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HEALTH AND SAFETY PLAN FOR SOIL DEBRIS REMOVAL AT WASTE DUMP NAS FORT
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METCALF AND EDDY

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**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
COVER SHEET**

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HEALTH AND SAFETY PLAN
FOR
SOIL/DEBRIS REMOVAL AT THE WASTE DUMP

Carswell Air Force Base, Texas 76127-5000

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June 1993

PREPARED FOR

AIR FORCE BASE DISPOSAL AGENCY
DISPOSAL MANAGEMENT TEAM
ENVIRONMENTAL PROGRAMS OFFICE
CARSWELL AIR FORCE BASE, TEXAS 76127-5000

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BASE CLOSURE RESTORATION DIVISION (AFCEE/ESB)
8001 INNER CIRCLE DRIVE, SUITE 2
BROOKS AIR FORCE BASE, TEXAS 78235-5328

SITE HEALTH AND SAFETY PLAN

198002

FOR

SOIL/DEBRIS REMOVAL AT OFFSITE WEAPONS STORAGE AREA WASTE DUMP

Air Force Base Disposal Agency
Carswell Air Force Base, Texas 76127-5000

June 1993

PREPARED BY

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SITE HEALTH AND SAFETY PLAN

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SECTION ONE INTRODUCTION

196007

1.1 GENERAL

Under contract with the Air Force Center for Environmental Excellence (AFCEE) Brooks AFB, Texas, Metcalf & Eddy, Inc. (M&E) has been issued a delivery order to remove approximately 150 cubic yards of debris from a Waste Dump in the vicinity of an offsite Weapons Storage Area near the Carswell Air Force Base (Carswell AFB) in Fort Worth, Texas. M&E will collect soil samples before and after removing the debris.

The Quality Program Plan (QPP) provides the detailed guidance and procedures by which M&E will conduct work at the offsite Waste Dump. The QPP includes three distinct plans, the Health and Safety Plan (HSP), the Construction Quality Plan (CQP), and the Sampling and Analysis Plan (SAP). This HSP covers topics such as personal protective equipment, decontamination, emergency procedures, and other related health and safety issues. The CQP deals with quality control during the soil/debris removal operation. The SAP, comprised of two sections (the Quality Assurance Project Plan (QAPP) and the Field Sampling Plan (FSP)), deals with sampling and analysis issues for both the laboratory and the field.

1.2 SITE BACKGROUND

The Carswell AFB is located near Fort Worth, Texas as indicated on Figure 1.1. An off-site Weapons Storage Area exists under the ownership and control of Carswell AFB. The Weapons Storage Area (WSA) is located about 4 miles west of Carswell AFB, just north of White Settlement Road. The facility, built in 1956, consists of 247 acres of fee-owned land surrounded by an additional 264 acres of easements. The general layout of the offsite Weapons Storage Area is shown in Figure 1.2. The site of interest for this investigation is the Waste (Open) Dump indicated in Figure 1.2.

This Waste Dump is located outside of the fenced area but within the WSA property boundary. According to WSA personnel, the site was occasionally used by them for disposal of debris (wood, metal, paper, etc.) and was not used for disposal of hazardous or other liquid wastes. An inspection of the site by the Air Force record search team during a base visit seemed to substantiate the above information. The site, however, is still of some concern due to two factors: (1) the public has access to the site and has used it on occasion and (2) the site is in a gorge that drains into a tributary to Live Oak Creek which flows into Lake Worth. The Air Force has determined that the site should be closed.

1.3 PURPOSE AND SCOPE

This Health and Safety Plan prescribes basic procedural and minimum equipment requirements for worker protection for M&E employees, subcontractors, clients and authorized visitors who enter the soil/debris removal work areas. This Health and Safety Plan describes minimum requirements in accordance with federal OSHA 29 CFR 1910 and 1926. Each subcontractor is responsible for the health and safety of their employees and for

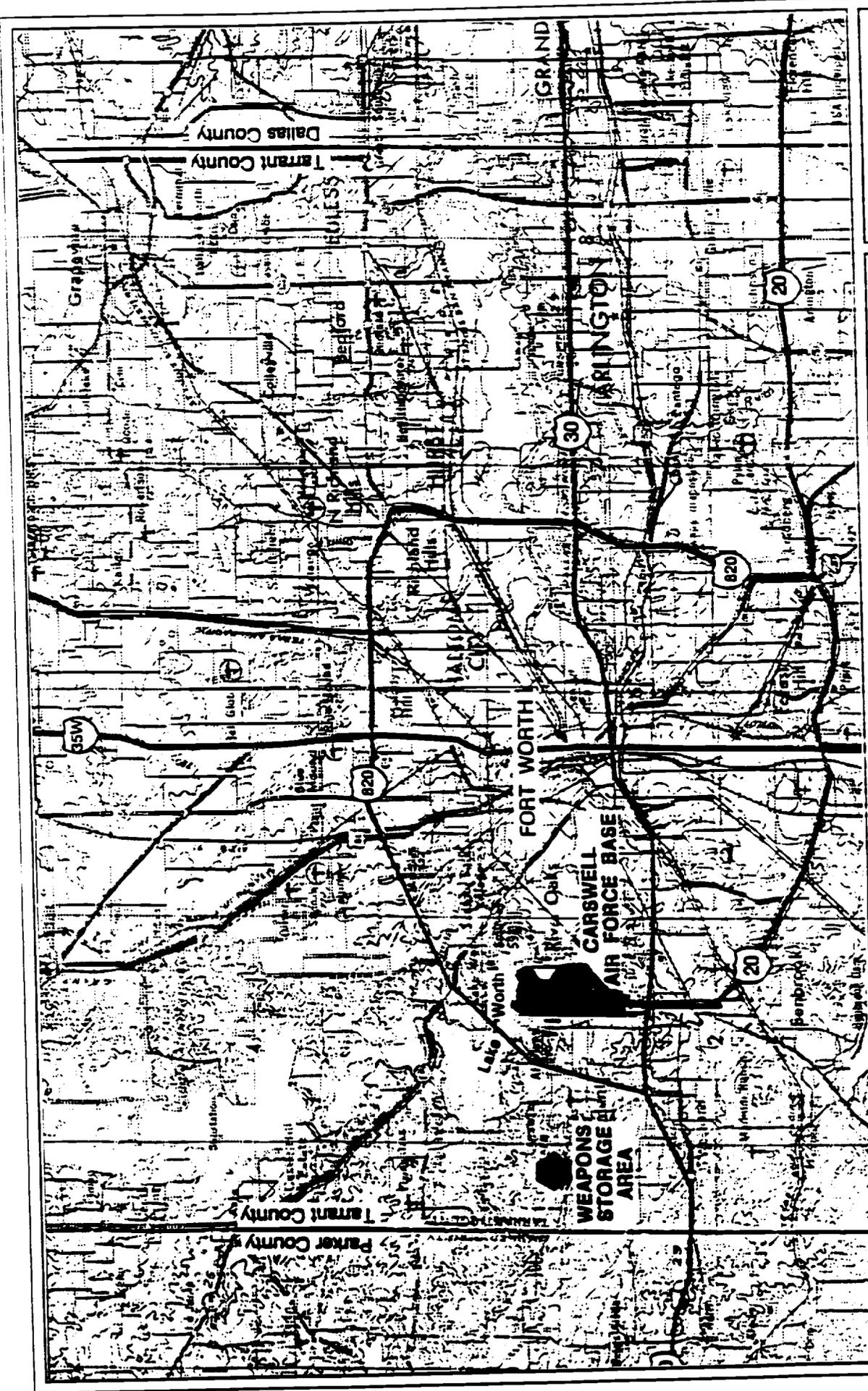
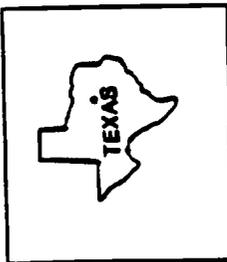
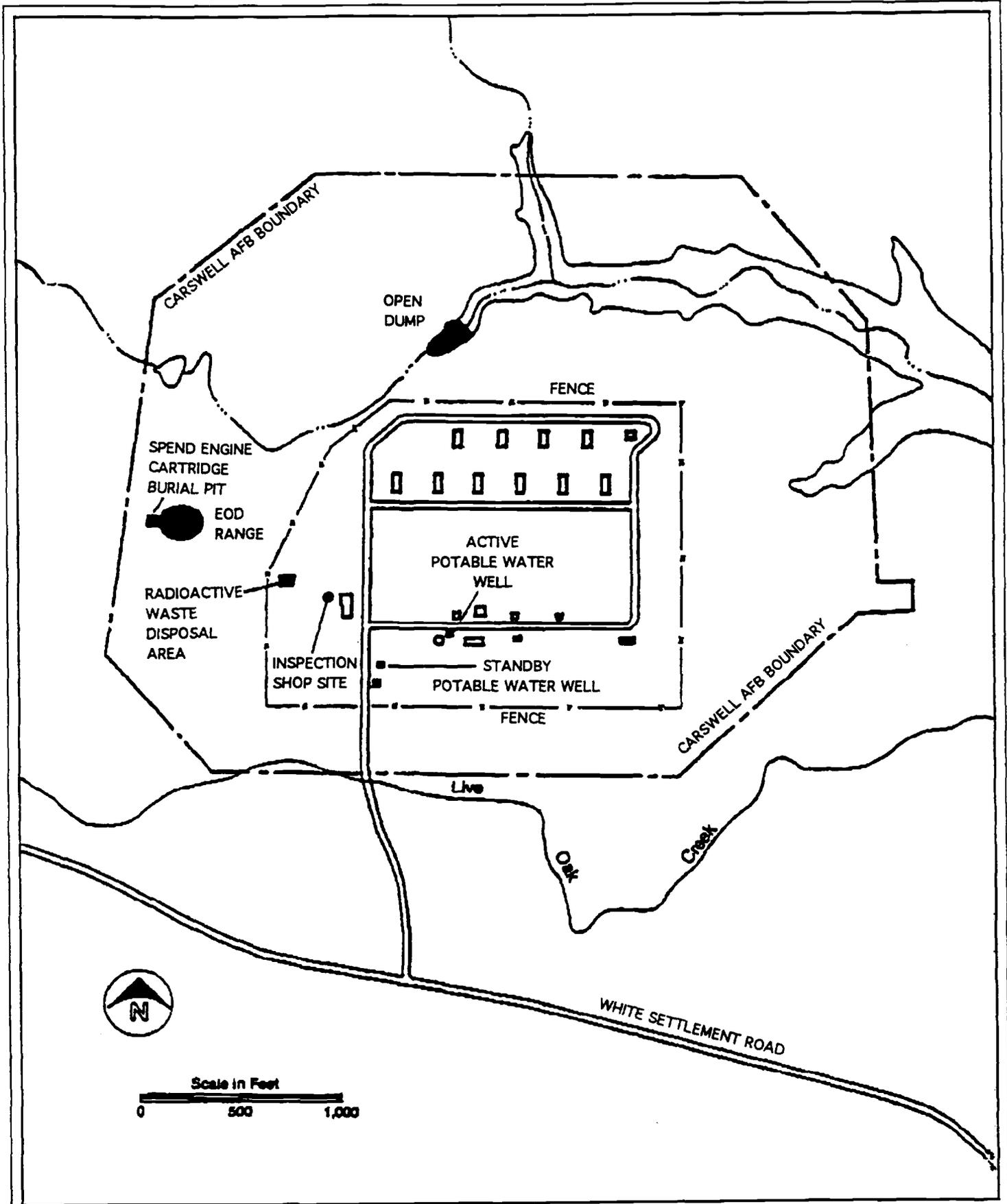


