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Civil Engineering

FIRE PREVENTION

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This instruction establishes policies and procedures for fire prevention at Vandenberg Air Force Base (AFB). It describes reporting procedures for fire and emergency situations that require immediate response by the Fire Department. It further describes fire prevention procedures and prevention measures for facility managers, contractors, concessionaires, and military members residing in Vandenberg AFB housing and lodging facilities. This instruction implements AFI 32-2001, *Fire Protection Program*, 1 April 1999. It applies to all personnel, activities and organizations, including tenant units, contractors, concessionaires, and family housing on Vandenberg AFB. Willful violators of this instruction will be subject to disciplinary action and pecuniary liability. Public Law 104-13, *Paperwork Reduction Act of 1995*, affect this publication. Maintain and dispose of records created as a result of the processes described in this instruction in accordance with Air Force Manual (AFMAN) 37-123, *Management of Records*, and Air Force WebRIMS Records Disposition Schedule located at <https://webrims.amc.af.mil/rds/index.cfm>.

SUMMARY OF REVISIONS

The emergency phone number for cell phones added (**Paragraph 2.1.1.**) wording from fire to emergency changed (**Paragraph 2.2.4.**) Adds Base Civil Engineer responsibilities (**Paragraph 3.2.**); OSHA standard number changes through out the publication; unit safety representative added to fire protection program (**Paragraph 4.1.**); updates smoking materials disposal can procedures (**Paragraph 7.1.**); updates appliance information (**Paragraph 13.4.**); adds requirement for appliances that can not be used (**Paragraph 16.4.4.6.**); updates squadron names in fire prevention briefing (**Paragraph 19.1.**); updates the requirement for a fire safety briefing (**Paragraph 19.5.**); describes organizational responsibilities (**Paragraph 21.1.**); describes when campfires are allowed on Vandenberg AFB; (**Paragraph 21.3.**) updates name to Mission Support Group; (**Paragraph 29.2.**) updates clearance allowed; (**Paragraph 33.3.2.1.**) A bar (|) indicates a revision from the previous edition.

1. Objective:

- 1.1. The fire prevention program ensures that the mission of Vandenberg AFB is not impaired by fire. The value of equipment and facilities is of personal concern to all people working and residing on Vandenberg AFB. In order for people to support an aggressive fire prevention program, they must be knowledgeable in the elimination of fire hazards and fire reporting procedures. This knowledge can minimize and reduce injury and monetary loss if a fire occurs.
- 1.2. Carelessness is the leading cause of fire. All personnel will observe preventive measures. Unit commanders and supervisors will enforce this instruction as it pertains to their units and will take appropriate administrative or disciplinary action in cases of willful misconduct or negligence involving fire prevention policies and fire loss to government property.
- 1.3. Post a copy of this instruction conspicuously in all occupied buildings.

2. Emergency and Fire Reporting Procedures:

- 2.1. In case of fire or emergency, notify the Fire Protection Flight, Fire Alarm Communications Center:
 - 2.1.1. Dial 911 from any base phone. From cell phones call 734-4117 for VAFB emergency services.
- 2.2. Give the following information to the fire department communication operator:
 - 2.2.1. Building number, type of facility and location (base exchange, dormitory, nursery, etc.).
 - 2.2.2. Nature of emergency.
 - 2.2.3. Hazards involved.
 - 2.2.4. Name and grade of person reporting emergency.
 - 2.2.5. Telephone number from which you are calling.
- 2.3. Do not hang up until the fire communication operator tells you to do so.
- 2.4. REPORT ALL FIRES, REGARDLESS OF SIZE OR DAMAGE, TO THE FIRE DEPARTMENT.

3. Responsibilities:

- 3.1. Fire Chief. The fire chief administers all functions of the base fire protection program.
- 3.2. The Base Civil Engineer is designated as the Base Fire Marshal and is responsible to the installation commander for the efficient execution of the installation's fire protection program.
- 3.3. Unit Commanders and Supervisors: At all levels will establish the unit's fire prevention procedures outlined in AFOSH Standard (Std.) 91-501, Chapter 6, *Fire Protection and Prevention*.

4. Fire Prevention Program:

- 4.1. Building managers, unit safety representatives, and unit commanders will be responsible for the fire-safe condition of their assigned areas.

4.2. All inspection reports will be kept on file for a minimum of one year. For those facilities inspected by base fire representatives, the facility manager, alternate or the unit safety representative will accompany the base fire prevention inspectors during fire prevention visits.

4.3. Facility managers will make sure places of work are secure and free of fire hazards before leaving for the day. Establish a checklist with the following as a minimum.

4.3.1. Empty trash and recycle containers as necessary.

4.3.2. Turn off and unplug heating appliances, this includes coffee pots.

4.4. Contractors, concessionaires, managers, and supervisors are responsible for a sound fire prevention program in assigned facilities. They will comply with practices and procedures in this instruction.

4.5. The fire chief or a designated representative will attend pre-construction conferences.

5. False Fire Alarms. These alarms create serious safety hazards to fire fighters and motorists using base roads. Any person damaging or tampering with fire alarm systems, installed fire protection systems or reporting a false fire alarm will be subject to punitive and disciplinary action.

6. Facility Managers: Monthly inspections of fire extinguishers are accomplished by the facility manager and recorded on the fire extinguisher record as outlined in AFOSH Std. 91-501. The facility manager is also responsible for performing and documenting monthly tests on exit lights and emergency lights. Facility managers will keep a copy of the latest annual fire alarm system test report for the last 3 years.

