids, gin piles, or for other than their intended purposes?

___ Are employees instructed to only adjust extension ladders while standing at a base (not while standing on the ladder or from a position above the ladder?

___ Are metal ladders inspected for damage?

___ Are the rungs of ladders uniformly spaced at 12 inches, center to center.

17. CONFINED SPACE ENTRY

A General

The following personal protective equipment will be worn during confined space activities:

a. Safety Shoes (steel toe and chemical resistant)
b. Safety gloves
c. Coveralls or a Chemical resistant suit
d. Hard Hat
e. Safety goggles
f. Respiratory equipment (as required by nature of contaminants or possible contaminants at site.

B Procedures

(1) Follow Confined Space Program of host client at site and work closely with their security/safety department or Hazardous response team on all phases of the entry.

(2) Immediately prior to entry, verify radio communications with the radio dispatcher office.

(3) Review emergency/rescue procedures. The name of the Hazardous Material Squad Agency and directions on how they should be contacted shall be posted at each worksite.

(4) The space shall be emptied, flushed or otherwise purged of flammable, injurious or incapacitating substances to the extent feasible.

(5) Ensure that all lines to the confined space which contain inert, toxic, flammable, or corrosive materials are valved off and blanked or disconnected and separated.

(6) All impellers, mixers, or other moving equipment inside the confined space must be locked out.

(7) Assure that the space has continuous mechanical ventilation.

(8) The air shall be tested with an appropriate device to determine whether dangerous air contamination, oxygen deficiency and/or explosive hazard exists.

(9) **A CONFINED SPACE PERMIT** showing a record of the testing results, personal protective equipment required, emergency rescue equipment required, and any lockout procedures required shall be maintained at the work site. A confined space permit shall be issued for the shift in which the work is to be done. A new permit shall be issued at the beginning of each work shift. **IF THE SPACE ATMOSPHERE TESTS HAZARDOUS - STOP DO NOT ENTER!!!!**

(10) "Hazardous" is defined as an atmosphere, which after venting, has an oxygen level below 19.5% or above 23.5% by volume or a combustible gas content greater than 10% of its lower explosive limit (LEL) or the presence of any gas with a published PEL, or that is IDLH.

(11) Maintain a log at the worksite for recording:

a. Name of person(s) entering enclosed space
b. Name of standby person
c. Date and time of each entry and exit
d. Initial % Oxygen
e. Initial % Lower Explosive Limit value
f. Periodic meter readings or notation that continuous monitoring equipment was used

(12) All portable electrical equipment used inside the confined space must be either grounded and insulated, or equipped with ground fault protection.

(13) No welding or burning is to be conducted in a confined space unless the following procedures are met:

(a) Welding/burning permit must be obtained from the local fire department or on site fire department.

(b) All hoses are to be checked for leaks prior to entry.

© Compressed gas bottles are not allowed inside the confined space.

(d) Torches are to be lighted outside the confined area and the air inside the confined space is to be tested for an explosive atmosphere each time before a lighted torch is
to be taken into the confined space.

(e) Oxygen levels inside the confined space will be monitored continuously.

(f) Sufficient ventilation will be continuously provided to remove smoke and welding fumes and to replace oxygen consumed by welding and burning processes.

(14) Check confined space for decaying vegetation or animal matter which may produce methane.

(15) Assure that a means of rescue is immediately available, and suitable lightning is provided in the work area. In addition to the standby employee, at least one other trained rescuer must be in the vicinity. All rescuers must be appropriately trained and using approved, recently inspected equipment. This equipment includes self contained breathing apparatus (SCBA), and approved rescue equipment (tripod) which is capable of lifting an employee vertically from a top opening

(16) Standby rescue persons shall not enter the confined space without lifelines and self contained breathing equipment.

(17) At least one standby person shall remain outside the enclosed space with an effective means of communication with the person(s) within the enclosed space and with the training and means to effect rescue.

(18) Testing of the atmosphere shall be conducted with sufficient frequency to ensure that the development of dangerous air contamination and/or oxygen deficiency does not occur during the performance of any operation.

(19) **IF THE ATMOSPHERE BECOMES HAZARDOUS, ALL PERSONS ARE TO VACATE THE ENCLOSED SPACE IMMEDIATELY!! DO NOT RE-ENTER!!!!**

(20) Notify the office or site superintendent of the situation and proceed as instructed.

SAFETY CHECKLIST

___ Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?

___ Before entry, are all lines to a confined space, containing inert, toxic, flammable, or corrosive materials, valved off and blanked or disconnected and separated?

___ Is it required that all impellers, agitators, or other moving equipment inside confined spaces be locked-out if they present a hazard?

___ Is either natural or mechanical ventilation provided prior to confined space entry?

___ Before entry, are appropriate atmospheric tests performed to check for oxygen deficiency, toxic substances and explosive concentrations in the confined space?

___ Is adequate illumination provide for the work to be performed in the confined space?

___ Is the atmosphere inside the confined space frequently tested or continuously monitored during conduct of work?

___ Is there an assigned safety standby employee outside of the confined space, whose sole responsibility is to watch the work in progress, sound an alarm if necessary, and help render assistance?

___ Is the standby employee, or other employees, prohibited from entering the confined space without lifelines and respiratory equipment, if there is any question as to the cause of any emergency?

___ In addition to the standby employee, is there at least one other trained rescuer in the vicinity?

___ Are all rescuers appropriately trained and using approved, recently inspected equipment?

___ Does all rescue equipment allow for lifting employees vertically from a top opening?

___ Are there trained personnel in First Aid and CPR immediately available?

___ Is there an effective communication system in place whenever respiratory equipment is used and the employee in the confined space is out of sight of the standby person?

___ Is approved respiratory equipment required if the atmosphere inside the confined space cannot be made acceptable?

___ Is all portable electrical equipment used inside confined spaces either grounded or insulated, or equipped with ground fault protection?