FIGURE 1.1



**LOCATION MAP
CARSWELL AFB AND OFF-BASE WEAPONS STORAGE AREA
CARSWELL AFB, TEXAS**





SITE MAP OF WEAPONS STORAGE AREA
CARSWELL AFB, TEXAS

FIGURE 1.2

compliance with applicable OSHA regulations.

All sections of this plan will apply to sampling activities conducted prior to the removal activities. The purpose of this sampling is to determine if hazardous or radioactive materials were disposed of in the Waste Dump. If the results of this sampling effort indicate that no hazardous or radioactive materials are present in the Waste Dump, then Section 8.3 outlining Work Zones and Section 9 describing decontamination procedures will not be applicable during the removal and post removal sampling activities. If hazardous materials are found or if site conditions change during the project, M&E and its subcontractors will be required to modify operations as necessary. These modifications may include upgrading or downgrading levels of personal protection and implementation of the Sections 8.3 and 9. Copies of modifications to this health and safety plan must be retained on-site by the on-site Health and Safety Officer as part of the site-specific health and safety plan. No changes to this plan will be permitted without prior approval by M&E's Project Manager and Regional Health and Safety Coordinator.

M&E employees, subcontractors, site visitors, and other authorized personnel who enter the restricted work areas (exclusion and contamination reduction zones) are subject to the provisions of this directive. Personnel who are assigned work within or plan to enter the restricted work areas must read the site health and safety plan and verify through signature that they are familiar with its provisions. Unauthorized personnel are not permitted in the restricted work zones.

During development of this plan, consideration was given to current safety standards as defined by EPA/OSHA/NIOSH, health effects and exposure guidelines/limits for potential contaminants, and procedures designed to protect against the potential for exposure to unknown substances. Specifically, the following reference sources have been consulted:

- OSHA 29 CFR 1900-1910 and 1926,
- The Handbook to Support the Installation Restoration Program (IRP) Statement of Work (SOW), May 1991,
- OSHA/NIOSH/EPA/USCG Occupational Health and Safety Guidance Manual for Hazardous Waste Site Activities,
- NIOSH Pocket Guide to Chemical Hazards.
- Air Force Manual 88-15, Criteria and Standards for Air Force Construction.

SECTION TWO HAZARD ANALYSIS

2.1 DESCRIPTION OF SITE TASKS

The following is a list of the tasks to be conducted under this soil/debris removal contract at the Carswell AFB off-base Waste Dump:

- (1) Remove soil/debris contained in the Waste Dump.
- (2) Sample soil before and after the soil/debris removal.

2.2 SITE HAZARDS OVERVIEW

<u>Apparent Hazard:</u>		<u>Type of Facility:</u>		<u>Status of Facility:</u>	
Serious	<u> </u>	Imp.	<u> </u>	Active	<u> </u>
Moderate	<u> </u>	Dump	<u> X </u>	Inactive	<u> X </u>
Low	<u> X </u>	Landfill	<u> </u>	Unknown	<u> </u>
None	<u> </u>	Open	<u> X </u>		
Unknown	<u> </u>	Enclosed	<u> </u>		
		Other	<u> </u>		
 <u>Waste Type(s):</u>		 <u>Waste Characteristics:</u>		 <u>Type/Form of Hazard:</u>	
Gas	<u> </u>	Toxic	<u> </u>	Dust	<u> X (potential) </u>
Liquid	<u> </u>	Corrosive	<u> </u>	Liquid	<u> </u>
Sludge	<u> </u>	Ignitable	<u> </u>	Fumes	<u> </u>
Solid	<u> X </u>	Volatile	<u> X (potential) </u>	Vapors	<u> X (potential) </u>
Unknown	<u> </u>	Radioactive	<u> X (potential) </u>	Contact	<u> </u>
Other	<u> </u>	Reactive	<u> </u>	Other	<u> </u>
		Unknown	<u> </u>		
		Other	<u> </u>		

The potential for unknown chemical hazards should not be ignored. The following subsections describe potential hazard categories and the corresponding procedures for hazard reduction. Personnel encountering a hazardous situation shall notify co-workers and the Site Health and Safety Officer (SSO) or Site Manager.