7. Smoking and Disposal of Smoking Material:

7.1. Commanders and facility managers designating outside areas for smoking will ensure all smoking materials are disposed of in a proper manner. These areas require a metal can with a self-closing lid. The cans are not for trash. The proper procedure for emptying the can at the end of each duty is to soak the contents in water until everything is out and then empty the cans contents in the dumpster.

7.2. Smoking is not permitted in any Air Force installation or government owned vehicle.

7.3. Do not throw smoking materials or other burning objects from vehicles. Use ashtrays to extinguish smoking materials. It is against Air Force instructions to smoke cigarettes in any government facility or in entry/exit-ways to government facilities.

7.4. Smoking is prohibited in all outside flightline areas and within fence perimeters of munitions storage or missile launch sites without approval of the fire chief.

8. Flammable Liquids and Gases:

8.1. Above ground flammable liquid storage tanks will be at least 50 feet from the nearest structure and either diked to contain its capacity plus 10 percent or positioned to drain to a safe area. Bottom discharge openings will have a valve that closes automatically through the operation of a heat-activated releasing device in event of fire. If this valve cannot be operated manually, there must be a second manually operated valve installed. Equip tank with a vent at least one and one half inches in diameter. Fill tubes must extend six inches from bottom to prevent static electricity buildup.

8.2. Mount liquefied petroleum storage tanks according to National Fire Code (NFC) 30, *Flammable and Combustible Liquid* and NFC 58, *Storage and Handling of Liquefied Petroleum Gases*.

8.3. Do not use any highly flammable liquid (flash point of less than 100 degrees) for cleaning purposes. Use only approved cleaning solvents. Deviations require approval by the fire chief.

8.4. Organizations and activities having a requirement to store flammable or combustible liquids will keep storage cabinet 40 feet from other structures. Lockers will be stenciled in black letters, "FLAMMABLE - KEEP FIRE AWAY." A letter requesting approval for the flammable storage locker must be submitted to 30 CES/CEFS before any locker can be used. An inventory sheet will be maintained and posted on each locker.

8.5. Flammable liquids inside a building will be stored according to AFOSH STD. 91-501, Chapter 22, *Flammable and Combustible Liquids*.

8.6. Cleaning solvent tanks will be an approved type, equipped with a hinged cover and counter-balanced by a chain with a fusible link to ensure closing in event of fire.

8.7. Do not spray paint inside buildings unless in approved spray booth. Do not use gasoline to thin paints. Remove paint residue daily. Spot spray-painting in hangars requires approval of the fire chief.

8.8. Operations requiring use of approved flammables will not interfere with the evacuation of personnel in the event of ignition.

8.9. Gasoline in cans, drums, or other metal containers will not be placed on any vehicle stored in garages, facilities or repair shops.

8.10. Vehicles and powered equipment will not be refueled with engines running. Trucks with plastic bed liners are required to have a ground wire from the truck body to the gas can being filled for grounding purposes (copper wire with alligator clips as a minimum).

8.11. Government vehicles being serviced at a service station dispensing island will have their ignition off and radio on standby status. Cell phones will be off when fueling vehicles. At no time will vehicles awaiting service be allowed to accumulate to the extent that evacuation of all vehicles is hindered in event of fire.

8.12. Operators of two-wheeled vehicles, motorcycles, minibikes, etc., will not be on the vehicles during servicing operations.

8.13. Use only non-ferrous tools or tools that will not produce sparks when used near flammable or explosive substances, vapors or dusts.

8.14. Use static grounds and bonds whenever flammable liquids are dispensed.

8.15. Warning signs on fuel storage areas will be posted according to AFOSH Std. 91-38, Chapter 3, *Fuel Storage Systems*.

8.16. Store large amounts of paints and solvents in separate noncombustible buildings 40 feet from other buildings or combustible structures marked "FLAMMABLE STORAGE." For quantities of less than 60 gallons comply with AFOSH Std. 91-501.

8.17. Dispose of animal or vegetable oil, grease, paint, lacquer, rags with linseed oil, cotton waste and combustible sweeping compounds daily. Good housekeeping practices are mandatory to eliminate common sources of spontaneous ignition.

9. Storage of Gas Cylinders and Chemicals:

- 9.1. Handle cylinders containing flammable or explosive gases with extreme care. Acetylene and oxygen cylinders will be secured to portable welding rigs. Pressurized cylinders transported by vehicle in a utilization configuration must have valve protection caps in place. Install hoses and regulators after arrival at job site. All compressed gas cylinders must be properly secured.
- 9.2. Do not install temporary electrical wiring and equipment in spaces designated for storage of flammable or explosive gases.
- 9.3. Do not store flammable/combustible gases with oxidizing gases. A firewall must separate such storage compartments. You may store inert gases, such as helium, nitrogen, carbon dioxide, or argon with either flammable or oxidizing gases. Typical oxidizing gases are oxygen, chlorine, etc.
- 9.4. Pay particular attention to the location of cylinder storage. Prevent fumes from entering ventilation air intakes, which lead to spaces where personnel may be affected or flammable gases could cause explosions. Store all chemicals in dry, well-ventilated areas and properly segregate from other types of materials. Protect cylinders stored in open storage from direct sun and extreme heat or cold. Safeguard containers against mechanical injury.
- 9.5. Check acetylene bottle soft plugs, heads, valves, etc., periodically to make sure no leakage is occurring and they are in satisfactory condition. Hydrostatically test bottles at prescribed intervals per Department of Transportation regulations.

