

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 1 OF 16

1.0 SCOPE

This document is to be used by Contractors performing work on the property of the Owner. Its purpose is to define responsibility of outside Contractors while working on the property of the Owner and to provide minimum guidelines.

This document shall be binding under terms of the contract including other referenced standards such as, but not limited to the following:

- 15.1 Material Handling Slings
- 16.4.1 Excess Air Flow Safety Valves
- 17.10.1 Low-Velocity, Powder-Actuated Tools
- 18.1 Entering and Working in Confined Spaces
- 18.1.1 Respiratory Protection
- 18.2 Fall Prevention/Protection
- 18.3 Tag Out and Lock Out Procedures
- 18.6.1 Safe Handling of Compressed Gases
- 18.14 Welding & Cutting Containers
- 18.19 Excavation, Trenching and Shoring
- 32.60 Electrical High Voltage Maintenance & Design Safety Practices
- 33.052.1 Safety and Health Evaluation of Outside Contractors and Subcontractors
- 33.052.2 Contractor's Safety Check List
- 33.052.4 Application of the OSHA Hazard Communication Standard for Outside Contractors
- 33.053 Safety in Painting
- 33.054 Safety in Explosive Blasting
- 33.055 Foreword to Contracted Services Safety Prequalification Questionnaire
- 33.055.1 Contracted Services Safety Prequalification Questionnaire
- 33.261.8 Coal Tar, Organic & Glass Felt Built-Up Roofing Workmanship

PLAINTIFF'S
EXHIBIT
AL-1326

2.0 FEDERAL, STATE, AND LOCAL REQUIREMENTS

Comply with all applicable provisions of federal, state, local safety and health laws, and building codes. The most stringent of these is the minimum standard unless the provisions contained in applicable Owner Standards are most stringent, in which case Owner's Standards shall govern.

Nothing in this or other Owner Standards relieves the Contractor from fully understanding and complying with the Federal Occupational Safety and Health Act (OSHA), the Federal Mine Safety and Health Act, (MSHA), and all other applicable laws, regulations, and standards.

**PLANT SAFETY REGULATIONS SHALL APPLY TO CONTRACTOR'S PERSONNEL
WHERE THESE CONTRACTOR'S EMPLOYEES ARE IN THE PLANT OPERATING
AREA.**

This document is the property of Aluminum Company of America and must be returned on request. It shall not be reproduced or copied, in whole or in part, or used on behalf of others than Aluminum Company or its subsidiaries, without permission. It is provided solely for the purpose of disclosing Alcoa's approach and is not intended to be a recommendation for any recipient other than Alcoa. No warranties, guarantees or representations, express or implied are made as to the utilities or effectiveness of the methods, processes, products or procedures described or recommended herein.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 2 OF 16

**3.0 MEETINGS OF THE OWNER'S AND CONTRACTOR'S
REPRESENTATIVES**

3.1 PRE-BID SITE VISITATION

Before bidding on a contract, visit the site and review with the Owner the safety, fire, and security requirements outlined in this standard and other such requirements which may be applicable.

Discuss, also, any production interferences which may occur during the Contractor's work.

Contractor shall have completed prequalification process prior to bidding on work.

3.2 PRE-JOB SAFETY CONFERENCE

The Contractor's safety representative and site superintendent shall meet for a pre-job safety conference before the start of the job in order to assure a correct understanding of the safety and security requirements outlined in this standard but not necessarily limited to this standard. At this time, THE CONTRACTOR SHALL SUPPLY THE OWNER'S REPRESENTATIVE WITH A COPY OF CONTRACTOR'S SAFETY MANUAL, PROJECT SAFETY PLAN, AND A PLAN FOR SAFETY TRAINING OF CONSTRUCTION EMPLOYEES ON THE JOB.

The following rules shall also be reviewed and agreed upon at this meeting:

- 1) Before starting work in any area, contact the Owner's Engineer regarding hazards so as to understand and comply with specific safety regulations applicable to that area.
- 2) Hold meetings with all concerned to further outline the necessary job procedures and Owner's policy.
- 3) Hold additional briefings following the completion of one project and prior to the start of the next.
- 4) Notify Owner's Construction Engineer or Supervisor weekly as to work activity and schedule in the area where the work is being performed. More frequent reporting notification may be required at a respective location.