2.3 CHEMICALS

The site background review has indicated that the Waste Dump was not used for disposal of hazardous or other liquid wastes. However, if during the sampling or remediation, contamination or potential contamination is detected at the Waste Dump, the Project Manager and Site Manager shall take adequate measures to inform and protect workers, according to M&E's Hazard Communication Program. Material Safety Data Sheets (MSDS) for each

chemical of concern will be available on-site to ensure that the hazard associated with each chemical is communicated to site workers (refer to Appendix G).

Potential contaminants which were disposed at other disposal sites at the WSA include trichloroethylene and radionuclides.

Table 2-1 provides a summary of the chemical hazards that could be encountered at the Waste Dump, based on contaminants disposed at other sites at the WSA. Information on the physical and chemical properties of the contaminants/hazardous chemicals and hazardous chemicals brought into the WSA by M&E personnel including the pathways of exposure are provided in the MSDS.

Monitoring instruments and the use of personal protective equipment at the site, will aid in minimizing the possible exposure of workers to contamination. Direct area air monitoring will be performed during sampling activities to identify and/or quantify airborne contaminants in order to determine the level of protection required. The type, frequency and duration of the air monitoring is outlined in Section 7.

TABLE 2-1. POTENTIAL CHEMICAL HAZARDS OF CONCERN			
CONTAMINANT	EXPOSURE LIMITS	IDLH ^b	ROUTES OF EXPOSURE
Trichloroethylene (TCE)	50 ppm ^a	1000 ppm NIOSH has identified TCE as a potential human carcinogen	Inhalation Ingestion Contact
Radionuclides Whole Body Extremities Skin (Whole Body) Lens of eye Other organs	5 rem/yr 50 rem/yr 50 rem/yr 15 rem/yr 50 rem/yr	Not Applicable	Inhalation Ingestion Contact
a. OSHA Permissible Exposure Limit (PEL)			
b. Immediately Dangerous to Life and Health (IDLH)			

2.4 MECHANICAL

Machinery which may be on-site includes cranes, backhoes, excavators, and trucks. Only qualified operators will be allowed to operate the equipment. During operation of swing equipment such as cranes or backhoes, the swing radius will be communicated to other workers by the equipment operator to prevent employees from being struck by rotating

machinery. Precautions will be taken to allow appropriate clearance for trees and electrical wires.

All motorized vehicles will be driven and ridden safely. Vehicles will not be overloaded with riders or supplies. Federal regulations require that seat belts be worn by all personnel when in vehicles on Carswell AFB property, this regulation applies to the off-site WSA also. No one will be allowed to ride in the back of pickup trucks.

2.5 TRAFFIC

The work area will be cordoned off with high-visibility, "Caution: Do Not Enter" barricade tape. The proposed location for the barricade tape is at the access road leading to the rim of the Waste Dump.

2.6 NOISE

Control of noise hazards will be in accordance with 29 CFR 1910.95. Hearing protection will be worn in noise hazard areas. Noise hazard areas include operation of heavy equipment. M&E has a hearing conservation program in effect. The program requires the use of hearing protection for employees exposed to noise levels above 90 dBA.

2.7 FALLING OBJECTS

Hard hats must be worn by all personnel whenever removal activities are taking place. The hat must be worn properly and not altered in any way that would lessen the degree of protection offered. All hard hats must meet ANSI Standard Z89.1, 1969.

2.8 SURFACE SOIL SAMPLING

Surface soil sampling is considered as any soil sampling performed within two feet of the ground surface. This soil sampling will be completed by hand using a trowel, shovel, auger, or other type of handheld tool. Common hazards associated with soil sampling include: contact with or inhalation of contaminants, back strain and muscle fatigue due to lifting, shoveling and augering techniques, and contact with or inhalation of decontamination solutions. First aid equipment will be available based on MSDS requirements. Proper lifting techniques will be used when shoveling, augering, and digging to decrease muscle strain. MSDSs will be available on-site for all decontamination solutions listed in Appendix G.

2.9 SURFACE AND EQUIPMENT CONTAMINATION

Contact with contaminated surfaces, or surfaces suspected of being contaminated should be avoided. This includes walking through, kneeling or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers. Eating, smoking, drinking and/or activities which involve hand to face/mouth area are prohibited in the immediate work area(s). This reduces the likelihood of contamination by ingestion.

2.10 FIRE PREVENTION

The Carswell Air Force Base Fire Regulation 92-1 is included in Appendix J. Other fire prevention measures which will be followed include:

- Only approved safety cans will be used to transport and store flammable liquids.
- All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool before filling.
- Smoking is not allowed during any operations within the work area.
- No open flame or spark is allowed within the work area.

2.11 HEAT STRESS

Heat stress control methods found in Appendix H shall be followed whenever ambient temperatures exceed 70°F.

SECTION THREE
KEY PERSONNEL AND RESPONSIBILITIES

The following is a summary of key personnel and their responsibilities.

<u>Company</u>	<u>Title</u>	<u>Name</u>	<u>Responsibilities</u>
M&E	Project Manager	Philip Smith	Coordinate all aspects of the project to ensure a safe and successful completion.
M&E	Site Manager	Ben Bentkowski	Direct all site operations from the field to provide a safe and successful completion.
M&E	Site Health & Safety Officer (SSO)	Ben Bentkowski	Act as site safety officer and enforce HSP.
M&E	Regional Health & Safety Coordinator	Mike Luker, C.I.H.	Review field operation, site-specific trends, and approve the HSP for corporate and regulatory compliance.
M&E	Corporate Health & Safety Officer	Richard Renzi, C.I.H.	Audit field operations, prepare corporate health and safety policies and procedures, and review medical monitoring information for compliance.

SECTION FOUR SITE WORKER TRAINING

Sampling personnel entering the exclusion and/or the contamination reduction zones shall have received training in accordance with OSHA 1910.120, including 40 hour initial Hazardous Waste Site Workers certification and 8 hour annual refresher training certification. In addition, if the initial samples indicate the potential for hazardous constituents in the waste pile, then removal personal will also be required to meet the OSHA 1910.120 training requirements.

Each truck driver or heavy equipment operator must have received DOT safety training and health monitoring. Documentation of training requirements is the responsibility of each employer. Each employee shall be able to provide written proof of documentation.

4.1 TRAINING AND BRIEFING TOPICS

The Site Health and Safety Officer shall hold a kickoff briefing at the start of field operations to ensure that all provisions of the HSP are understood by the field workers. The Site Health and Safety Officer shall hold a briefing at other times, as necessary, to ensure that all site personnel are informed of any changes in site specific health and safety issues. The topics to be discussed at the kickoff briefing shall include, but not be limited to,:

- Work tasks to be accomplished
- Coordination of activities to be conducted
- Identification of all hazards posed by the tasks to be conducted as well as by site conditions
- Level of protection required for performance of site tasks
- Safe work practices to be followed
- Communication procedures, i.e., hand signals, etc.
- Familiarization with the emergency plans for exposures, fire, etc.
- Concerns of the worker/health and safety problems identified.

4.2 APPLICABILITY OF THE SITE HEALTH AND SAFETY PLAN TO VISITORS

All visitors entering the work area(s) at the Waste Dump will be required to read and verify compliance with the provisions of the HSP. In addition, visitors will be expected to comply

with relevant training and medical surveillance. Visitors will also be expected to provide their own personal protective equipment.

In the event that a visitor does not adhere to the provisions of the HSP, he/she will be requested to leave the work area(s). If he/she fails to do so, all work shall stop and the Metcalf & Eddy Project Manager and Regional Health and Safety Coordinator as well as the Air Force Technical Project Manager (TPM) shall be notified. All nonconformance incidents will be recorded in the site log.