10. Packing Materials, Waste, and Warehouse Storage:

- 10.1. Storage bins for packing materials, such as excelsior, straw, upholstery materials, clean wiping rags, cotton waste and similar items, will be of substantial noncombustible materials, or of wood lined on the inside with single-lock-jointed sheet metal. Metal lining of a wooden bin will include all interior surfaces and edges. Arrange cover of bin to close automatically in case of fire. These bins will hold not more than three bales of material at any time.
- 10.2. Store packing materials in original bales until ready for use. Once bales are opened, place the contents in bins.
- 10.3. Deposit used waste, oil, paint, chemical-soaked rags, and other combustible materials, in plainly marked metal containers equipped with self-closing lids. Keep covers closed at all times. Dispose of these materials according to the Base Hazardous Waste Management Plan.
- 10.4. Wastebaskets and trash containers will be of fire resistant material. Plastic bags as inserts are permitted.
- 10.5. Whenever possible, use trash receptacles (dumpsters) located throughout the base for disposal of ordinary waste materials. Keep doors closed at all times except when disposing of materials. Receptacles will be at least 50 feet from any building, if possible.
- 10.6. Store separately and adequately identify supply materials, which may be hazardous in combination with each other.
- 10.7. Do not store supply materials within 24 inches of interior combustible walls. Do not store supply materials under or stack within 15 feet of buildings, ramps, doors, or exits.
- 10.8. Supply materials shall be properly stacked to minimize spread of fire and to permit easy access.

10.9. Height of materials should be as low as practical and volume limited so that any fire occurring can be contained and extinguished. Where automatic sprinkler protection is provided, keep a clearance of at least 18 inches under sprinkler heads when heights of stacks do not exceed 15 feet. When stacks are over 15 feet, maintain a clearance of 36 inches. Where sprinkler protection is not provided, keep a clearance of 36 inches or more between tops of stacks to the underside of the lowest beam, girders or other ceiling obstructions, which might restrict the play of hose streams over the stacked materials. When storing hazardous materials, keep a minimum of 36 inches clearance between stacks and sprinkler heads.

10.10. Main aisles will not be less than eight feet wide. Cross aisles will not be less than four feet wide for stacks 10 feet high and five feet wide where stacks exceed 10 feet. When cross aisles are provided, locate them opposite window or door openings in exterior walls when practical.

10.11. Store materials a minimum of 24 inches from firewalls.

10.12. Keep firewalls, fire doors, and floors in good repair at all times to restrict the spread of fire.

11. Electric Installation and Equipment:

11.1. All electrical installation and equipment will comply with the National Electric Code, as set forth in national fire codes.

11.2. All electronic computer systems will comply with National Fire Codes.

11.3. All essential hospital electric service will comply with National Fire Codes.

11.4. Electric standards for metal working machine tools will comply with National Fire Codes.

11.5. All electrical equipment used in area of flammable gases and vapors will be evaluated to determine if explosion-proof equipment is needed. Grounding of installed and portable electrical equipment will comply with National Fire Codes.

11.6. All electrical equipment installed in hazardous locations will be listed by Underwriter's Laboratories or Factory Mutual Laboratories for the particular location involved. The National Fire Code defines areas where explosion-proof equipment is required.

11.7. Do not use extension cords for permanent electrical wiring. Gang receptacle boxes and power strips are not permitted without a circuit breaker. Power strips will only be used to power computer and its accessories. Only one power strip per outlet per workstation is allowed

11.8. When UL extension cords are used on a temporary basis, they will be equal to or larger than the cord of the appliance being serviced and equipped with only one male plug and not more than one female receptacle. Extension cords will not exceed length needed to perform required operations. Inspect frequently and keep in a safe condition. Keep free from oil and grease, and do not splice or extend in any manner. Do not tack tie or twist around any fixture or portion of building.

11.9. Do not use portable droplights for temporary lighting unless equipped with suitable shatterproof globes and guards, and approved for location in which they are used.

11.10. Do not overload electric circuits. Branch circuits servicing normal lighting and receptacles will not exceed 20 amps. Do not daisy-chain power strips!

11.11. When a circuit has been interrupted by a tripped breaker, the appropriate Civil Engineer Zone will locate and eliminate the source of disturbance before restoring power to the circuit.

11.12. Cords will not extend under carpets or on the floor where they will be subject to mechanical damage.

11.13. Remove defective electric cords, lighting fixtures, appliances, and switches. Report all defective electrical equipment for repair to the appropriate Civil Engineer Zone.

11.14. Only an authorized or certified electrician will install, alter or repair electrical wiring.

11.15. Disconnect all soldering irons, coffee makers, toasters, and other small appliances when not in use and before securing the building at end of work day. All appliances will be Underwriter's Laboratories listed. Open coil type hot plates are not permitted. These appliances will not be plugged into power strips or other extension cords. They will be plugged directly into the wall.

11.16. Clearance between electrical light fixtures and combustible materials will be at least 18 inches.

11.17. Aggregate light bulb wattage will not exceed rating of the light fixture.

11.18. Do not use combustible paper or cloth shades on or over electric bulbs.

11.19. Do not hang anything on electric wiring.

11.20. Keep electronic equipment clean and free from dust or lint.

12. Static Electricity: All persons entering an area where explosive vapors may exist will remove the accumulated static electricity present in their bodies and clothing (including gortex jackets) by touching a properly grounded post or connection. Work stands must be grounded when used in areas where flammable vapors, gases or combustible dusts are likely to be present.

13. Heating and Cooking Appliances:

13.1. Do not store materials of any type in boiler or mechanical rooms.

13.2. Clean kitchen ranges, hoods, grease extractors, heating equipment, and surrounding areas daily to prevent grease accumulation. Electrical fixtures and lights installed in hoods and ducts will be vapor-proof type.