4.0 CONDUCT OF CONTRACTOR'S EMPLOYEES

While on the Owner's property, do not permit employees to:

- 1) Use or be under the influence of alcoholic beverages or illegal drugs.
- 2) Fight or gamble.
- 3) Abuse, steal or destroy property of the Owner or his employees.

This document is the property of Aluminum Company of America and must be returned on request. It shall not be reproduced or copied, in whole or in part, or used on behalf of others than Aluminum Company or its subsidiaries, without permission. It is provided solely for the purpose of disclosing Alcoa's approach and is not intended to be a recommendation for any recipient other than Alcoa. No warranties, guarantees or representations, express or implied are made as to the utilities or effectiveness of the methods, processes, products or procedures described or recommended herein.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 3 OF 16

- 4) Use the Owner's lunch wagons or canteens.
- 5) Use cameras without the written consent of the Owner's resident construction manager or plant manager.
- 6) Carry concealed weapons.

5.0 SECURITY

5.1 PERSONAL PROPERTY

In the interest of security and plant protection, Contractor's employees are discouraged from bringing packages other than essentials, such as lunches, tool boxes and work clothes, into the plant. All such items, as well as personal vehicles, are subject to inspection by the Owner's security personnel both upon entering and leaving the plant site. Failure to submit to inspection will be sufficient grounds for restricting the individual from further entry to the Owner's property.

5.2 AUTOMOBILE PARKING

Contractor's employees shall park their personal vehicles in those areas designated by the Owner. The Owner is not liable for these vehicles.

5.3 ENTRANCE IDENTIFICATION AND ROUTING

Identification badges showing the Contractor's name and employee's number shall be required and must be presented by the Contractor's employees before entrance will be permitted by the Owner's guards. Supply to the Owner, upon his request, a current list of employees' names and their badge numbers. Access gates and routes to the job site for Contractor's employees shall be designated by the Owner. Contractor's employees shall either walk to the site of the work from this gate or be hauled in Contractor's trucks or busses, sitting in a safe manner.

The construction work area may, at Owner's option, be fenced in such a manner that Contractor's employees must pass through a guarded man gate.

5.4 PASS PROCEDURE FOR VISITORS AND VENDORS TO CONSTRUCTION SITE

Each visitor must:

- 1) Obtain an Owner's pass approved by the Owner's authorized personnel.
- 2) Sign the register at the guard gate.
- 3) Be escorted by Owner's or Contractor's authorized personnel.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 4 OF 16

- 4) Use the protective safety equipment as required by the respective site regulations.

5.5 SERVICING OF EQUIPMENT

Representative must receive specific instructions concerning site hazards and safety and health regulations required in the area in which they will be working. Compliance with such instructions is mandatory.

6.0 FIRST AID AND ACCIDENT REPORTING

6.1 EMERGENCY DOCTOR AND AMBULANCE SERVICE

Before beginning work on a contract, select a qualified local doctor and ambulance service to be used in case of a serious personal injury to an employee. Notify the Owner's Representative of your selection.

Post numbers for emergency calls at all telephones.

6.2 PERSONAL INJURY AND PROPERTY DAMAGE

When an accident results in injury, submit to the Owner, within 24 hours, a copy of the OSHA Form 101 Report or equivalent detailing the accident. The reporting of serious injuries (OSHA recordables) shall be made immediately to the respective agency and the OSHA Form 101 prepared immediately, for the Owner's review.

Prepare a monthly injury summary report for the Owner. Details shall be maintained at the location. The use of OSHA Form #200 serves as a guide form.

7.0 FIRE PROTECTION

7.1 FIRE REGULATIONS

Observe the Owner's existing fire prevention and protection regulations at the location where the work is to be performed.

7.2 TEMPORARY BUILDINGS

The type of construction, i.e., combustible or non-combustible, and location of temporary buildings shall be approved by the Owner's construction engineer, in conjunction with the supervisor of plant fire protection.