SECTION FIVE MEDICAL SURVEILLANCE

5.1 REQUIRED MEDICAL MONITORING

Prior to being assigned to site activities, site personnel performing activities under the OSHA 1910.120 regulations and entering the exclusion or contamination reduction zones shall participate in a medical surveillance program. At a minimum, this medical monitoring shall include:

- Complete medical and occupational histories
- Physical examination
- Pulmonary function tests
- Eye examination and visual acuity
- Audiometry
- Complete blood count
- Blood PCB
- Blood lead
- Urine screen for heavy metals
- Fasting SMA 12

The medical evaluation shall categorize employees as fit-for-duty and able to wear respiratory protection. Documentation is the responsibility of each employer. Each employee shall be able to provide proof of documentation. Specific medical requirements for M&E employees are outlined in the "M&E Health & Safety Manual for Hazardous Waste Projects".

Medical monitoring shall also be provided to these individuals at the following times:

- a. When employees have been injured, receive a health impairment, develop signs or symptoms which may have resulted from an exposure.
- b. As soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible over-exposure to hazardous substances, health hazards or exposed above an OSHA permissible exposure limit (PEL).
- c. As soon as possible following an emergency incident where personnel may have been exposed.
- d. Whenever there is a loss of time due to injury or illness.

Equipment operators and drivers will be required to meet DOT specified medical monitoring requirements.

5.2 SITE-SPECIFIC MEDICAL MONITORING

There are no site-specific medical monitoring tests for this project, unless the scope of work changes or unforeseen circumstances arise. If changes do occur, the SSO will be in contact with the Regional and/or Corporate Health and Safety Officer and the Corporate Occupational Physician to determine if/what monitoring is needed.

SECTION SIX

PERSONNEL PROTECTION

This section describes the general requirements of the EPA designated levels of protection (A through D) and the specific levels of protection required for each task to be performed at the Waste Dump.

6.1 DEFINITION OF LEVELS OF PROTECTION

The individual components of protective clothing and equipment must be assembled into a full protective ensemble that protects the worker from site-specific hazards and minimizes the hazards and drawbacks of the personal protective equipment (PPE) itself.

- Level A:** Should be worn when the hazardous substance has been identified and requires the highest level of protection for skin, eyes, and the respiratory system based on either the measured (or potential for) high concentration of atmospheric vapors, gases, or particulates; or the site operations and work functions involve a high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of materials that are harmful to skin or capable of being absorbed through the intact skin; or substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
- Level B:** Should be worn when the type and atmospheric concentrations have been identified and require a high level of respiratory protection and moderate skin protection; or the atmosphere contains less than 19.5% oxygen.
- Level C:** Should be worn when the atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect, or be absorbed through, any exposed skin; or the types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove the contaminants.
- Level D:** Should be worn when the atmosphere contains no known hazard or work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals.

6.2 LEVELS OF PROTECTION ASSIGNED TO TASKS

Modified Level D protective equipment is planned for all removal and sampling activities to be performed at the Waste Dump. Listed below is the PPE required.

Modified Level D PPE

- Work clothes
- Work Gloves
- Chemical-resistant gloves (when sampling)
 - Inner: N-DEX (or similar)
- Steel-toed, steel-shank boots or shoes
- Hard hat during removal activities
- Safety glasses with side shields
- Chemical splash goggles (where necessary)
- Cool vests (as dictated by weather conditions)
- Ear plugs/muffs (during operation of heavy equipment).

Level C PPE will be required when modified Level D PPE does not provide adequate operator protection. The upgrade contingency will be based on air monitoring results as described in Section 7.

Level C PPE

- Saranex or Tyvek disposable coveralls,
- Inner and outer chemical-resistant gloves,
 - Outer: Nitrile (or similar),
 - Inner: N-DEX (or similar),
- Hard hat,
- Chemical resistant, steel-toe, steel-shank work boots ,
- Full face air purifying respirator equipped with NIOSH/MSHA approved cartridges or canister for removal of organic vapors and toxic particulates,
- Cool vests (as dictated by weather conditions),
- Hearing protection (where required),

6.3 REASSESSMENT OF PROTECTION PROGRAM

The level of protection provided by PPE selection shall be upgraded or downgraded based upon a change in site conditions, air monitoring, or sample analytical results. The SSO, in consultation with the Regional Health and Safety Coordinator, shall be responsible for deciding when and if an upgrade or downgrade in PPE is warranted.

When a significant change occurs, the protection program should be reassessed. Some indicators of the need for reassessment are:

- Change of season/weather
- When temperature extremes or individual medical considerations limit the effectiveness of PPE

- Contaminants other than those previously identified are encountered
- Potential hazardous debris (such as drums) are encountered in the waste pile
- Change in ambient levels of contaminants

6.4 STANDARD OPERATING PROCEDURES FOR RESPIRATORY PROTECTION DEVICES AND PERSONAL PROTECTIVE CLOTHING

Standard operating procedures for air purifying respirators and personal protective clothing can be found in Appendix E of this plan.

SECTION SEVEN
FREQUENCY AND TYPES OF AIR MONITORING

7.1 AREA AIR MONITORING

Direct area air monitoring shall be performed during sampling to quantify airborne contaminants in order to verify and determine the level of worker protection required. All monitoring equipment shall be calibrated, operated and maintained according to the manufacturer's specifications. See Appendix F for a summary of these requirements.

At a minimum, equipment shall be "field calibrated" at the start and end of each work day and whenever equipment operation is questionable.

Table 7.1 provides a summary of the area air monitoring program.

All direct monitoring results shall be recorded in the site log. Highest and average airborne concentrations shall be recorded in the daily record of hazardous waste field activity located in Appendix D.

TABLE 7-1. MONITORING METHODS				
Instrument	Sampling Location	Monitoring Frequency	Action Level	Action
OVA-FID	O.B.Z.	Continuously during sampling activities	25 ppm above background for 1 minute in the breathing zone 50 ppm above background for 1 minute in breathing zone	Upgrade to Level C Evacuate site; notify Regional Health and Safety Coordinator
Count Rate Meter (CRM)	Debris Removed from Waste Dump	Periodically	Any detection above background	Evacuate Site; notify Regional Health and Safety Coordinator

OVA = Organic Vapor Analyzer
 FID = Flame Ionization Detector
 ppm = Parts per million
 OBZ = Operator Breathing Zone
 CRM = Count Rate Meter

SECTION EIGHT
SITE CONTROL

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The following section defines measures and procedures for maintaining site control. Site control is an essential component in the implementation of the site health and safety program.

8.1 BUDDY SYSTEM

There will be no activities conducted on-site without sufficient backup personnel to permit operation of a buddy system. The buddy system is a method of organizing employees into work groups in such a manner that each employee of the work group is designated to be observed by at least one other employee in the work group. Both employees shall be able to visually or verbally communicate with each other at all times and shall be equipped with the personal protective equipment required to assist the buddy in case of an emergency. At a minimum, two persons must be present at each facility location at all times.

8.2 SITE COMMUNICATIONS PLAN

Successful communications between field workers and contact with emergency personnel is essential. At a minimum, the following communications systems will be available during activities at the Waste Dump:

- mobile/cellular telephone,
- Hand signals;

<u>Signal</u>	<u>Definition</u>
Hands clutching throat	Out of air/cannot breathe
Hands on top of head	Need assistance
Thumbs up	OK/I am alright/I understand
Thumbs down	No/negative
Arms waving upright	Send backup support
Grip partners wrist	Exit area immediately

Visual, or voice, communications must be maintained at all times among field workers.

8.3 WORK ZONE DEFINITIONS

The three general zones regularly established at hazardous waste sites are the exclusion zone, contamination reduction zone, and support zone. These zonal designations are defined as follows:

or likely to be present, or because of activity, will provide a potential to cause harm to personnel. Entry into the exclusion zone requires the use of modified Level D personal protective equipment.