13.3. Do not leave kitchen ranges, electric or open flame kitchen equipment unattended while in use.

13.4. Food preparation in dormitories (unless the appliances are supplied with the room) and other base buildings will be limited to appliances such as two-slice toasters, electric crock pots, vegetable steamers, coffee pots, blenders, electric mixers, microwaves, and rice cookers. Appliances must be placed on non-combustible surfaces and be Underwriters Laboratory" listed. When using microwaves, never leave them unattended.

13.4.1. Appliances that create large current draw such as electric fry pans, deep fat fryers, toaster ovens, electric broilers, tabletop electric grills, electric woks, and hot plates, cannot be used. Open flame devices are not permitted.

13.4.2. All appliances must be approved by unit First Sergeants prior to their use.

13.5. Electric heaters must be listed by the Underwriter's Laboratories. Appropriate Civil Engineer Squadron personnel will install or supervise the installation of permanently installed electric heaters. All portable electric heaters will be equipped with a "tilt switch" and not be left unattended. These heaters will be plugged into the wall outlets only. They cannot be plugged into a power strip or other

devices. Electric heaters must be kept at least 36 inches away from other objects. Unplug at the end of the day.

14. Arc Welding, Torch Welding, Cutting, Braking, Grinding, and Soldering:

14.1. Welding, cutting, brazing, grinding or soldering other than in an approved welding shop requires permission from the fire department and the issuance of AF Form 592, **USAF Welding, Cutting and Brazing Permit**. Permits must be requested at least 2 business days in advance by calling the Fire Prevention office at 6-4680. Electrical soldering in all areas other than where flammable vapors may be present is exempt from the permit requirement. Compliance with requirements of AFOSH Std. 91-5, **Welding, Cutting and Brazing** is mandatory.

14.2. Personnel will make sure that all combustible material within a 35-foot radius has been removed prior to welding operations. Fire extinguishers, shovels, etc., will be available to extinguish small fires.

14.3. Only authorized (certified) personnel will operate welding equipment.

14.4. Do not weld in the vicinity of flammable or explosive materials until all possibility of fire or explosion has been eliminated. Place a fire-resistant shield between flammable material and the welding operations where the removal of flammable material is impractical.

14.5. Follow requirements of AFOSH Std. 91-38 and 91-25, **Confined Spaces** where applicable prior to work on containers, which contained flammable liquids.

14.6. Inspect all equipment before operation for damage, loose connections, and unsafe conditions. Repair or replace as required

14.7. When a welding hose bursts or escaping gas is ignited shut regulator valves off immediately.

14.8. Keep oil and grease away from oxygen cylinders and fittings.

14.9. Remove and weld aircraft parts in a welding shop. Weld on aircraft only with approval of the aircraft maintenance officer and fire chief.

14.10. Position personnel as a fireguard with suitable fire extinguishing equipment near the welding location when required.

14.11. After welding or cutting operations have stopped, carefully inspect and patrol the area until no hazards exist.

14.12. Secure all gas cylinders used for welding to prevent falling or damage. All portable-welding carts will have a class 2A, 10 BC rated fire extinguisher in the immediate area where welding operations are performed.

14.13. Civil Engineer craftsmen trained by welding shop supervisor may issue themselves welding permits in nonhazardous areas. They must receive recertification training annually. A letter listing of all properly trained welders will be on file at the fire department's communication center.

15. Gasoline Powered Equipment:

15.1. Do not operate motor vehicles driven by internal combustion engines, continuously inside hangars unless specifically authorized by the fire chief. Do not store motor vehicles in hangars, or operate inside longer than necessary to transport material or equipment.

15.2. When electrical trouble, gasoline or oil leakage, or engine trouble arises, remove equipment from buildings immediately.

15.3. Do not refuel equipment indoors. Do not refuel any type of internal combustion engine, on which fuel tanks are located above or adjacent to the engine, until sufficient time has elapsed to permit the engine temperature to reach a point below the ignition point of gasoline (495 degrees F).

15.4. Powered lawn mowers may be stored inside buildings when approved by the fire inspector. Ventilate the room; place drip pans under the mower when positioned on combustible floors. Store gasoline for operating lawn mowers in an approved flammable locker.

15.5. All privately owned motor vehicles (i.e., motorcycles, dune buggies, etc.) will have a stock-type exhaust system for off-road use, and only be used in areas approved by the fire chief.

16. Places of Public Assembly and Recreational Facilities:

16.1. Managers and supervisors of public assembly and recreational facilities will constantly be alert for hazards to life that are involved in these facilities. They will take every precaution to prevent fires in places where large numbers of people assemble.

16.2. Managers and supervisors will ensure that each employee receives quarterly fire prevention training and keep accurate records of this training. Training of newly hired employees will include, but not be limited to, use of fire extinguishers and other manual fire suppression equipment, fire reporting, and orderly exiting.

16.3. Managers and supervisors that have been designated in writing will conduct a thorough inspection of their facility within one hour after closing to ensure that the building is fire-safe. Designated places of public assembly will report closing to the fire alarm communications center, 6-5380. Coordinate late closing due to special functions with the fire prevention office, 6-4680, 24 hours in advance, or on last duty day prior to the function to avoid report of late closings. The inspection will include, but not be limited to:

16.3.1. Kitchen area—heat-producing appliances secured, grease filters cleaned.

16.3.2. Remainder of building—remove all trash from facility; turn heat thermostats off; disconnect nonessential electrical appliances, etc.

16.3.3. Follow a checklist for closing inspection. For assistance in preparing the checklist, contact the fire prevention office.