Temporary buildings located within another building or structure shall be of either a non-combustible construction or of a construction having a fire resistance of not less than 1 hour.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 5 OF 16

Temporary buildings, located other than inside another building and not used for the storage, handling, or use of flammable or combustible liquids, flammable gases, explosives, or blasting agents, or similar hazardous occupancies, shall be located at a distance of not less than 10 feet from another building or structure. Groups of temporary buildings, not exceeding 2,000 square feet in aggregate, shall, for the purposes of this part, be considered a single temporary building.

7.3 HEATING FACILITIES

Heating facilities for temporary buildings within the Owner's plant site shall be operated by electricity, propane gas, LPG, steam or other types of fuel approved by the Owner. Kerosene-, wood-, or oil-fired salamanders shall not be permitted inside temporary buildings. Stoves or heaters shall be properly vented, and all vent pipes shall have tight joints and be well supported. Each heating facility shall have the following information permanently affixed to the unit: 1) clearances, 2) ventilation, 3) fuel-type and input pressure, 4) lighting, extinguishing and relighting instructions, 5) electrical power supply characteristics. Follow the requirements set forth in ANSI A10.10, "Safety Requirements for Temporary and Portable Space Heating Devices and Equipment."

7.4 TRANSPORTING FLAMMABLE LIQUIDS

For transporting flammable liquids, use containers approved by Underwriters' Laboratories, and clearly label them to identify the contents.

7.5 PRECAUTIONS FOR FIRE HAZARD AREAS

When work is to be done in critical fire-hazard areas designated by the Owner, hold a special fire-prevention meeting with the Owner's Construction Engineer, the supervisor of plant fire protection, and with operating and maintenance supervisors in the department concerned to familiarize the Contractor with the potential hazards and the precautions that must be taken.

7.6 OWNER'S FIRE BRIGADE

Immediately notify the appropriate Owner's contact person in the event of any fire. Notification procedures are to be established by agreement between the Contractor's and the Owner's Engineer or Owner's supervisor of plant fire protection. If there is no fire brigade, outside help will have to be obtained.

7.7 PROHIBITION OF OPEN FIRES

Open fires are prohibited.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 6 OF 16

7.8 REFUELING OF VEHICLES

Refuel vehicles such as small trucks, tractors or autos only in predesignated outdoor areas. As a minimum, observe the following procedures for refueling:

- 1) Shut off the vehicle engine.
- 2) Do not smoke.
- 3) Do not over-fill fuel tanks.
- 4) When the fuel is liquid propane gas, ground the nozzle of the fuel hose to the vehicle filler pipe with a ground wire.

7.9 STORAGE OF FLAMMABLE LIQUIDS

- 1) Do not store flammable liquids inside buildings unless approved by the supervisor of plant fire protection who will also designate container capacity and design.
- 2) Outside temporary/portable storage tanks of 1000 gallon maximum size shall be placed a minimum of 75 feet from buildings, construction equipment, parking lot, etc., to minimize their exposure to a fire involving the tank. Place the tank in a diked or recessed area to contain spills equivalent to the capacity of the storage tank. These tanks shall be equipped with self-closing dispensing nozzles. Containers of flammable liquid with flash points below 140 Deg F (vapor pressure not exceeding 40 psi absolute at 100 Deg F) shall be provided with atmospheric and emergency relief vents equipped with flame arrestors. Tanks or drums from which such flammable liquids (by definition above) are dispensed shall be electrically grounded and shall be equipped with bonding wires to complete the grounding with the vessel into which the liquid is dispensed.
- 3) Paint horizontal type fuel tanks red with a two-inch yellow stripe on the circular circumference of all gasoline storage tanks 6" back from the front edge. Identify tanks with the contents stenciled (4" letters) neatly on all viewable sides of the tank.
- 4) Transport flammable liquids through plant premises in FM approved or UL listed safety cans.
- 5) Supply tanks for fuel oil heaters shall not exceed 55 gallons capacity, shall be located outside of the building (trailer), and shall be equipped with shut-off valves (approved by Underwriters' Laboratories) at the tank.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 7 OF 16

- 6) No smoking or open flames are allowed in flammable-liquid storage areas. Post conspicuous and legible signs prohibiting smoking.
- 7) Provide portable, dry-chemical, fire extinguishers for fuel storage tanks, the size of which is determined by NFPA.