- The contamination reduction zone is the area where personnel conduct personal and equipment decontamination. It is essentially a buffer zone between contaminated areas and clean areas. Support activities to be conducted in this zone will require at a minimum personal protective equipment of modified Level D.
- The support zone is situated in clean areas where the chance to encounter hazardous materials or conditions is minimal. Personal protective equipment is therefore not required.

The exclusion zone and the contamination reduction zone are restricted work zones. Access to the restricted work zones shall be only to personnel having undergone the requisite training as specified in Section 4 and under the requisite medical surveillance program as specified in Section 5, and also having certified by signature that they have read, understand, and will abide by the Site Health and Safety Plan (Appendix C). Figure 8.1 depicts the typical work zone delineation for the removal site.

A centralized temporary equipment staging area/decontamination station will also be erected at the Waste Dump. In the vicinity of the staging/decontamination area, a support area will be established.

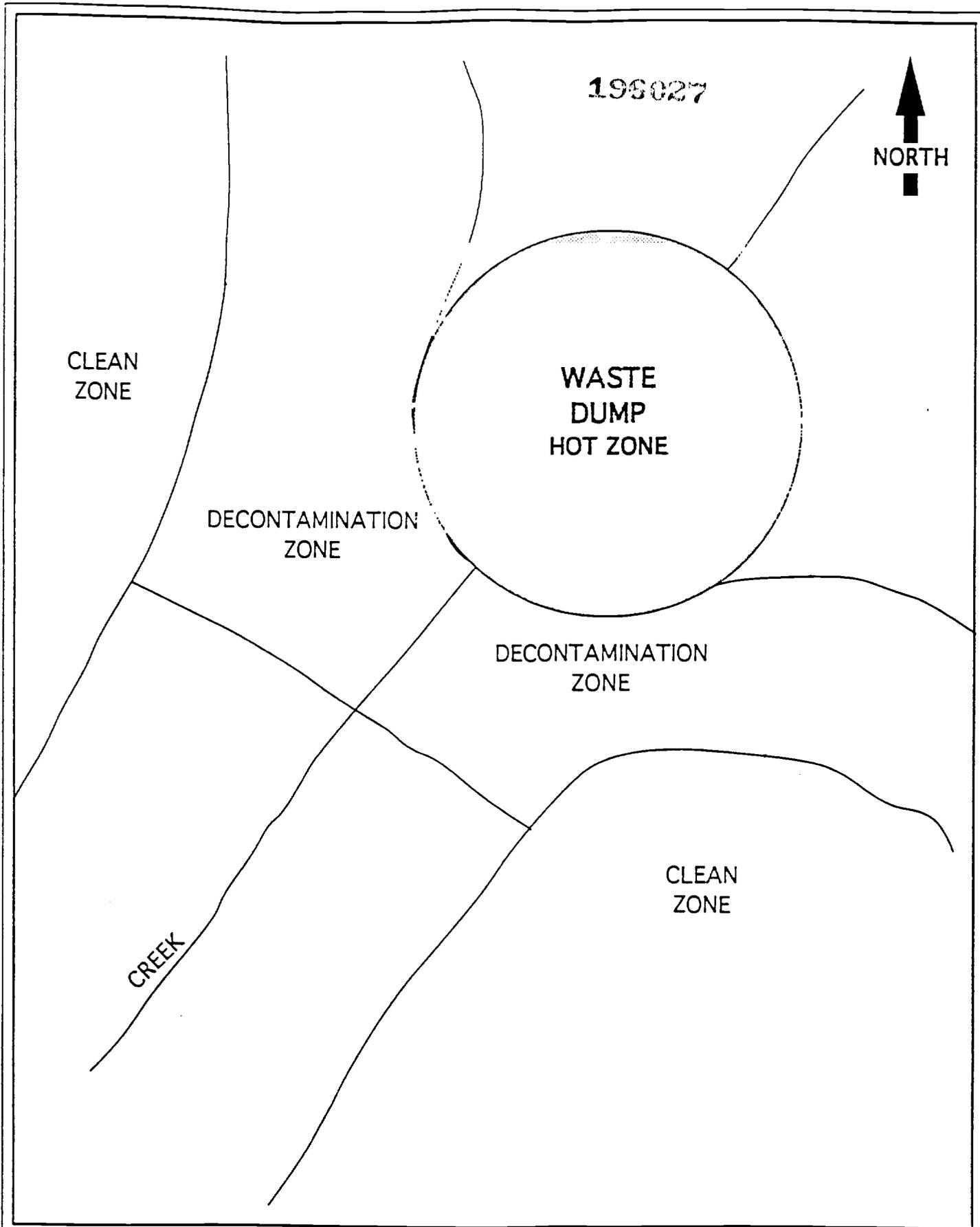
8.4 SITE SECURITY

If the site is determined to contain hazardous or radioactive waste materials, the boundary of the exclusion zone and contamination reduction zone at the Waste Dump will be cordoned off with high-visibility, "Caution: Do Not Enter" barricade tape to discourage access by unauthorized personnel.

8.5 NEAREST MEDICAL ASSISTANCE

In the event that medical treatment beyond first aid is required by site workers who may experience an injury or exposure on-site, the Harris Southwest Methodist Hospital will provide emergency care. The Harris Southwest Methodist Hospital is located at 6100 Harris Parkway in Fort Worth. Figure 8.2 illustrates the location of the hospital. The SSO will ensure that all site personnel are familiar with the routes to the hospital in the kickoff briefing. The following is a narrative description of directions to the Harris Southwest Methodist Hospital:

Take White Settlement Road
 Get on I-820 South
 Exit from I-820 at the Bryant-Irving Road Exit
 Turn Right at the end of the exit ramp
 Turn left onto Oakmont Road