___ Before gas welding or burning is started in a confined space, are hoses checked for leaks, compressed gas bottles forbidden inside the confined space, torches lighted only outside the confined area, and the confined area tested for an explosive atmosphere each time before a lighted torch is to be taken into the confined space?

___ If employees will be using oxygen-consuming equipment- such as salamanders, torches, furnaces- in a confined space, is sufficient air provided to assure combustion without reducing the oxygen concentration of the atmosphere below 19.5 percent by volume?

___ Whenever combustion-type equipment is used in a confined space, are provisions made to ensure that the exhaust gases are vented outside of the enclosure?

___ Is each confined space checked for decaying vegetation or animal matter which may produce methane?

___ Is the confined space checked for possible industrial waste which could contain toxic properties?

___ If the confined space is below the ground and near areas where motor vehicles are operating is it possible for vehicle exhaust or carbon monoxide to enter the space?

18. GAS DETECTOR USAGE

A General

Gas detectors will be used before:

1. Entering any confined spaces:
   a. Manholes
   b. Tanks
   c. Vaults
   d. Any enclosed area where hazardous gases may be present...

2. Lighting torches/burners on or around:
   a. Spreader Trucks

b. Heat Tanks
c. Nurse Tanks
d. Blenders
e. Any tank or vessel containing hydro-carbon petroleum based products...
f. When smoke is present from heating oil

3. Excavations where contaminated soil/liquids may be present.

B Procedures

Calibration and Testing will be performed by Kevin Nielsen or someone appointed directly by Kevin Nielsen.

C Training

Training on the use and calibration of each air monitoring instrument shall be provided by the manufacturer's representative for the instrument at the time of purchase and periodically when needed.

Operation manual and calibration gas shall be kept with the instrument at all times.

19. ELECTRICAL - GENERAL RULES

(1) Nielsen Construction workers will be aware of the OSHA Electrical Safety Orders and will comply with the same. Employees will be required to report any hazard to life or property that is observed in connection with a job, electrical equipment or lines.

(2) Employees will be expected to make preliminary inspections or appropriate tests to determine conditions before starting work. When equipment or lines are to be serviced, maintained or adjusted, employees must be aware of open switches.

(3) Lockouts must be tagged whenever possible.

(4) Equipment such as electrical tools or appliance must be grounded or of the double insulated type.

(5) Extension cords being used must have a grounding conductor. The workplace supervisor must be aware if multiple plug adapters are prohibited.

(6) If ground-fault circuit interrupters are installed on each temporary 15 or 20 ampere, 120 volt AC circuit at locations where construction, demolition, modifications, alterations or excavations are being performed, temporary circuits must be protected by suitable disconnecting switches or plug connectors with permanent wiring at the junction.

Electricians must be Aware of the Following:

1 Exposed wiring and cords with frayed or deteriorated insulation must be repaired or replaced.

2 Flexible cords and cables must be free of splices or taps.

3 Clamps or other securing means must be provided on flexible cords or cables at plugs, receptacles, tools, equipment. The cord jacket must be held securely in place.

4 All cord, cable and raceway connections must be intact and secure.

5 In wet or damp locations, electrical tools and equipment must be appropriate for the use or location, or otherwise protected.

6 The location of electrical power lines and cables (overhead, underground, under floor, other side of walls) must be determined before digging, drilling or similar work is begun.

7 All metal measuring tapes, ropes, hand lines or similar devices with metallic thread woven into the fabric are prohibited for use where they could come in contact with energized parts of equipment or circuit conductors.

8 The use of metal ladders is prohibited in areas where the ladder or the person using the ladder could
come in contact with energized parts of equipment, fixtures or conductors.

9 All disconnecting switches and circuit breakers must be labeled to indicate their use or equipment served.

10 A means for disconnecting equipment must always be opened before fuses are replaced.

11 All interior wiring systems must include provisions for grounding metal parts or electrical raceways, equipment and enclosures.

12 All electrical raceways and enclosures must be fastened securely in place.

13 All energized parts of electrical circuits and equipment must be guarded against accidental contact by approved cabinets or enclosures.

14 Sufficient access and working space will be provided and maintained around all electrical equipment to permit ready and safe operations and maintenance.

15 All unused openings (including conduit knockouts) in electrical enclosures and fittings must be closed with appropriate covers, plugs or plates.

16 Electrical enclosures such as switches, receptacles, junction boxes must be provided with tight-fitting covers or plates.

17 Disconnecting switches for electrical motors in excess of two horsepower must be capable of opening the circuit when the motor is in a stalled condition without exploding. (Switches must be horsepower rated equal to or in excess of the motor hp rating.)

18 Low voltage protection must be provided in the control device of motor driven machines or equipment which could cause injury from inadvertent starting.

19 A motor disconnecting switch or circuit breaker must be located within sight of the motor control device.

20 Motors:

a) must be located within sight of their controller;
b) must have their controller disconnecting means capable of being locked in the open position;
c) or must have separate disconnecting means installed in the circuit within sight of the motor.

21 A controller for a motor in excess of two horsepower must be rated equal to but not in excess of the motor it services.

22 Employees who regularly work on or around energized electrical equipment or lines will be instructed in cardio-pulmonary resuscitation (CPR) methods.

23 Employees needing to work on energized lines or equipment over 600 volts will be specially trained and certified.

___ Are your workplace electricians familiar with the Cal/OSHA Electrical Safety Orders?

___ Do you specify compliance with Cal/OSHA for all contract electrical work?

___ Are all employees required to report as soon as practicable any obvious hazard to life or property observed in connection with electrical equipment or lines?

___ Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?

___ When electrical equipment or lines are to be serviced, maintained or adjusted, are necessary switches opened, locked out and tagged whenever possible?