7.10 PORTABLE FIRE EXTINGUISHERS

Provide portable fire extinguishers suitable for the potential hazard for equipment, office, building, and work activities as per instructions issued by the supervisor of plant fire protection.

Install portable fire extinguishers on all lubrication trucks and all other mobile equipment such as trucks, mobile cranes, service vehicles, etc.

7.11 SOLVENTS AND OTHER CLEANING AGENTS

Discontinue using solvents or other cleaning agents if requested by the Owner.

7.12 BURNING AND WELDING

7.12.1 Restricted Burning and Welding Areas

Perform burning and welding only in areas approved by the Owner's Construction Engineer or other designated person and with an approved welding or burning permit.

7.12.2 Burning and Welding Precautions

Remove all combustibles, provide a fire watch when necessary, and supply fire extinguishers or other fire-fighting equipment prior to burning or welding operations.

Take special precautions, including the use of fire blankets, when welding or cutting near highly combustible materials such as protective coatings (on various types of insulation), freshly painted surfaces and oily surfaces. The fire watch shall stand in the immediate area in sight of the welding or burning with the fire extinguisher in hand. If impractical for the fire watch to stand in the immediate area of welding and burning, then the Owner and the Contractor must agree on the fire watch arrangement.

Welding or burning on containers shall be in accordance with Engineering Standard 18.14. Do not weld or cut on a container that has held combustibles until the container has been suitably cleaned.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 8 OF 16

7.12.3 Gas Cylinder Precautions

Observe the following precautions when using or storing oxygen, acetylene, and other flammable gas cylinders (Refer to Standard 18.6.1):

- 1) Oxygen storage areas shall be separated by at least 25 feet from combustible liquids, flammable materials or heat sources such as fire, molten metal or electric lines. If impossible to comply with this 25-foot distance, then isolate the oxygen storage area by a non-combustible fire barrier with a 1/2-hour fire-retardant rating.
- 2) Do not transport gas cylinders by overhead building cranes or truck cranes except with an approved holder or carrier designed for this purpose.
- 3) Properly vent oxygen storage areas.
- 4) Gas cylinders shall be stored, used, transported vertically, and adequately secured; keep valve caps in place when cylinders are not in use.
- 5) Maintain regulators and gauges for oxygen and fuel in proper working order while in use. Keep oil and grease away from oxygen cylinders, fittings, and hose.

7.13 FIRE PREVENTION INSPECTION

The Owner's safety engineer and supervisor of plant fire protection will inspect the area frequently enough to maintain good fire prevention awareness. All hazards will be brought to the attention of the Contractor, and immediate action shall be initiated to eliminate the hazard.

8.0 PERSONAL PROTECTIVE EQUIPMENT

Furnish protective devices and personal protective equipment. Contractor's personnel shall conform to plant safety regulations in operating areas. Failure to comply will result in orders to leave the area by responsible plant area supervision or construction management.

8.1 HEAD PROTECTION

The wearing of approved non-conductive safety hats is mandatory. Refer to ANSI Z89.1, PROTECTIVE HEADWEAR FOR INDUSTRIAL WORKERS.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 9 OF 16

8.2 EYE AND FACE PROTECTION

Eye and face protection is required in those areas specified by the Owner and must be used when engaged in drilling, grinding, burning, welding, chipping or when the risk to eye and face injury exists.

8.3 FALL PREVENTION / PROTECTION

Use life lines and safety belts/harnesses in all applications where required by federal, state or local safety standards, or Standard 18.2, Fall Prevention / Protection.

8.4 HEARING PROTECTION

Wherever feasible, reduce the noise levels or duration of exposures to those specified in OSHA Regulations, Table D-2, "Permissible Noise Exposures," in Section 1926.52. In addition, provide and use ear protection devices.

8.5 RESPIRATORY PROTECTION

In emergencies, or when controls required by OSHA 1926.55 fail or are inadequate to prevent harmful exposure to employees, provide and use appropriate respiratory protective devices. (Refer also to OSHA 1926.103 and Standard 18.1.1).

8.6 WEARING APPAREL

Appropriate work clothing shall be worn to minimize hazards from work and to comply with applicable location rules. As a minimum:

- 1) Shirts to be worn at all times.
- 2) No shorts.
- 3) Substantial leather work shoes--no canvas or track type shoes.
- 4) No loose clothing shall be worn.