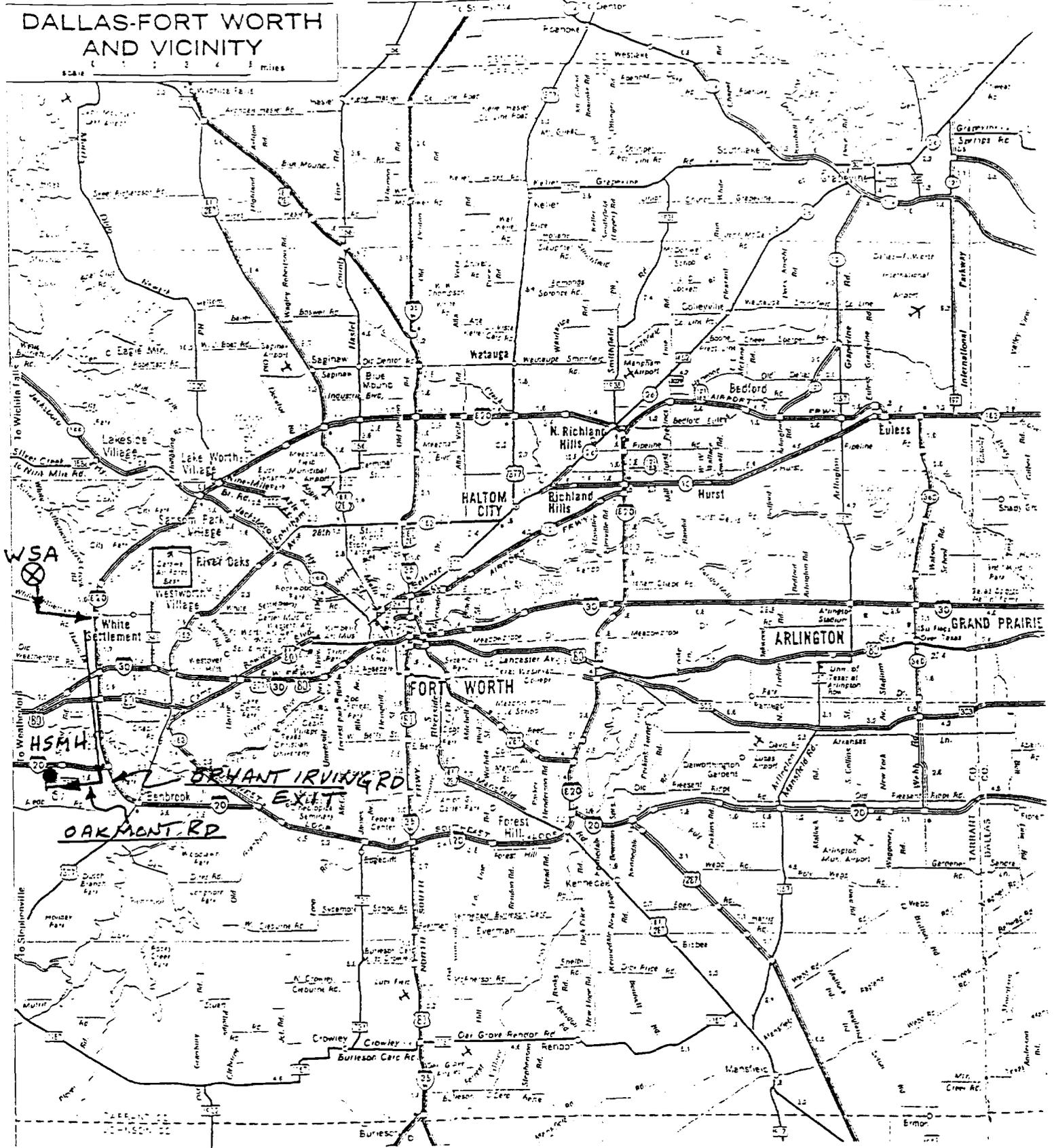


SITE WORK ZONES
CARSWELL AFB, TEXAS

NOT TO SCALE

FIGURE 8.1

DALLAS-FORT WORTH AND VICINITY



199028

FIGURE 8-2

ROUTE TO HARRIS SOUTHWEST METHODIST HOSPITAL (HSMH)

WSA-WEAPONS STORAGE AREA

8-4



Take next right onto Harris Parkway
The hospital is a white building with a red tile roof and clock tower.

8.6 SAFE WORK PRACTICES

The following general safety procedures shall be followed by all persons entering and/or working at the Waste Dump:

- All persons working on this project shall read and sign this HSP prior to entering or working at Waste Dump. The master copy (with signature sheet) of this safety plan will be held by the designated SSO. See Appendix C.
- At work sites where there are non M&E employees that may be exposed to hazardous chemicals which are used by M&E personnel, the SSO shall inform the other employers of the methods to obtain a copy of a MSDS, precautionary measures that are necessary to protect employees and the labeling system used at the work site. See Appendix G.
- There will be no smoking, eating, chewing gum, chewing tobacco, drinking, taking medicines, or activities which require hand to mouth/face actions in the exclusion zone or contamination reduction zone.
- All site activities shall conform with M&E's Health & Safety Manual for Hazardous Waste Projects.
- All contractor or subcontractor personnel shall bring to the attention of the SSO any unsafe condition or practice associated with site activities.
- Hands, face and all other potentially contaminated areas shall be thoroughly cleaned prior to smoking, eating, or leaving the Waste Dump.
- Project personnel must avoid unnecessary contamination exposure (e.g., walking through known or suspected "hot" zones or contaminated puddles, kneeling or sitting on the ground, leaning against potentially contaminated barrels or equipment).
- All project personnel who are likely to wear air purifying or air supplied respirators must first meet the training and medical requirements of 29 CFR 1910.120 and 29 CFR 1910.134.
- Respiratory devices may not be worn with beards, long sideburns, or under other conditions that prevent a proper seal.
- No project personnel may be allowed on-site without the prior knowledge and consent of the designated SSO and Project Manager.

- All accidents and/or injuries shall be immediately reported to the SSO. If necessary, a first report of injury will be initiated by the SSO and provided to the Regional Health and Safety Officer for processing.
- All non-routine operations or amendments to this HSP shall be reviewed and approved by the Corporate Health and Safety Officer or Regional Health and Safety Coordinator and Project Manager prior to implementation. See Appendix B.
- No contact lenses may be worn within the site exclusion or contamination reduction zones.
- No matches or lighters may be brought into the exclusion or contamination reduction zones.
- Aerial obstructions such as power lines and tree branches will be verified prior to erection of crane rig masts or movement of large equipment. A 20-foot horizontal clearance must be maintained between all aerial obstructions.
- All outside site operations shall be performed during daylight hours.
- All confined space entries shall require either the Site Health and Safety Officer and/or Regional Health and Safety Coordinator to be present, and shall be performed by personnel properly trained in confined space entry per the program in Section II. The proper health and safety equipment for the entries will be provided.
- When using portable electric tools and appliances use three-wire grounded extension cords and ground fault circuit interrupters to reduce the potential for electrical shock.
- If signs of radiation contamination, explosivity or unusual conditions such as dead animals are discovered at the Waste Dump, personnel will immediately exit the site and report findings to the SSO.

Sanitation

- An adequate supply of potable water shall be available on-site. Portable containers used to dispense drinking water shall be capable of being tightly closed and equipped with a tap. Water shall not be dipped from containers.
- Any container used to distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose.
- Restroom facilities shall be made available at hazardous waste site locations.

SECTION NINE DECONTAMINATION PLAN

9.1 PERSONNEL DECONTAMINATION PROCEDURES

The following decontamination procedure shall be followed whenever exiting the exclusion zones into the contamination reduction zones:

- | | | |
|------------|---------------------------------------|---|
| Station 1: | Segregated
Equipment Drop | <ul style="list-style-type: none"> • Deposit equipment used on-site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area. |
| Station 2: | Boot and
Glove Removal | <ul style="list-style-type: none"> • Scrub outer boot covers and gloves with brush and decon solution. • Rinse off decon solution with water. |
| Section 3: | Hard Hat/Eye
Protection
Removal | <ul style="list-style-type: none"> • Remove hard hat and eye protection. Wash and sanitize at least daily. |
| Section 4: | Face Piece
Removal | <ul style="list-style-type: none"> • If respirators are used, wipe down the respirator exterior with a wet paper towel, remove and deposit in plastic liner. Avoid touching face with fingers. Respirators shall be washed in a MSA sanitizing solution (or equivalent), rinsed with potable water and allowed to air dry at the end of each day. |

At the end of the decontamination train, workers should wash hands, face, and any other potentially contaminated areas with a potable water/mild soap solution followed by a potable water rinse. Personnel should shower and launder personal clothing as soon as possible upon completing daily activities.

9.2 EQUIPMENT DECONTAMINATION PROCEDURES

All heavy equipment (non-sampling equipment) which comes into direct contact with potentially contaminated soil shall be decontaminated (by physical removal of packed dirt and debris) prior to leaving the contamination reduction zones established at the Waste Dump.

SECTION TEN

EMERGENCY RESPONSE/CONTINGENCY PLAN

This section describes contingencies and emergency planning procedures to be implemented at the Waste Dump. This plan is compatible with local, state and federal disaster and emergency management plans as appropriate.

10.1 PRE-EMERGENCY PLANNING

All workers will be informed of provisions of the emergency response plan, communications systems, and evacuation routes. The plan will be reviewed and revised if necessary, by the SSO. This will ensure that the plan is adequate and consistent with prevailing site conditions.