___ Are portable electrical tools. vacuum cleaners, polishers, and equipment grounded or of the double insulated type?

___ Do extension cords being used have a grounding conductor?

___ Are multiple plug adapters prohibited?

___ Are ground-fault circuit interrupters installed on each temporary 15 or 20 ampere, 120 volt AC circuit at locations where construction, demolition, modifications, alterations or excavations are being performed.

___ Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?

___ Is exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?

___ Are flexible cords and cables free of splices or taps?

___ Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, and is the cord jacket securely held in place?

___ Are all cord, cable and raceway connections intact and secure?

___ In wet or damp locations, are electrical tools and equipment appropriate for the use, or location, or otherwise protected?

___ Is the location of electrical power lines and cables (overhead, underground, underfloor, other side of walls) determined before digging, drilling or similar work is begun?

___ Are metal measuring tapes, ropes, handlines or similar devices with metallic thread woven into the fabric prohibited where they could come in contact with energized parts of equipment or circuit conductors?

___ Is the use of metal ladders prohibited in areas where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures or circuit conductors?

___ Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?

___ Are disconnecting means always opened before fuses are replaced?

___ Do all interior wiring systems include provisions for grounding metal parts or electrical raceways, equipment and enclosures?

___ Is sufficient access and working space provided and maintained about all electrical equipment to permit ready and safe operations and maintenance?

___ Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs or plates?

___ Are electrical enclosures such as switches receptacles, junction boxes provided with tight-fitting covers or plates?

___ Are disconnecting switches for electrical motors in excess of two horsepower capable of opening the circuit when the ;motor is in a stalled condition without exploding? (Switches must be horsepower rated equal to or in excess of the motor hp rating.)

___ Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?

___ Is each motor located within sight of its controller or the controller disconnecting means capable of being locked in the open position, or is separate disconnecting means installed in the circuit within sight of the motor?

___ Is the controller for each motor in excess of two horsepower rated in horsepower equal to or in excess of the rating of the motor it serves?

___ Are employees who regularly work on or around energized electrical equipment or lines instructed in cardio-pulmonary resuscitation (CPR) methods?

___ Are employees prohibited from working alone on energized lines or equipment over 600 volts?

20. EXCAVATION AND SHORING

A General

The following personal protective equipment will be worn during excavation activities:

a. Safety Shoes (steel toe and chemical resistant)
b. Safety gloves
c. Coveralls or a Chemical resistant suit
d. Hard Hat

e. Safety goggles
f. Respiratory equipment (as required by nature of excavation site)

B Precautions

(1) If the excavation site is exposed to vehicular traffic, wear proper warning vests marked with reflectorized or highly visible material.

(2) Respiratory equipment shall be worn if a possibility of exposure to hazardous dusts, gases, fumes, mists or an oxygen deficient atmosphere exists.

(3) Avoid walking or standing under any loads handled by power shovels, derricks or hoists.

(4) Refrain from depositing excavated materials and other obstructions on sidewalks, runways or walkways. Shore all undermined sidewalks to meet accepted engineering requirements.

(5) Lay all planks used for raised walkways and sidewalks parallel to the length of the walk and fasten the ends together.

(6) Use plank steps on strong stringers to provide support for raised walkways and sidewalks.

C Procedures

1 Prior to excavation, determine the location of any underground installations: (i.e., sewer, telephone and water lines, etc.)

2 Make all underground installations safe using proper shoring and support systems once they are excavated.

3 Locate and secure all trees, boulders and other encumbrances on the excavation site that pose a potential hazard to the excavation activity.

4 Provide proper shoring or ground slope for all walls and faces of excavations that pose a potential hazard to other workers in the vicinity.

5 Inspect all excavations following a rainstorm or hazard-increasing occurrence for the possibility of landslides and cave-ins.

6. Ensure all sides, faces, slopes, support equipment and shoring meet or exceed accepted engineering requirements.

7. Store excavated or other material a safe distance from the edge of the excavation (at least 2 feet away).

8. Inspect all materials used in support systems for defects and to ensure proper, serviceable condition.

9. Properly support all adjoining structures that are potentially endangered by the excavation.

10. Brace the excavation site in accordance with accepted engineering requirements if it is necessary to place or operate heavy objects in or near the excavation site.

11. Take special precautions when an excavation site has water or loose soil conditions, is adjacent to a previously back-filled excavation site, or is subject to excessive vibration.

21. TRENCHING

A General

The following personal protective equipment will be worn during excavation activities:

a. Safety Shoes (steel toe and chemical resistant)
b. Safety gloves
c. Coveralls or a Chemical resistant suit
d. Hard Hat
e. Safety goggles
f. Respiratory equipment (as required by nature of trench site)

B Precautions

(1) If the trenching site is exposed to vehicular traffic, wear proper warning vests marked with reflectorized or highly visible material.

(2) Respiratory equipment shall be worn if a possibility of exposure to hazardous dusts, gases, fumes, mists or an oxygen deficient atmosphere exists.

(3) Avoid walking or standing under any loads handled by power shovels, derricks or hoists.

(4) Refrain from depositing excavated materials and other obstructions on sidewalks, runways or walkways. Shore all undermined sidewalks to meet accepted engineering requirements.

(5) Lay all planks used for raised walkways and sidewalks parallel to the length of the walk and fasten the ends together.

(6) Use plank steps on strong stringers to provide support for raised walkways and sidewalks.

C Procedures

1 Under normal ground conditions, provide a stable means of support by shoring or sloping banks in excess of 5 feet.

2 Provide enough support through shoring, bracing, sloping or other acceptable means of sufficient strength to support the sides of trenches five or more feet in depth that are located in soft or unstable material.

3 Support the sides of trenches in hard or compact soil when the trench is more than 5 feet in depth and 8 feet in length either through shoring or sloping.

4 Inspect all support materials and braces to ensure that they are in good serviceable condition and free from defects.

5 Take extra support precautions when trenching near or adjacent to recently back-filled land, or in areas subject to excessive vibration.