16.4. Facilities that have installed commercial cooking equipment will establish procedures to:

16.4.1. Clean grease filters as often as necessary to prevent accumulation of grease, but at least daily.

16.4.2. Clean kitchen range exhaust hoods, ducts, fans, roofs, louvers, exterior wall, and other areas where exhaust is extracted to the outside, at least quarterly. Facilities where the quantity of cooking is significant should be cleaned more often.

16.4.3. Maintain on file for each hood:

16.4.3.1. Date hood and filter were last cleaned.

16.4.3.2. Date duct system was last cleaned.

16.4.4. Make sure the following are complied with before starting cooking operations:

16.4.4.1. Clean grease filters and extractors are properly installed.

16.4.4.2. A metal cover is in the vicinity of deep fat fryers, to be used in the event of a grease fire.

16.4.4.3. Exhaust fan is operational. If the fan is not operational, cooking operations will stop until repairs have been made.

16.4.4.4. Deep fat fryers will have dual thermostats. The primary thermostat will limit the temperature to no more than 400 degrees F. The second will be non-adjustable and preset at no more than 475 degrees F. These thermostats will be tested annually. Documentation of the test will be affixed to the unit.

16.4.4.5. The minimum distance between deep fat fryers and a cooking surface with a flame is 16 inches.

16.4.4.6. Portable wet chemical fire extinguishers are required for all deep fat fryers

16.5. Textile wall coverings, curtains, drapes and movable scenery, including all types of decorations will be of fire retardant materials in places of public assembly. Send documentation of fire retardance to 30 CES/CEFS before installing curtains, drapes, etc. The document will specify date of fire retardant treatment, name of company performing work, and date next treatment is due.

16.6. Managers of places of public assembly will notify the Fire Prevention office before any major social event when temporary decorations or unusual arrangements are involved.

16.7. The manager will maintain occupancy load data in their office. Posting of occupancy load signs is not required.

16.8. Buildings or portions of buildings used for gathering of 50 or more persons without fixed seating, require seating diagrams to be submitted to 30 CES/CEFS for approval. All gatherings will adhere to approved seating arrangements only.

16.9. All stage curtains will be in a closed position except during performances, rehearsals, or similar activities.

16.10. Clothing and personal effects shall not be stored in corridors and lobbies.

16.11. No open flame devices nor pyrotechnic devices will be used in any assembly occupancy unless specifically approved by 30CES/CEFS.

16.12. Portable cooking equipment fueled by small heat sources that can be readily extinguished, such as candles or alcohol-burning equipment (including "solid alcohol") may be used provided adequate precautions are taken to prevent ignition of any combustible materials.

16.13. Candles may be used on tables used for food service if securely supported on substantial non-combustible bases so located as to avoid danger of ignition of combustible materials and only if approved by 30 CES/CEFS. Candle flames will be protected. Candles will not be allowed in other base facilities except for decorative purposes. They will not be lit.

17. Aisles and Exits:

17.1. Under normal circumstances, do not block doors. Under no circumstances will a door be blocked that leads to an exit access corridor or an exit to the outside. In circumstances where a door needs to be blocked the using organization will make a written request to 30 CES/CEFS. A blocked door meeting the requirements of this section will clearly state on both sides of the door "THIS DOOR IS BLOCKED".

17.2. Keep adequate fire aisles in all facilities.

17.3. Equip all emergency exit doors in dining halls, theaters, chapels, schools, gymnasiums, and recreational buildings, having a capacity of 100 persons or more with panic hardware and self-closing devices. Keep building exits clear at all times and identify these by signs or lights according to NFPA 101, *Life Safety Code*.

17.4. Do not install pad locks, sliding bolts, chains, or any device that hinders the operation of panic hardware or fire rated doors.

17.5. When a building is modified, such as installation of additional walls, relocate exit lights to ensure they are clearly visible to the occupants.

17.6. Doors opening to stair enclosures or horizontal exits will be self-closing and shall not at any time be secured in the open position.

17.7. All buildings constructed with attics will have at least one attic access point. Penetrations to fire rated walls or ceilings will have covers or doors with an equivalent fire rating. All attic access points will remain closed or covered to prevent the vertical spread of fire to the attic area.

17.8. Do not store combustibles beneath stairways.

17.9. Do not restrict the movement of doors in hallways and corridors by any means. Only those doors equipped with approved-type fusible links or automatic-closing devices will remain open.

17.10. Exit doors in places of public assembly will have illuminated exit signs above doors. All exit doors will remain unlocked and in a free-swinging position during hours of operation or occupancy.

18. Vegetation Control:

18.1. Flammable native vegetation, including naturalized introduced species (e.g., eucalyptus) will be removed around all structures for a minimum of 100 feet where feasible. "Flammable" in this case means all dead vegetative matter and enough live crowns to avoid direct spread of fire from one tree or bush to another. Trees and bushes should be pruned enough to avoid their ignition by a ground fire. Areas in and around fenced in transformers will be maintained in the same manner.

18.1.1. Where slope and fire hazards warrant, the clearance and thinning will be increased to fit the conditions. Appropriate clearance will be determined by 30 CES/CEFS.

18.1.2. Where the surrounding vegetation is predominantly sparse grass, remove all flammable vegetation for at least 3 feet and keep a minimum of 30 feet well-trimmed around all structures.

18.2. Replace removed vegetation only with those plants that have proven fire protection qualities.

18.3. Open area under buildings, walkways, ramps etc., will be free of all vegetation.

18.4. Remove vegetation within the diked area around any flammable fuel tank.

18.5. Remove vegetation from within a 50-foot area around any stationary fuel-dispensing unit.

18.6. Do not store grass cuttings in paper bags, cardboard boxes, or other combustible containers in or adjacent to any building or structure.