10.2 PERSONNEL ROLES AND LINES OF AUTHORITY

The Site Manager has primary responsibility for evacuating the site in emergency situations. This includes taking appropriate measures to ensure the safety of site personnel and the public. Possible actions may involve evacuation of personnel from the site area, and evacuation of adjacent facilities. He/she is additionally responsible for ensuring that corrective measures have been implemented, appropriate authorities notified, and follow-up reports completed. The SSO may be called upon to act on the behalf of the Project Manager/Site Manager, and will direct responses to any medical emergency. If an emergency situation occurs, the individual subcontractor organizations are responsible for assisting the Site Manager within the scope of the subcontractor's work.

10.3 EMERGENCY RECOGNITION/PREVENTION

A listing of physical health hazards on-site is provided in Section 2. Personnel will be trained in hazard identification. The SSO is responsible for ensuring hazard prevention devices or equipment are available to site personnel.

10.4 EVACUATION ROUTES/PROCEDURES

In the event of an emergency which necessitates evacuation of the Waste Dump, the following procedures will be implemented.

1. Proceed to the closest exit
2. Gather at the predetermined primary assembly area (relocate at predetermined secondary assembly area if necessary)
3. Perform head count to verify all present
4. Notify Regional Health and Safety Coordinator

Figure 10.1 provides a map depicting evacuation routes from the Waste Dump.

Figure 10.1 Evacuation Routes

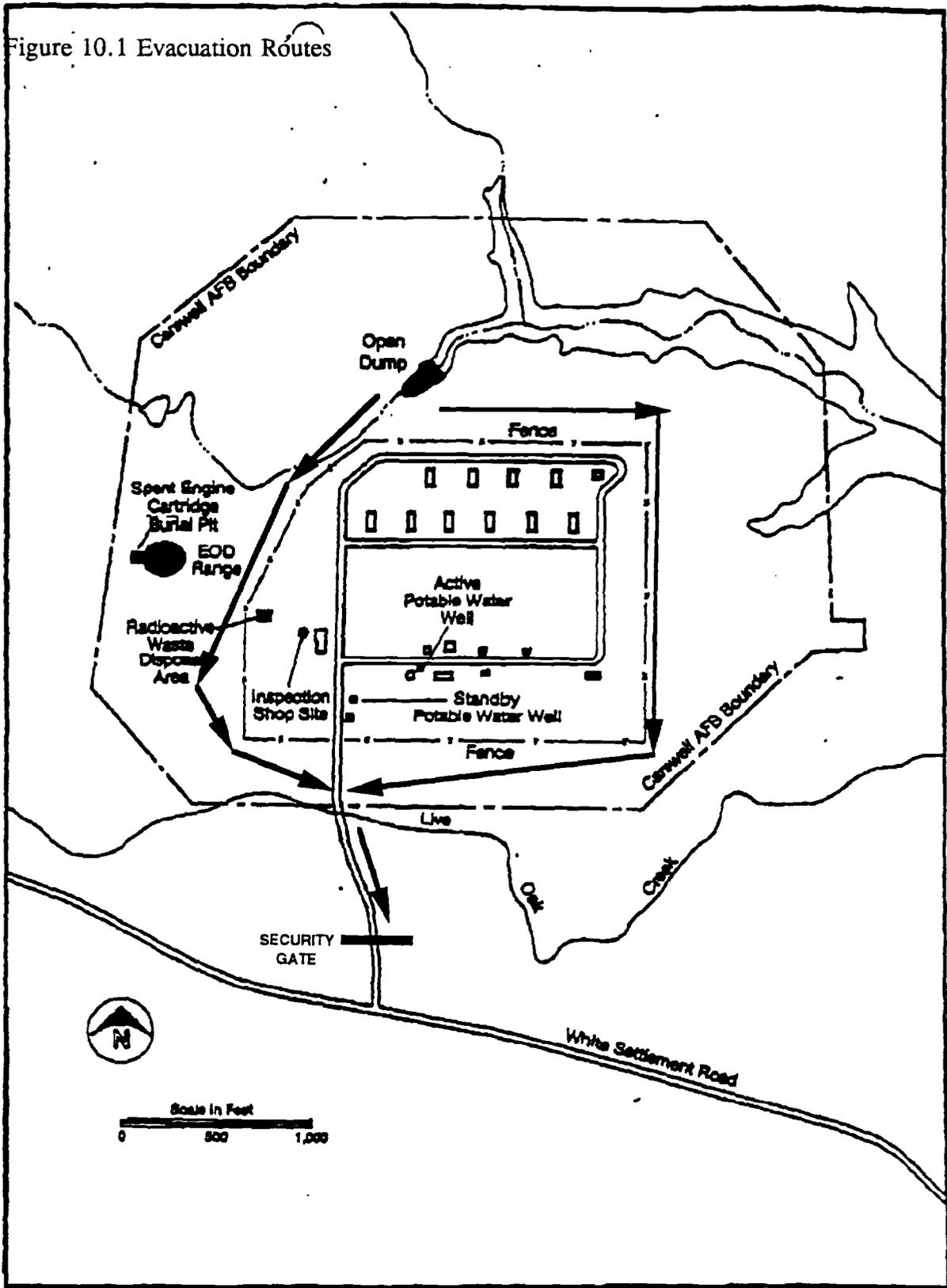


FIGURE 10-1. EVACUATION ROUTES

10.5 EMERGENCY CONTACT/NOTIFICATION SYSTEM

Table 10-1 provides names and telephone numbers for emergency contact personnel. In the event of a medical emergency, personnel will take direction from the SSO and notify the appropriate emergency organizations. In the event of a fire or spill, the Site Manager will notify the appropriate local, state, and federal agencies.

TABLE 10-1. EMERGENCY CONTACTS			
Organization	Contact	Emergency Telephone	Business Telephone
Ambulance	Medstar	911	
Fire - Primary - Secondary	Fort Worth Fire Department Carswell AFB Fire Department	911 911 (request transfer to Carswell AFB Fire Department) or 782-6330	782-6334 or 6335
Hospital	Harris Southwest Methodist	911	
National Response Center		(800) 424-8802	
Center for Disease Control		(404) 488-4100	
Chemtrec		(800) 424-9555	

10.6 EMERGENCY MEDICAL TREATMENT PROCEDURES

Any person who becomes ill or injured in the exclusion and/or contamination reduction zones must be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed.

First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must immediately be reported to the Project Manager, SSO, Regional Health and Safety Coordinator, and the Corporate Health and Safety Officer.

A minimum of two persons on site will be currently certified in Standard First Air/Adult CPR by the American Red Cross.

Any person being transported to a clinic or hospital for treatment should be accompanied with a complete copy of the HSP.

Any vehicle used to transport contaminated personnel will be treated and cleaned as necessary.

Any person who becomes ill or injured without the concern of contamination shall also seek appropriate medical assistance.

10.7 FIRE OR EXPLOSION

In the event of a fire or explosion, evacuate and contact the Fort Worth Fire Department or the Carswell AFB fire protection crew. Upon their arrival, the Project Manager or Site Manager will advise the Fire Commander of the location, nature, and identification of any known hazardous materials in the affected area.

10.8 SPILL OR LEAKS

In the event of a spill or a leak, site personnel will leave the area and inform the Site Manager. The Site Manager will then contact the designated commander in charge of the Carswell AFB fire protection crew.

10.9 EMERGENCY EQUIPMENT/FACILITIES

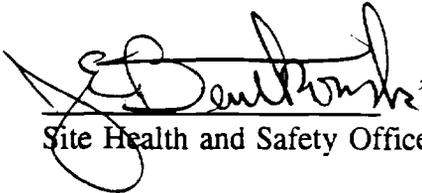
All emergency alerting and response equipment shall be available at the interface of the support and contamination reduction zones. At a minimum this shall include the following:

- Air Horn
- First Aid Kit
- Fire Extinguisher (20 lb Rated 2A/10BC)
- Mobile Phone
- Eye Wash
- Emergency Shower, or hose connected to potable water supply.