6 When entering trenches with bell-bottom pier holes, properly install the appropriate removable casing to protect against shifts in the surrounding earth.

22. PUMPING/FUELING OPERATIONS

A General

The following personal protective equipment will be worn during excavation activities:

a. Safety Shoes (steel toe and chemical resistant)
b. Safety gloves (chemical resistant
c. Chemical resistant suit
d. Hard Hat
e. Safety goggles
f. Respiratory equipment (full-face)

B Pumping Procedures

(1) During pumping operations, ensure that at least one worker remains in close proximity to the transfer connection from the tank to the transfer apparatus.

(2) Refrain from venting petroleum or other hazardous liquid into the atmosphere, even if doing so would assist in the transfer process.

(3) When pumping any hazardous liquids from a UST (underground storage tank) to a *vehicle*, conduct the operation at a safe distance from the nearest building walls or openings (at least 25 feet for all openings and most structures, 10 feet from masonry walled buildings).

(4) When transferring hazardous liquids from UST's into *portable containers*, ensure that the nearest building wall or opening is at least 50 away.

(5) Do not perform pumping operations if any air intakes for either sealed combustion system appliances or mechanical ventilation systems are located within 10 feet of the transfer connection.

(6) Gage and charge fuel supply containers only in open air buildings specifically designed for that purpose.

(7) Use only pump and compression systems specifically designed for the transfer of petroleum or other hazardous liquid materials.

(8) Extinguish all open flames and sources of ignition within the legal limits of the pumping operations.

(9) Ensure all electrical wiring and equipment used in the transfer activities is properly designed for pumping of hazardous materials.

(10) Constantly monitor explosivity levels within the immediate vicinity of the transfer location throughout the duration of the pumping operation.

C Fueling

1 Do not fuel an internal combustion engine with a flammable liquid while the engine is running.

2 If spillage occurs during fueling, the spilled fuel must be completely cleaned up and vapors controlled before restarting the engine.

3 Insure that fuel tank cap is replaced and secured before starting the engine.

4 Insure that there is always metal contact between the container and the fuel tank.

5 Do not transfer gasoline in open containers.

6 Prohibit open lights, open flames or sparking or arcing equipment near fueling or transfer of fuel operations.

7 Insure the proper fueling hose for the specific type of fuel is being used.

8 Smoking is prohibited in the vicinity of fueling operations.

9 Prohibit fueling operations in buildings or other enclosed areas that not specifically ventilated for this purpose.

10 Where fueling or transfer of fuel is done through a gravity flow system, the nozzles must be of the self-closing type.

D Special Training Required

General Safety
Confined Space Entry
First Aid
Hazardous Materials
Mechanical Training (for pumping equipment)

23. MATERIAL HANDLING

A Manual Lifting

(1) Every work assignment begins and ends with materials being handled. No matter what the material is, accidents and injuries can be reduced with proper planning. A majority of incidents leading to injury, occupational illness, and property damage are the result of unsafe handling of materials and their improper storage.

(2) When confronted with a lifting and moving job, the first concern of an employee or a supervisor is whether this lifting can or should be done more efficiently and safely by mechanical devices rather than manually. Wherever possible, employees must be discouraged from lifting heavy or bulky objects that may overtax their physical capability.

(3) The Safety supervisor and supervisor of the job must ensure that employees have been trained on how to move objects safely by hand or with mechanical devices in the operations normal to the area. It is the supervisor's responsibility to enforce the use of safe lifting techniques and maintain lifting equipment in good mechanical condition.

(4) Employees are responsible for observing all established safety regulations relating to safe lifting techniques.

(5) Manual Lifting Rules

(6) Employees who have been assigned to tasks which require heavy lifting must be properly trained and physically qualified, by medical examination if deemed necessary.

(7) Before lifting, Inspect the load for sharp edges, slivers, and wet or greasy spots. Wear protective gloves when lifting or handling objects with sharp or splintered edges.

(8) Before lifting, View the area over which you will be carrying the load. Check for objects in your path or spills which could cause a trip or slip. How long is the distance you will need to carry the load? You may become fatigued and be unable to grip the load over long distances. Consider asking for help or asking for mechanical assistance.

(9) Examine the load and make a preliminary "heft" to be sure the load is easily within your lifting capacity. If it is not, get help.

(10) Ensure your footing is stable. Your feet should be about 10 to 15 inches apart. It may help to set one foot forward of the other.

(11) Squat in front of the object keeping your back straight and upright. Grip the object firmly and lift it by straightening your knees - not your back.

(12) Pull the load in as close to your body as possible. Do not carry objects with arms extended. Shift your feet, do not twist your body to turn or change position.

(13) Follow the above steps in reverse for setting an object on the ground.

B Mechanical Lifting

1 Rules

1) Objects that are too heavy or bulky for employees to move manually or which must be moved on a continual basis, must be moved by mechanical devices. Employees who operate power driven mechanical devices to lift objects (such as fork trucks) must be properly trained and qualified to perform these activities. See SOP for Fork Truck operation.

2) Pedestrian employees must be cautious of material handling equipment in their work areas. Never walk or move under a load supported by material handling equipment. Operators of material handling equipment must select a path to avoid the possibility of injury to employees should the material handling equipment fail.

3) Never leave a suspended load unattended. The load must be lowered to the working surface and the equipment secured before the equipment operator leaves the area. Do not work on suspended loads. Lower the load to the working surface and complete any tasks involving the load in a safe position.

2 Truck Loading

(a) Ensure that objects being loaded on trucks are secured to prevent shifting or falling of loads while the truck is moving.

(b) The wheels of trucks positioned at a loading dock must be chocked to ensure that the truck does not move while being loaded or unloaded.

(c) Dock boards or bridge plates must be in place when loading or unloading operations are taking place between vehicles and docks.

C Rigging

1. Planning for safe rigging and lifting must involve all parties including the rigging crew, the customer, and other contractors in the area. The lifting procedure should be developed and discussed with the rigging crew supervisor.