9.0 IN-PLANT TRAVEL

9.1 PRESCRIBED PATHS

Contractor's employees shall use the prescribed walkways, crossovers, roadways and pathways to get to their related work areas.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 10 OF 16

9.2 PATHS NOT PRESCRIBED

If the Owner's permission is given to deviate from the prescribed areas, applicable plant safety rules shall apply to Contractor's personnel.

Do not climb on or over machinery unless authorized by Owner's production supervision or construction engineering.

9.3 MOTOR VEHICLES REQUIREMENTS

- 1) Maintain safe vehicle speed at all times. Speed limit 15 mph unless otherwise posted.
- 2) Obey all warning signs.
- 3) All construction vehicles on the Owner's site shall be subject to a safety inspection. Unsafe vehicles shall be removed from service until repaired.

9.4 WARNING SIGNS

Obey all warning signs.

9.5 TRAFFIC VOLUME

Keep in-plant traffic to a minimum. Safe speed--15 mph, unless otherwise posted.

9.6 VEHICLE REGISTRATION

Before starting work, submit to the Owner a list of Contractor's vehicles intended for use on the site.

9.7 VEHICLE PASS RENEWAL

Vehicle passes shall be issued for a particular time period as determined by the length of the contract. No passes are valid for more than 12 months.

10.0 OWNER'S EQUIPMENT

10.1 AUTHORIZATION REQUIRED

Do not operate any equipment belonging to the Owner unless authorized by the Owner's Construction Engineer or other designated person.

10.2 TAG OUT AND LOCK OUT PROCEDURES

Follow published location TAG OUT AND LOCK OUT PROCEDURES and adhere to the requirements of Engineering Standard 18.3.

Note that Contractors shall use personal danger tags and equipment danger tags similar to but distinguishable from the Owner's tags described in Section 5 of Standard 18.3. One way of making the Contractor's tags distinctive is to stamp CONTRACTOR in large bold letters on both sides of the Owner's tags.

11.0 CONTRACTOR'S MOBILE EQUIPMENT

11.1 EQUIPMENT NOT IN USE

When mobile equipment is not in use, it must be positioned where it will not obstruct railroad tracks, roadways, walkways, electrical lines or temporary passageways. All equipment not in use must be secured to prevent movement or operation.

Mobile cranes shall not be parked with the boom suspended over walkways, or other employee passageways, roadways, railroad tracks, electrical or mechanical equipment or buildings, or to obstruct building crane or bridge crane travel.

11.2 EQUIPMENT IN USE

When mobile equipment is in use, clearances shall be maintained to prevent anyone from being caught between the equipment and structures. The Contractor shall barricade the area or provide a flagman for the protection of persons passing by. Proper clearance distance from electrical lines shall be observed (Refer to Standard 32.60, Section K).

11.3 FLAGMAN ESCORT

Traveling truck cranes or crawler cranes shall be escorted by a flagman for traffic control and to prevent damage to plant power lines, pipe lines or building structures.

12.0 HOUSEKEEPING

12.1 DEBRIS AND REFUSE

Stack materials to maintain safe clearances and prevent toppling. Remove loose overhead material; promptly remove and properly dispose of oil and water spillage; dispose of garbage daily. Immediately remove or bend over any nails protruding from lumber. Do not allow refuse to accumulate so as to create a fire hazard. Cleanup to the Owner's satisfaction. Follow all applicable Safety and Health Standards.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 12 OF 16

Locate containers throughout the Contractor's work areas for collection of his employees' trash with collection at the Contractor's expense.

12.2 PASSAGEWAYS

Maintain unobstructed passageways for movement of fire trucks and ambulances.

12.3 BUILDING MATERIALS

Building material storage shall be at least six feet from the nearest rail along all railroad tracks and eight feet minimum along curved tracks.

12.4 MATERIALS TO BE REMOVED FROM A ROOF

Daily, before quitting time, roofing contractors and others must remove from the roof their combustible debris, mops, and combustible materials stored in cans, buckets or drums. Secure all loose materials, such as stacks of insulation, plywood, aluminum roof deck, steel deck, etc., so that they cannot be blown from the roof. In accordance with Standard 33.261.8 for Coal Tar, Organic & Glass Felt Built-Up Roofing, there shall be no tar kettles on a roof.