18.7. Remotely situated electrical emergency power generators will have a cleared, sealed surrounding area of 20 feet on all sides to prevent spark or fuel oil spillage ignition of vegetation.

19. Unpaved or Off Road Vehicle Travel:

19.1. In the spring of each year, personnel from the 30th Space Communications, Security Forces, and Civil Engineer Squadrons, who are required to operate vehicles and equipment on unpaved or off road, will receive a fire prevention briefing. The shop supervisor will conduct the briefing.

19.2. Vehicles equipped with catalytic converters will not be operated on unpaved paths (excluding grass free dirt roads) or grass areas without a walking fire spotter trailing the vehicle.

19.3. Supervisors of persons who are authorized to travel off road during wildland fire season will be required to brief all vehicle operators and crews on the fire dangers associated with off road vehicle operation prior to being dispatched.

19.4. Whenever practical, leave the vehicle parked on the shoulder of the road and walk the last distance to the job site.

19.5. No vehicle will be allowed to operate off road (on any unpaved road, path, or grass area) unless it is equipped with a water type fire extinguisher and a shovel. Each using organization is responsible for purchasing the shovels and fire extinguishers.

20. Vehicle Parking:

20.1. Do not position vehicles or trailers in any manner that would block access of fire equipment to all sides of buildings, in fire lanes, within 15 feet of fire hydrants or fire department sprinkler and standpipe connections. Curbs and streets adjacent to fire department connections and hydrants will be considered a fire lane. All fire lanes will be 20 feet wide unless approved by the fire chief.

20.2. Vehicles will not be within 20 feet of a building except in an authorized parking area.

20.3. Gasoline or oil trucks (whether loaded or empty) will not enter hangars or other buildings unless the structure is designated for that purpose. Tank trucks may enter maintenance shops for repairs provided the tanks have been completely purged of flammable vapors. Park petroleum fuel trucks in single rows so they can be driven out of parking areas in a single turn. Do not park petroleum fuel trucks on the flightline in such a manner as to endanger aircraft, or within 100 feet of any building or structure.

21. Open Fire and Fireworks:

21.1. Open fires, campfires, burning of rubbish, and similar material within the limits of Vandenberg AFB will not be permitted without the approval of the fire chief or designated representative. A written permit, 30 SW Form 605, **Open Fire Permit**, is required and can be obtained from fire department headquarters (Bldg. 10660). No open fires will be authorized on Vandenberg during fire season (May-Dec), or as local conditions dictate.

21.2. Do not use blowtorches or other flame units to remove paint from any surface or to burn wood for decorative purposes, unless authorized by the fire chief.

21.3. Fireworks of any type are not permitted on Vandenberg AFB unless approved in writing by the 30th Mission Support Group Commander or the 30th Space Wing Commander.

21.4. Do not use open-flame devices such as candles and oil lamps unless specifically authorized elsewhere in this instruction or by 30CES/CEF.

21.5. Do not burn incense except in containers specifically designed for that purpose.

21.6. BBQ grills will be of the approved type and located at least 15 feet from any structure.

22. Use of Fire Extinguishers:

22.1. Facility Managers will notify 30 CES/CEFS, 6-4680, before relocating or removing portable fire extinguishers.

22.2. When a fire extinguisher has been used to control a fire, been accidentally discharged, has a broken seal, requires annual inspection, or becomes inoperative for any reason, the using organization must call the Fire Prevention office at 6-4680. A control number will be issued and the customer can call the local contractor to have the extinguisher/s serviced. Date stickers on the extinguisher indicate the date annual inspection was done.

22.3. Return fire extinguishers to their original location after servicing. Do not use fire extinguishers for any purpose other than the control of fire. All fire extinguishers will be properly mounted to the wall.

22.4. The responsible supervisor will take appropriate disciplinary or administrative action for damage due to misuse of fire extinguishers.

23. Hazardous Conditions. The fire chief will personally observe any operation or condition considered to be a serious fire hazard. The final determination as to whether the operation or condition is stopped rests with the Wing Commander.

24. Traffic Across Fire Hose. Do not drive any vehicle over or across fire hoses used by the fire department unless specifically directed to do so by fire department personnel.

25. Traffic and Pedestrian Control at Fires:

25.1. The security police will respond to all fire calls to direct automotive traffic around the fire area.

25.2. Security police will control bystanders at a distance determined by the on-scene fire department representative.

25.3. No one will be allowed to enter a building involved in fire or structural collapse until fire department personnel declare the building safe.

25.4. Buildings where fire of unknown or suspicious origin has occurred will be secured until the fire investigation board members have completed their investigation.

25.5. Drivers of vehicles will, upon seeing or hearing emergency warning devices, immediately drive to the right side of the road, come to a stop, and remain there until all emergency equipment has

passed. At no time will vehicles follow the emergency equipment closer than 300 feet, or will they be parked within 25 feet of emergency equipment.

26. Fire Symbols:

26.1. Identify each building or area for storing explosives with the appropriate fire symbol. Symbols must be visible from all approaches to the building or area. Storage procedures, placement, and size of signs will be according to Explosive Safety Standards.

26.2. Each activity storing munitions will develop, distribute, and post a fire protection operating instruction. The fire chief or designated representative will approve these instructions. Forward one copy of each instruction to the base fire protection branch for incorporation into the base pre-fire plan. An up to date explosives license will be on file at the fire department.

26.3. Toxic chemicals other than explosives housed in any facility will be placarded with appropriate signs per Explosives Safety Standard, and as shown on AFVA 91-216, *USAF Explosive Fire and Chemical Hazard Systems* symbols.