2. The customer is responsible for defining and requesting the move, for providing technical information on relevant characteristics of the apparatus, including special lifting fixtures when required, for providing suggestions on rigging and moving, and for assigning someone to represent them both in planning and while the job is being carried out.

3. The riggers are responsible for final rigging and for carrying out whatever moves have been designated. Before anything is moved, however, all parties must approve the rigging and all procedures associated with the operation.

4. Only those employees who are formally qualified by training and certification to operate a fork truck, crane, or hoist are authorized crew members.

5. The Safety Director is responsible for providing training programs followed by certification for employees who have demonstrated the ability to operate fork trucks of up to 4-ton capacity and for incidental crane operations that require no special rigging.

D Cranes

1. Bridge cranes are classified as cab-operated or pendant-operated. Mobile cranes consist of a boom and controls mounted on a truck chassis. Both types of cranes must be operated only by trained operators and so designated by the Safety Director. The Safety Director is also responsible for ensuring that operators are trained, carrying out the inspections and following the safe operating rules explained in the Operator/Rigger Training Program.

2. The Operator/Rigger Training Program is provided by the Safety Director. The training staff must consist of a qualified crane consultant, professional riggers, and the Safety Director.

3. Levels of expertise are:
   a. Professional Operator/Rigger: Person whose principal assignment includes crane operation and rigging functions. The professional operator/rigger must maintain the necessary qualifications.

   b. Incidental Operator/Rigger: Person who performs operating/rigging functions as an incidental part of his/her normal work assignment. Persons in this category are restricted to lower load limits and rigging of specific types of hardware.
   Incidental operator/riggers must be reexamined at least once every three years.
   Designated operator/riggers must have Government identification cards (Federal Form 46), endorsed appropriately.

4. Before an employee may begin operating any cranes, the Safety Director must arrange for the employee to receive incidental crane-operator training on the appropriate crane. Successful completion of the training must include an oral or written examination on the safety aspects of crane operation and a satisfactory

demonstration of operational skills. The Safety Director must determine that the applicant does not have any disqualifying medical or physical disabilities based on established requirements.

5. Loading the Crane

   a. The crane must not be loaded beyond its rated load and its rated capacity must be visibly marked on each crane. Hoist chain or hoist rope must be free of kinks or twists and must not be wrapped around the load. Crane operators and floor persons must follow the OSHA requirements relating to moving the load.

   b. Cranes must be visually inspected for defective components prior to the beginning of any work shift.

   c. All electrically operated cranes must be grounded.

   d. Operating controls must be clearly identified.

   e. Provide a fire extinguisher at the operator's station.

   f. An audible warning device must be mounted on each crane.

   g. Provide sufficient illumination for the operator to perform the work safely.

   h. If the crane is so designed that the boom could fall over backward, it must be equipped with boomstops.

   I. Each crane must a certificate indicating that required testing and examinations have been performed.

   j. Crane inspection and maintenance records must be maintained and available for inspection.

E Forklift Operators

1. Only drivers authorized by Nielsen Construction and trained in the safe operations of industrial trucks shall be permitted to operate fork lifts on the premises.

2. The rated capacity of the lift truck will be displayed on the vehicle so that it is visible to the driver.

3. When an industrial truck operates in areas where flammable gases, vapors, combustible dust, or ignitable fibers may be present in the atmosphere, the vehicle must be approved for such locations with a tag showing such approval posted on the vehicle itself.

4. Industrial trucks with internal combustion engines, operated in buildings or enclosed areas, should be carefully checked to ensure that the operation of the vehicle does not cause harmful concentration of dangerous gases or fumes.

5. Required Safety equipment

   (a) Brakes for industrial lift trucks must be effective and adequate to bring the vehicle to a complete safe stop while fully loaded

   (b) The parking brake must effectively prevent the vehicle from moving when unattended.

   (c) Every industrial truck must be equipped with a warning horn, whistle, gong, or other device which can be heard clearly above normal industrial noises.

   (d) Substantial overhead protective equipment will be provided on high lift rider equipment.

   (e) Directional lighting must also be provided on each industrial truck that operates in an area with less than 2 foot candles per square foot of general lighting.

6. Lift Truck Operating rules will be posted and will be strictly enforced. The following rules apply to all industrial trucks. These rules were promulgated by OSHA/Cal/OSHA and can be found in CCR Title 8, Article 25, Section 3664. Nielsen Construction 's truck drivers are to be familiar with these rules as part of their training.
   (a) Stunt driving and horseplay are prohibited.
   (b) No riders shall be permitted on vehicles unless provided with the proper riding facilities.
   (c) Riding on forks of lift trucks is prohibited.
   (d) Employees shall not place any part of their bodies outside the running lines of an industrial truck or between mast uprights or other parts of the truck where shear or crushing hazards exist.
   (e) Employees must not stand, pass, or work under the elevated portion of any industrial truck, loaded or empty, unless it is blocked to prevent it from falling.
   (f) The driver shall perform a safety check of the vehicles once per shift, and if it is found to be unsafe, it shall be reported immediately to the driver's supervisor. The vehicle will not be used again until it has been made safe. The following items shall be checked for proper functioning:
      (1) tires

(2) horn
(3) lights
(4) battery
(5) controller
(6) brakes
(7) steering mechanism
(8) cooling system
(9) lift system for forks (forks, chains, cable, and limit switches)

(g) No truck is to be operated with a leak in the fuel system.

(h) Trucks are not to exceed the authorized safe speed. Drivers are to maintain a safe distance from other vehicles (3 truck lengths), and have their trucks under control at all times.

(I) Drivers are not to pass each other at intersections, blind spots, or dangerous locations.

(j) The load shall not be carried so as to obstruct vision. If the load cannot be made smaller or shorter, the driver must travel with the load trailing.