12.5 TOXIC OR FLAMMABLE SUBSTANCES

Properly dispose of daily all drums, containers, or hollow structures which have contained toxic or flammable substances

13.0 ELEVATED LEVELS

13.1 PLANT ROOFS AND TANK TOPS

Before going on any plant roof or top of tank, first contact the Owner's Construction Engineer for permission.

13.2 PROTECTION FROM FALLING MATERIALS

When workers are overhead, rope off the area below or take other equivalent measures to protect personnel below from falling materials. Conspicuously post warning signs. If conditions justify, in the opinion of the Owner's Engineer, station a flagman to warn persons in the vicinity.

13.3 MATERIALS THROWN OR DROPPED FROM ROOFS

Do not throw or drop materials from plant roofs unless permission has been granted by the Owner's Construction Engineer and a protected area has been established.

13.4 CRANES AND CRANE RUNWAYS

Before doing any work on or near existing cranes and crane runways, first make arrangements with the Owner's Construction Engineer who will arrange for permission to do so through the respective plant area superintendent.

Before any work commences on cranes or crane runways, padlock crane master switches in the OFF position and tag to indicate that the switch must not be placed in the ON position until tags have been properly removed. (Refer to Standard 18.3, Tag Out and Lock Out Procedures).

13.5 FALL PREVENTION/PROTECTION

Provide fall prevention/protection systems and assure they are proper for the exposure. (Refer to Standard 18.2, Fall Prevention/Protection)

14.0 WATER, STEAM COMPRESSED AIR, AND ELECTRIC POWER

14.1 POINTS OF CONNECTION

When steam, water, compressed air or electric power supplied by the Owner are used by the Contractor, the points of connection, method of connection and connected load shall be approved by the Owner's Construction Engineer.

14.2 PRESSURE VESSELS

All pressure vessels belonging to the Contractor shall comply with all applicable government codes and safety standards and shall be inspected and approved as often as required, but at least annually, by an authorized inspector designated by the Contractor. This applies to both fired and unfired vessels such as boilers, compressed air receivers and air compressors.

In the absence of applicable government codes and safety standards, fired and unfired pressure vessels shall meet all requirements of the applicable codes of the American Society of Mechanical Engineers (ASME). At the Contractor's request, the Owner's Construction Manager will provide copies of ASME codes for reference.

14.3 ELECTRIC POWER LINES

All work performed on or near power lines shall be in strict adherence to Standard 32.60, "Electrical High Voltage Maintenance and Design Practices". Contractor shall consult with owner's representative(s) prior to start of any work.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 14 OF 16

The Owner's power line supervisor will check locations where work is to be performed. If considered necessary, the Owner will assign a qualified member of his line department to the area to insure that the Owner's power line equipment is not damaged or service interrupted or personnel endangered.

Crane booms, load lines or swinging loads must maintain a 10-foot minimum clearance from power lines rated up to and including 50 kv. For voltages higher than 50 kv, the appropriate standard shall apply [1926.550(a)(15)]. A 10 foot minimum clearance shall apply to hand carried materials and equipment such as ladders, pipes, etc. (Refer to Standard 32.60).

14.4 GROUND-FAULT OR ASSURED EQUIPMENT GROUNDING PROTECTION

It is the Contractor's responsibility to provide the necessary equipment for ground-fault protection or the implementation of an assured equipment grounding conductor program in connection with the use of portable power tools. This applies also to the occasions where construction power is supplied by the Owner. Permanent building outlets shall not be used unless prior approval is granted by the Owner's representative, and the Contractor has determined at the point of outlet that the system is grounded and has made a record of this fact.

15.0 EXPLOSIVES

Consult with the Owner's Construction Engineer before using any explosives or blasting agents. The Contractor shall follow the requirements as stated in Standard 33.054, Safety in Explosive Blasting.

16.0 POWDER-ACTUATED TOOLS

Consult with the Owner's Construction Engineer before using powder-actuated tools and follow the rules for using such tools given in Standard 17.10.1.