26.4. Notify the base fire department immediately of all new areas designated for munitions storage or changes in class of explosives stored. Using personnel will post appropriate fire symbols.

26.5. When transporting explosives (convoys) on base, notify the fire alarm communications center, 6-5380, giving route and time. Give termination of operation when complete.

26.6. Explosive transporting vehicles will have two 2A10BC extinguishers available.

27. Sanding and Floor Refinishing: Ensure gas pilots are in the off position and open flames are extinguished during floor sanding. Provide adequate ventilation, and if possible, put main electrical circuit breakers in the off position. Place all unnecessary electrical circuits in the off position.

28. Housekeeping Practices:

28.1. A high standard of cleanliness is a primary factor in fire prevention. Waste materials and rubbish saturated with various chemical and flammable products, will heat and ignite, especially when stored together. Remove rags containing various types of flammable liquids, etc., from the building or job site by the end of each work period. The containers must be marked "CLEAN RAGS" or "DIRTY RAGS" as appropriate.

28.2. Do not store sweeping compound in combustible containers. Use metal containers with lids. Remove trash (combustible paper, etc.) from the building at the end of each workday or upon completion of each cleanup period. Store steel wool in metal containers with lids when the roll has been opened. Do not store used steel wool in janitorial closets or lockers. Do not use steel wool for scrubbing floors with any type of flammable compound.

28.3. Do not store flammable liquids, such as paint thinner, alcohol, etc., in janitorial closets or lockers. Do not store combustible material on or near water heaters or other type of heat-producing devices.

28.4. The supervisor will brief contractor janitorial personnel on fire prevention procedures before assigning duties, and periodically thereafter.

28.5. Temporary or seasonal decorations will be of flame resistant or noncombustible material. Live Christmas trees are prohibited in places of public assembly. Use of combustible decorations is prohibited unless approved by 30 CES/CEFS.

29. Building Alterations, Modifications, Self Help Projects and Repairs:

29.1. Carefully consider selection of material to construct partitions, cover walls, lower ceilings, etc. Do not use combustible materials, such as fiberboard and plywood for partitions, walls, and ceiling coverings. Do not install wall paneling without approval of the fire chief. Materials and alterations must not detract from original life safety design criteria and must comply with current codes and regulations governing the type of occupancy involved.

29.2. Any modification, alteration, or self-help project performed on any base building or structure requires prior approval on 30 SW Form 35, **BCE Work Request**.

29.3. Extend fire alarm system detecting devices and sprinkler heads located on ceilings to cover existing area and below whenever false ceilings are installed. Install fire detection devices and sprinkler heads located on ceilings so as to be exposed to any fire that may occur within the protected area.

29.4. Do not paint fire alarm detection devices or sprinkler heads.

Submit fire protection deficiencies on 30 SW Form 35. Coordinate forms involving fire protection deficiencies submitted by other organizations with 30 CES/CEFS, Building 10660.

30. Fire Prevention Visits:

30.1. Qualified fire prevention inspectors, accompanied by the Squadron Safety Representative, facility manager or an alternate, will perform fire prevention inspections. Immediately correct fire hazards noted. Annotate the fire hazard report as to corrective action and forward to 30 CES/CEFS. Forward through required channels when:

30.1.1. Correctable hazards are recurrent.

30.1.2. An effective fire prevention program has not been established.

30.1.3. Facility managers have failed to enforce established fire prevention practices.

30.1.4. Unit Safety representative or facility managers have failed to establish and enforce fire prevention responsibilities.

30.1.5. Corrective action on a fire hazard is delayed for an unreasonable amount of time.

30.1.6. Firm follow-up action is not established for the hazard abatement program.

30.2. Annotate AF Form 1487, **Fire Prevention Visit Report**, as to corrective action taken on fire hazards identified, and return it to 30 CES/CEFS by suspense date in item 4.

31. Fire Drills:

31.1. Facility managers will hold fire drills with the approval of unit commander. Fire drills will be held as follows:

31.1.1. Child development centers and youth centers—monthly.

31.1.2. Places of public assemblies, i.e., clubs, dining facilities, base exchanges, stores, bowling alley, etc.—quarterly—employees only.

31.1.3. Industrial facilities at the discretion of the commander.

31.1.4. Administrative facilities two or more stories at the discretion of commander.

31.1.5. Health Care Clinic—quarterly—employees only.

31.2. Fire drill exercises will include a designated assembly and accountability area. A senior representative will be assigned to meet and brief fire crews on essential information.

32. Training. Supervisors will administer fire prevention training to all newcomers upon their arrival. Personnel involved with fuels, munitions, and aircraft will receive training annually. Fire prevention lectures and demonstrations are available for social or functional groups upon prior arrangements with the fire prevention office at 6-4680.

33. Family Housing, and Other Lodging:

33.1. Sponsors are fully responsible for actions of family members in matters of fire prevention. Every occupant will practice good housekeeping in order to reduce the fire hazard potential and ensure safety.

33.2. When fire hazards are detected, take immediate action to eliminate them. Report those hazards beyond the occupant's control to the fire prevention office, 6-4680.

33.3. Occupants will comply with the following fire prevention policies:

33.3.1. Kitchen:

33.3.1.1. Do not leave cooking appliances unattended.

33.3.1.2. Arrange curtains so they will not blow over the stove.

33.3.1.3. Keep stove, including ovens and broilers, clean and free of grease.

33.3.1.4. Keep exhaust fan and grease hood clean and free of grease. Remove filters at least once a month and wash in warm, soapy water.