(k) The driver must look in the direction of travel and must not move a vehicle until all persons are in the clear. The driver shall slow down and sound the horn at cross aisles and other locations, blind spots, or dangerous locations.

(l) Trucks shall not be driven up to anyone standing in front of a fixed object of such size that the person could be caught between the truck and object.

(m) Driving fork lift trucks on grades:
(1) When ascending or descending grades in excess of 10 percent, drive loaded
trucks with the load upgrade.
(2) On all grades, the load shall be tilted back and raised only as far as necessary to clear the road surface.

(n) Always carry forks as low as possible.

(o) When leaving vehicle unattended: (driver over 25 feet away from or out of sight of truck)
(1) The power must be shut off, brakes set, mast brought to the vertical position, and forks left in the down position. When left on an incline, the wheels must be blocked; or

(2) The power may remain on provided the brakes are set, the mast is brought to the vertical position, forks are left in the down position, and the wheels shall be blocked front and rear.

(p) When operator of truck is dismounted and within 25 feet while remaining in view of the truck, the load engaging means must be fully lowered, controls neutralized and the brakes set to prevent movement.

(q) Ensure that trucks are not operated on floors, sidewalk doors, or platforms that will not safely support the loaded vehicle.

® The driver will check the floors of trucks, and trailers for structural weaknesses and will ensure that trucks and trailers are securely blocked, wheels chocked, and brakes set before driving onto them.

(s) A loaded vehicle shall not be moved until its load is safe and secure.

(t) Tilting Loads: Tilting forward shall be limited to picking up a load and depositing a load. Backward tilting shall be limited to that necessary to stabilize the load.

F INDUSTRIAL TRACTORS

1. All tractors shall be equipped with rollover protective structures (ROPS) when operated by an employee.

2. Where a recognized hazard exists, operator protection from falling or rolling objects shall be provided by either ROPS or other independent means compatible with the use of ROPS.

3. Each ROPS shall bear a label with the following information:
Manufacturer's name and address
ROPS model number
Tractor makes, models, or series numbers that the structure is designed to fit.
A statement of compliance with the appropriate ASAE Standard or SAE Recommended practice.

4. All sharp edges and corners at the operator's station shall be appropriately treated to minimize operator injury in the event of upset.

5. Batteries, fuel tanks, oil reservoirs, and coolant systems shall be constructed and located or sealed to assure that spillage will not occur which might be harmful to the operator in the event of an upset.

6. Seat belt assemblies conforming to SE J386 JUN85, Operator Restraint Systems for Off-Road Work Machines hereby incorporated by reference shall be provided on all equipment where rollover protection is installed and employees shall be instructed in their use.

7. Where vehicles are equipped with rollover protective structures and are subjected to the hazard of falling trees, brush, or the breaking of tow lines or winch cables, provision shall be made to protect against such hazards by means of:
   a. Shear or brush deflector guards extending from the leading edge of the ROPS to the front part of the frame of the vehicle or radiator guard or equivalent operator protection.
   b. Breaking line guards consisting of adequately supported 1/4 inch woven wire screens having not less than 1 ½ inch nor more than 2 inch mesh shall be located between the lines and the operator

INSPECTION CHECKLIST - INDUSTRIAL TRUCKS - FORKLIFTS

___ Are only trained personnel allowed to operate industrial trucks?

___ Is substantial overhead protective equipment provided on high lift rider equipment?

___ Are the required lift truck operating rules posted and enforced?

___ Is directional lighting provided on each industrial truck that operates in an area with less than 2 foot candles per square foot of general lighting?

___ Does each industrial truck have a warning horn, whistle, gong or other device which can be clearly heard above the normal noise in the are where operated?

___ Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?

___ Will the industrial truck's parking brake effectively prevent the vehicle from moving when unattended?

___ Are industrial trucks operating in areas where flammable gasses or vapors, combustible dust or ignitable fibers may be present in the atmosphere, approved for such locations?

___ Are industrial trucks with internal combustion engines, operated in buildings or enclosed areas, carefully checked to ensure such operations do not cause harmful concentration of dangerous gases or fumes?

INSPECTION CHECKLIST - CRANES

___ Are the cranes visually inspected for defective components prior to the beginning of any work shift?

___ Are all electrically operated cranes effectively grounded?

___ Is a crane preventive maintenance program established?

___ Is the load chart clearly visible to the operator?
___ Are operating controls clearly identified?

___ Is a fire extinguisher provided at the operator's station?

___ Is the rated capacity visibly marked on each crane?

___ Is an audible warning device mounted on each crane?

___ Is sufficient illumination provided for the operator to perform the work safely?

___ Are cranes of such design, that the boom could fall over backward, equipped with boomstops?

___ Does each crane have a certificate indicating that required testing and examinations have been preformed?

___ Are crane inspection and maintenance records maintained and available for inspection?

24. DECONTAMINATION PROCEDURES

A General Personnel Decontamination:

Specific decontamination procedures depending upon the project are included in each site plan. Below are general procedures outlined according to the level of protective equipment required for the project.

1. LEVEL A - Segregated equipment drop, boot cover and glove wash, boot cover and glove rinse, tape removal, boot cover removal, outer glove removal, suit/safety hat removal, SCBA backpack removal, inner glove removal, inner clothing removal, field wash, redress.

2. LEVEL B - Segregated equipment drop, boot cover and glove wash, boot cover and glove rinse, tape removal, boot cover removal, outer glove removal, safety boot removal, SCBA backpack/airline removal, facepiece removal, inner glove removal, inner clothing removal, field wash, redress.

3. LEVEL C - Segregated equipment drop, boot cover and glove wash, boot cover and glove rinse, tape removal, boot cover removal, outer glove removal, safety boot removal, splash suit removal, facepiece removal, inner glove removal, inner clothing removal, field wash, redress.