17.0 ENTERING AND WORKING IN CONFINED SPACES

The responsibility for safe procedure both at the time of entry and during the entire operation of entering and working in confined spaces rests with the Contractor. The Contractor must be sure that adequate steps have been taken to eliminate or control the hazards. At no time shall the Contractor's safety standards for entering and working in tanks, pits, manholes, and other confined spaces be less than those set forth in Engineering Standard 18.1.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

33.052
1992 JUNE
PAGE 15 OF 16

18.0 EXCAVATIONS

18.1 UNDERGROUND UTILITIES

Before any excavating is started, check with the Owner's Construction Engineer for all known underground utilities such as conduit, pipe lines, tanks, etc., and proceed only after receiving the proper permission.

18.2 TEMPORARY BARRICADES

Erect and maintain appropriate temporary barricades or warning devices.

18.3 EXCAVATION, TRENCHING AND SHORING

Adhere to requirements of Engineering Standard 18.19. Shore or slope trenches to prevent earth slides. Federal, state, and local standards on trench wall shoring or sloping shall govern all applications. Access ladders are required in accordance with federal, state or local regulations. Do not place materials and equipment closer than 2 feet to trench edge.

19.0 LADDERS

Provide employees with ladders that are constructed from nonconductive materials such as wood or fiberglass; Ref. OSHA Subpart L-Ladders, 1926.450(a)(11). Equip ladders with anti-slip shoes and secure as required near the top. Step-ladders used as straight ladders shall conform to the above regulations.

20.0 RIGGING EQUIPMENT

Inspect rigging equipment for material handling prior to use on each shift and as necessary during its use to ensure that it is safe.

21.0 SCAFFOLDING

Erect scaffolding accordance with requirements of the 1926.451 scaffolding OSHA regulations.

22.0 CRANE OR DERRICK SUSPENDED WORK PLATFORM

Contractor-owned or leased platforms suspended from lifting cranes or derricks for work to be performed at elevations that cannot normally be reached by other types of scaffolds or aerial work platforms, shall be designed and/or approved by a qualified engineer, periodically inspected for soundness and adequately maintained according to the applicable Federal, State, National or Owner's Standards. Personnel on the work platform shall adhere to Federal, State, National or Owner's safe work performance standards.

This document is the property of Aluminum Company of America and must be returned on request. It shall not be reproduced or copied, in whole or in part, or used on behalf of others than Aluminum Company or its subsidiaries, without permission. It is provided solely for the purpose of disclosing Alcoa's approach and is not intended to be a recommendation for any recipient other than Alcoa. No warranties, guarantees or representations, express or implied are made as to the utilities or effectiveness of the methods, processes, products or procedures described or recommended herein.

**SAFETY AND HEALTH, FIRE PROTECTION, AND
SECURITY PROCEDURES FOR OUTSIDE
CONTRACTORS**

**33.052
1992 JUNE
PAGE 16 OF 16**

23.0 FLOOR, ROOF, AND WALL OPENINGS

Protect floor and roof holes, wall openings, and floor and roof edges with handrails, covers or catch platforms according to OSHA Regulations 1926.500 and 1926.500(g), (guarding low-pitched roofs and perimeter warning line protection).

24.0 EVALUATION OF CONTRACTOR

The Owner's safety representative or the Owner's Field Construction Manager has the right (but not the obligation) to determine if the Contractor is performing in accordance with the regulations set forth in this Standard. The items presented in Standard 33.052.1 may be used to evaluate Contractors. Evaluations may be made at least once a month and also before the completion of a contract. Deficiencies shall be corrected. Continued unsatisfactory evaluation and injury experience may serve to disqualify the Contractor for further work from the Owner.

Conditions presented in the checklist in Standard 33.052.1 reflect requirements from the Occupational Safety and Health Act, Part 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, and Part 1910.12, CONSTRUCTION WORK.

25.0 SUMMARY

The Owner expects the fullest cooperation of the Contractor on these safety and health regulations. Should any doubt arise as to the meaning or interpretation of these instructions, consult the Owner's construction safety representative, the field construction manager or the employee assigned to coordinate construction activities. Contractor shall comply with Owner's recommendations for correcting unsafe conditions immediately.

468346 1511