33.3.1.5. Use only appliances listed by Underwriter's Laboratories.

33.3.1.6. Do not store combustible materials or flammable liquids in cabinets above stove.

33.3.2. Utility Room:

33.3.2.1. Do not store combustible materials at base of or on top of water heater. An 18-inch clearance must be maintained.

33.3.2.2. Clean lint trap in dryer after each use.

33.3.2.3. Make sure that washers and dryers are grounded.

33.3.2.4. Vent clothes dryers to the outside. Periodically check vent hose for cleanliness and/or obstructions.

33.3.2.5. Do not block circuit breaker panel.

33.3.2.6. If a gas dryer is not used ensure the gas pipe is capped.

33.3.3. Living Room:

- 33.3.3.1. Do not splice electrical cords or place under carpets, across or in the path of travel.
- 33.3.3.2. Inspect area before retiring or vacating to make sure cigarette butts are not burning under sofa cushions or on tables.
- 33.3.3.3. Test smoke and carbon monoxide detectors for proper operation once a month.
- 33.3.3.4. Use only flame retardant decorations on Christmas tree. Candles shall not be used.
- 33.3.3.5. Fireplaces will have built-in or fastened hearth screens. Never use flammable liquids in the fireplace.

33.3.4. Furnace Area:

- 33.3.4.1. Do not use for storage.
- 33.3.4.2. Remove and inspect air filters every 30 days and replace if dirty, frayed or damaged.
- 33.3.4.3. Check blower motors periodically and clean by vacuuming when needed.
- 33.3.4.4. Check and vacuum compartment as needed.
- 33.3.4.5. Check and clean air intake area underneath by vacuuming periodically.

33.3.5. Bedrooms:

- 33.3.5.1. Do not smoke in bed.
- 33.3.5.2. Do not splice electric cords or place under rugs, across or in the path of travel.
- 33.3.5.3. Keep closets clean and orderly

33.3.6. Garage:

- 33.3.6.1. Store flammable liquids, not exceeding five gallons, in approved containers equipped with a lid.
- 33.3.6.2. Do not allow rags to accumulate in the garage area. Dispose of rags in metal containers equipped with a lid.
- 33.3.6.3. Extension cords will comply with **Paragraphs 11.7.** and **Paragraph 11.8.** of this publication.
- 33.3.6.4. Do not alter wiring. Only qualified personnel will install, alter, or repair electrical wiring.
- 33.3.6.5. Spray-painting vehicles, boats, etc. in garages is prohibited.
- 33.3.6.6. Do not store boxes or any objects on natural gas pipe.
- 33.3.6.7. Keep garage area clean and orderly, keep combustible materials to a minimum and 18-inches away from the water heater or other heat-producing device.
- 33.3.6.8. The use of ceramics kilns in family housing is prohibited.

33.3.7. General:

- 33.3.7.1. Use of multiple electrical plugs can overload circuits and should be avoided.

- 33.3.7.2. Do not tamper with electrical wiring.
- 33.3.7.3. Do not use any type of damaged appliance, plug, frayed or spliced cord.
- 33.3.7.4. Do not use extension cords as permanent electrical wiring, and do not permanently affix to the floor or walls.
- 33.3.7.5. Do not leave electrical appliances such as frying pans, coffee pots, toasters, irons, etc., plugged in and unattended.
- 33.3.7.6. Do not use gasoline, benzene, or any type of flammable liquids for cleaning purposes.
- 33.3.7.7. Soak smoking materials thoroughly with water for several minutes before disposal.
- 33.3.7.8. Report all fires extinguished by housing occupants by dialing 911 or from a cell phone dial 734-4117, regardless of nature or size, to the base fire department for investigation.
- 33.3.7.9. Keep matches and cigarette lighters well out of reach of children. Instruct children never to play with matches or cigarette lighters.
- 33.3.7.10. Parents will brief baby-sitters on fire reporting and evacuation procedures. Parents will always leave a telephone number with the baby-sitter where they can be reached in the event of an emergency.
- 33.3.7.11. Do not store ammunition or smokeless bulk powder in net explosive weight quantities of greater than ten pounds, or five pounds black powder in military quarters. Store all powders in their original containers.
 - 33.3.7.11.1. Do not smoke in the room or immediate area where explosives are stored. Maintain portable fire extinguisher in the immediate area where explosives are kept.
 - 33.3.7.11.2. During hand loading operations, have available a portable fire extinguisher, and do not smoke.
 - 33.3.7.11.3. Do not store or leave unattended hand loaders with explosive powder in them.
- 33.3.7.12. Fire symbols need not be used in family quarters; however, notify the fire communications center, 606-5380, of specific locations where explosives are stored for pre-fire planning purposes.
- 33.3.7.13. Do not store explosive items of any type in housing or lodging quarters.
- 33.3.7.14. Only 30 CES and housing contractor personnel will connect or disconnect gas-operated appliances.
- 33.3.7.15. Should the pilot light on a forced-air furnace go out, turn the wall thermostat to the off position and call the housing maintenance office.

34. Forms.

- 34.1. Forms Prescribed: 30 SW Form 605, **Open Fire Permit**.
- 34.2. Forms Adopted: AF Form 592, **UASF Welding, Cutting, and Brazing**, AF Form 1487, **Fire Prevention Visit Report**, 30 SW Form 35, **BCE Work Request**, 30 SW Form 400, **Request to use Base Facilities/Transportation**.

34.3. Routing of all 30 SW Form 400s will be processed through the Base Fire Department Fire Prevention Branch for coordination and review.

34.4. Routing of all Staff Summary Sheets will be processed through the Base Fire Department Fire Prevention Branch if it affects fire or life safety issues. 30CES/CEF will appear in the routing block for coordination.

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