4. LEVEL D - Segregated equipment drop, boot and glove wash, boot and glove rinse.

B Equipment and Materials Decontamination:

1. The following procedure may be used for decontaminating equipment and materials: (See SSP for Specifics)

    a. Contaminated materials will be scraped and removed from the object.
    b. The objects will be washed and scrubbed with a detergent solution.
    c. The object will be rinsed using a potable water and a low volume, high pressure washer.

2.. Vehicle Decontamination: - (Heavy Equipment) The following procedure will be utilized for decontaminating vehicles:

    a. Earthen materials will be scraped and removed from the vehicle as needed.

b. The appropriate areas (tires and/or undercarriage will be rinsed as needed using potable water and a low volume, high pressure washer.

c. All vehicles will remain in secured area. Decontamination will be conducted at the end of cleanup or as needed.

3. Decontamination Equipment:
The following items are available to be used in decontamination of equipment. See the SSP for specific information for each project.

Disposable protective clothing/equipment	Water
Low pressure	High pressure
Deionized Water	Steam
Detergent/Water	Compressed air
Scrub brushes/scrapers/sponges	Chemical detoxification
Acids/Bases/Solvents	Containers (buckets, wading pools)
Hoses	Visqueen

4. Disposal Procedures:
(contaminated equipment, supplies, disposable washwater):
All items shall be disposed in a manner agreeable to both representatives of Nielsen Construction , and in accordance with Federal, State and Local regulations.

Used PPE will be placed in containers, sealed, labeled and accumulated adjacent to the decontamination area. Any reusable PPE that is damaged beyond repair or that cannot be properly decontaminated will be contained in the same manner. Discharged PPE containers will remain closed except when adding to the contents. Once a used PPE container becomes full, it will be disposed of at permitted off-site as a special waste disposal facility.

HEAT STRESS PROGRAM

Our work is in the Construction Industry and we recognize the dangers of hot and cold environments.

Nielsen Construction recognizes that the Division of Occupational Safety and Health pursuant to Labor Code sections 6308 and 6317 and any other statutes conferring enforcement powers upon the Division. It is a violation of Labor Code sections 6310, 6311, and 6312 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees. Nielsen Construction specifically does not discriminate against any employee who exercises their rights, if fact we have an "Anybody can stop the job" if a safety issue arises.

Definitions.

"Acclimatization" means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

"Heat Illness" means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

"Environmental risk factors for heat illness" means working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

"Landscaping" means providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design of landscape plans and/or the construction (i.e., installation) of walkways, retaining walls, decks, fences, ponds, and similar structures, except for employment by an employer who operates a fixed establishment where the work is to be performed and where drinking water is plumbed.

"Oil and gas extraction" means operating and/or developing oil and gas field properties, exploring for crude petroleum or natural gas, mining or extracting of oil or gas or recovering liquid hydrocarbons from oil or gas field gases.

"Personal risk factors for heat illness" means factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

“Shade” means blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions.

“Temperature” means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the thermometer should be shielded while taking the measurement, e.g., with the hand or some other object, from direct contact by sunlight.

(c) Provision of water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in subsection (f)(1)(C), shall be encouraged.

Nielsen Construction provides access to shade under these conditions.

(1) Shade shall be be present when the temperature exceeds 85 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 85 degrees Fahrenheit, Nielsen Construction shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate 25% of the employees on the shift at any time, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shaded area shall be located as close as practicable to the areas where employees are working.

Shade shall be available when the temperature does not exceed 85 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 85 degrees Fahrenheit employers shall either provide shade as per subsection (d)(1) or provide timely access to shade upon an employee's request.

Employees are allowed and encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times.

Exceptions to the above requirements:

Where Nielsen Construction can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, Nielsen Construction may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.

High-heat procedures. Nielsen Construction will implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.

(2) Observing employees for alertness and signs or symptoms of heat illness.

(3) Reminding employees throughout the work shift to drink plenty of water.

(4) Close supervision of a new employee by a supervisor or designee for the first 14 days of the employee's employment byNielsen Construction , unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day.

Training

Nielsen Construction provides effective employee training. Effective training in the following topics will be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:

(A) The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.

(B)Nielsen Construction 's procedures for complying with the requirements of the Heat Stress Standard.

(C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.

(D) The importance of acclimatization.

(E) The different types of heat illness and the common signs and symptoms of heat illness.

(F) The importance to employees of immediately reporting toNielsen Construction , directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.

(G)Nielsen Construction 's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.

(H)Nielsen Construction 's 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.

Nielsen Construction 's procedures ensure that, in the event of an emergency, clear and precise directions to the work site are provided as needed to emergency responders. The person designated to be available to ensure that emergency procedures are invoked when appropriate is .

(2) Supervisor training. Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

(A) The information required to be provided by section (f)(1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

(D) How to monitor weather reports and how to respond to hot weather advisories.

(3)Nielsen Construction 's procedures for complying with each requirement of this standard required by subsections (f)(1)(B), (G), (H), and (I) shall be in writing and shall be made available to employees and to representatives of the Division upon request.

LIST OF TRAINING SUBJECTS

We train our workers about the following checked training subjects:

The employer's Code of Safe Practices.
Confined spaces.
Safe practices for operating any equipment.
Good housekeeping, fire prevention, safe practices for operating any construction equipment.
Safe procedures for cleaning, repairing, servicing and adjusting equipment and machinery.
Safe access to working areas.
Protection from falls.
Electrical hazards, including working around high voltage lines.
Crane operations.
Trenching and excavation work.
Proper use of powered tools.
Guarding of belts and pulleys, gears and sprockets, and conveyor nip points.
Machine, machine parts, and prime movers guarding.
Lock-out/tag-out procedures.
Materials handling.
Power tool operation.
Landing and loading areas, including release of rigging, landing layout, moving vehicles and equipment, and log truck locating, loading and wrapping.
Fall protection from elevated locations.
Use of elevated platforms, including condors and scissor lifts.
Driver safety.
Slips, falls, and back injuries.
Ergonomic hazards, including proper lifting techniques and working on ladders or in a stooped posture for prolonged periods at one time.
Personal protective equipment.
Respiratory Equipment.
Hazardous chemical exposures.
Hazard communication.
Physical hazards, such as heat/cold stress, noise, and ionizing and non-ionizing radiation.
Bloodborne pathogens and other biological hazards.

FORMS

Nielsen Construction

Accident/Exposure Investigation Report

Date:_____

Investigation Team:_____
Employee's Name:_____
Gender _____ Age:___ Job Description: _____
Accident Date & Time:_____
Date & Time Accident Reported:_____
Nature of Incident:_____
Nature of Injury:_____
Referred to Medical Facility/Doctor: Yes _____ No _____

Employee Returned to Work: Yes_____Date/Time:_____ No _____

Injured Employee Interview/Statement - Attached

Witnesses:_____
Witness Interviews/Statements - Attached

Photographs of Site - Attached

Diagrams of Site - Attached

Equipment Records - Attached - Reviewed Yes _____ No _____

Accident/Exposure Incident Description
Was the Unsafe Condition, or Practice Corrected Immediately?____ If No, What has been done to assure correction?

_____
_____
_____
_____
_____
_____

Signature of Investigator_____ Date_____

Nielsen Construction

Employee Safety Training Verification

Training

Employee's Name:_____

Hire Date: _____Job Description: _____

Training Program _____ Date Completed _____ Instructor _____

Comments

Nielsen Construction

Hazard Assessment Form

Investigation/Inspection & Abatement Record

Date of Investigation/Inspection:_____
Reason for Inspection: _____

_____

_____

_____

Name of Person(s) Conducting Investigation: _____

Name of Person(s) Consulted:_____

Description of Investigation: _____
_____
_____
_____
_____

Findings - Including Identification of Hazard & Severity:_____

_____

Steps Taken to Abate Hazard & Date of these Steps: _____
_____
_____

Nielsen Construction

Report of Safety Hazard

Employee Communication & Compliance

Name (optional)		**Supervisor's Name**	**Date**
Describe Substance, Equipment, Process, Practice or Workplace Condition	Health and/or Safety Hazard	Suggestions for Minimizing or Abating Hazard or for Training	Action

I verify that I have received and reviewed this Report of Safety Hazard.

Program Administrator Signature:_____ Date_____

Nielsen Construction
Employee Safety Meeting Attendance
Training

Date & Time:_____
Conducted By::_____
Subject Discussed::_____
Signatures of Employees:

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Approved by:_____ Date:_____

Nielsen Construction SITE SPECIFIC HEALTH AND SAFETY PLAN

Specific Location: Project Number:
Start Date: Estimated Completion Date:

Telephone:

Project Type: [ ] Phase One [ ] Phase Two [ ] Other

Description of Site Processes and Operations:

Project Objectives:

[ ] Site Characterization/Sampling
[ ] Chemical Disposition
[ ] Catalog and Quantification of Chemicals
[ ] Decontamination of Equipment
[ ] Other:
[ ] Other:

Emergency Procedures: (attach site map)

Specific Site Hazards:

[ ] Acids Strong [ ] Cyanides [ ] Metals
[ ] Acids Weak [ ] Dyes/Inks [ ] Pesticides
[ ] Asbestos [ ] Halogenated gases/solvents
[ ] Phenol/Cresol [ ] Caustics Strong [ ] Pigments
[ ] PCBs [ ] Caustics Weak [ ] Oils/Greases
[ ] Solvents [ ] Other:

Site Specific Features:

Physical and Biological Hazards:

[ ] Heat [ ] Cold [ ] Overhead Hazards
[ ] Noise [ ] Lifting [ ] Fall Hazards
[ ] Biological [ ] Confined Space [ ] Poisonous Plants

Protective Equipment:

A. Protective equipment level necessary for on-site activities (check all that apply):

[ ] Level A [ ] Level B
[ ] Level C [ ] Level D

B. Respiratory Equipment Needed:

Supplied Air: Air Purifying:
[ ] SCBA [ ] Full Face
[ ] Airline w/ escape SCBA [ ] 1/2 Face
[ ] Airline Cartridge:

C. Clothing/Equipment:

Clothing:
[ ] Work Uniform [ ] Tyvek
[ ] Saranex [ ] Polycoated Tyvek
[ ] Chemical Protective Suit

Gloves:
[ ] Surgical Latex [ ] PVC [ ] Nitrile
[ ] Viton [ ] Neoprene [ ] Silvershield (PCB)
[ ] Butyl

Miscellaneous:
[ ] Steel Toe Boots [ ] Chemical Resistant Boots
[ ] PVC Boot Covers [ ] Hard Hat
[ ] Safety Glasses [ ] Chemical Resistant Goggles
[ ] Face Shield [ ] Other _____

D. Work Procedures:

E. Personnel Decontamination Procedures:

F. Additional Information:

I have received a copy of the above information in it's entirety and understand the information within the Site Specific Health and Safety Plan.

Nielsen Construction
Truck Inspection Form

Date of Investigation/Inspection:_____
Make, Model of Vehicle_____
License Number or ID Number_____ Name of Person(s)
Conducting Inspection:_____ _
Name of Person(s) Notified :_____ _

Items Checked:		PASS	FAIL
(1)	tires	_____	_____
(2)	horn	_____	_____
(3)	lights	_____	_____
(4)	battery	_____	_____
(5)	controller	_____	_____
(6)	brakes	_____	_____
(7)	steering mechanism	_____	_____
(8)	cooling system	_____	_____
(9)	lift system for forks (forks, chains, cable, and limit switches)	_____	_____

Findings - Including Identification of Hazard & Severity:_____
_____
_____
_____
Steps Taken to Abate Hazard & Date of these Steps:_____
_____
_____
_____