HEALTH AND SAFETY PLAN APPROVAL SHEET

This site health & safety plan has been written for the exclusive use of Metcalf & Eddy, Inc. employees. M&E claims no responsibility for its use by others. The plan is written for the specified site conditions, dates, and personnel and must be amended if these conditions change.

PREPARED BY:

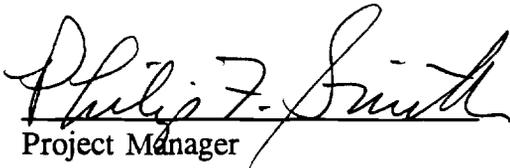

Site Health and Safety Officer

6/30/93
Date

REVIEWED BY:


Regional Health and Safety Coordinator

6/30/93
Date


Project Manager

7/2/93
Date

SITE SAFETY PLAN AMENDMENT FORM

Amendment # _____

Site Name _____

Work Assignment # _____

Date _____

Type of Amendment _____

Reason for Amendment _____

Alternate Safeguard Procedures _____

Required Changes in PPE _____

Regional Health & Safety Coordinator
Mike Luker, C.I.H.

Date

Project Manager
Philip F. Smith

Date

198040

APPENDIX C
SITE WORKER CERTIFICATION SIGN-OFF SHEET

190042

APPENDIX D

DAILY RECORD OF HAZARDOUS WASTE FIELD ACTIVITY

198043

DAILY RECORD OF HAZARDOUS WASTE FIELD ACTIVITY

Site Name _____

Period of Activities(Date) _____

WA# _____

Tasks _____

Site Health & Safety Officer/Alternate _____

Highest Airborne Conc./Monit. Instrument _____

Average Airborne Conc./Monit. Instrument _____

<u>Employee Name</u>	<u>Total Hours onsite</u>	<u>Hours/Level</u>			<u>Activities Performed While Onsite</u>
		<u>B</u>	<u>C</u>	<u>D</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

198046

APPENDIX E
PPE INSPECTION AND MAINTENANCE PROGRAM

PPE INSPECTION PROCEDURES

E.1 Cleaning and Disinfecting Air Purifying Respirators (APR)

APRs in routine use should be cleaned and disinfected at least daily. Where respirators are used only occasionally, or when they are in storage, the cleaning interval is weekly or monthly, as appropriate.

E.1.1 Daily Cleaning Procedure. The steps to be followed for cleaning and disinfecting daily are as follows:

- **Respirator Disassembly.** Respirators are taken to a clean location where the filters, cartridges or canisters are removed, damaged to prevent accidental reuse, and discarded. For thorough cleaning, the inhalation and exhalation valves, speaking diaphragm, and any hoses are removed.
- **Cleaning.** In most instances, the cleaning and disinfecting solution provided by the manufacturer is used, and is dissolved in warm water in an appropriate tub. Using gloves, the respirator is placed in the tub and swirled for a few moments. A soft brush may be used to facilitate cleaning.
- **Rinsing.** The cleaned and disinfected respirators are rinsed thoroughly in water to remove all traces of detergent and disinfectant. This is very important for preventing dermatitis.
- **Drying.** The respirators may be allowed to dry in room air on a clean surface. They may also be hung upside down like drying clothes, but care must be taken not to damage or distort the facepieces.
- **Reassembly and Inspection.** The clean, dry respirator facepieces should be reassembled and inspected in an area separate from the disassembly area to avoid contamination. Special emphasis should be given to inspecting the respirators for detergent or soap residue left by inadequate rinsing. This appears most often under the seat of the exhalation valve, and can cause valve leakage or sticking.

E.1.2 After Routine Use in Exclusion Zone. The steps to be followed for cleaning and disinfecting in the field are as follows:

- The mask may be washed/rinsed with soap and water.
- At a minimum, the mask should be wiped with disinfectant wipes and allowed to air dry in a clean area.

E.2 APR Inspection and Checkout

1. Visually inspect the entire unit for any obvious damages, defects, or deteriorated rubber.
2. Make sure that the facepiece harness is not damaged. The serrated portion of the harness can fragment which will prevent proper face seal adjustment.
3. Inspect lens for damage and proper seal in facepiece.
4. Exhalation Valve - pull off plastic cover and check valve for debris or for tears in the neoprene valve (which could cause leakage).
5. Inhalation Valves (two) - screw off cartridges/canisters and visually inspect neoprene valves for tears. Make sure that the inhalation valves and cartridge receptacle gaskets are in place.
6. Make sure a protective cover lens is attached to the lens.
7. Make sure the speaking diaphragm retainer ring is hand tight.
8. Make sure that you have the correct cartridge.
9. Don and perform negative pressure test.

E.3 Storage of Air Purifying Respirators

OSHA requires that respirators be stored to protect against:

- Dust
- Sunlight
- Heat
- Extreme cold
- Excessive moisture
- Damaging chemicals
- Mechanical damage

Storage of respirators should be in a clean, secure area which minimizes the chance for contamination or unsanitary conditions.

E.6 Personal Protective Clothing

E.6.1 Inspection. Proper inspection of PPE features several sequences of inspection depending upon specific articles of PPE and its frequency of use. The different levels of inspection are as follows:

- Inspection and operational testing of equipment received from the factory or distributor.
- Inspection of equipment as it is issued to workers.
- Inspection after use or training and prior to maintenance.
- Periodic inspection of stored equipment.
- Periodic inspection when a question arises concerning the appropriateness of the selected equipment, or when problems with similar equipment arise.

The primary inspection of PPE will occur prior to immediate use and will be conducted by the user. This ensures that the specific device or article has been checked-out by the user, and that the user is familiar with its use.

CLOTHING

Before use:

- Determine that the clothing material is correct for the specified task at hand.
- Visually inspect for:
 - Imperfect seams
 - Non-uniform coatings
 - Tears
 - Malfunctioning closures
- Hold up to light and check for pinholes.
- Flex product:
 - Observe for cracks
 - Observe for other signs of shelf deterioration
- If the product has been used previously, inspect inside and out for signs of chemical attack:
 - Discoloration
 - Swelling
 - Stiffness

During the work task, periodically inspect for:

- Evidence of chemical attack such as discoloration, swelling, stiffening, and softening. Keep in mind, however, that chemical permeation can occur without any visible effects.

- Closure failure.
- Tears.
- Punctures.
- Seam Discontinuities.

GLOVES

Before use:

- Visually inspect for:
 - Imperfect seams
 - Tears, abrasions
 - Non-uniform coating
 - Pressurize glove with air; listen for pin-hole leaks.

196049

APPENDIX F
DIRECT-READING INSTRUMENT DESCRIPTIONS

DIRECT-READING INSTRUMENTS

The applicability and use of the air monitoring equipment to be used to monitor the health and safety conditions are given below. The sampling methods used will follow NIOSH and/or EPA criteria.

Flame Ionization Detector (FID)

Hazard Monitored: Many organic gases and vapors.

Application: In survey mode, detects the concentration of many organic gases and vapors. In gas chromatography (GC) mode identifies and measures specific compounds. In survey mode, all the organic compounds are ionized and detected at the same time. In GC mode, volatile species are separated.

General Care/Maintenance: Recharge or replace battery. Monitor fuel and/or combustion air supply gauges. Perform routine maintenance as described in the manual. Check for leaks.

Typical Operating Time: 8 hours; 3 hours with strip chart recorder.

Count Rate Meter (CRM)

Hazard Monitored: Radiation contamination

Application: Used to manually check for external contamination on surface areas, tools, etc. Can detect alph, beta, and/or gamma radiation.

General Care/Maintenance: Recharge or replace battery.

199051

APPENDIX G

CHEMICAL INVENTORY & MATERIAL SAFETY DATA SHEETS

CHEMICAL INVENTORY

Chemicals of Concern

Trichloroethylene

Chemicals M&E Personnel May Bring Onsite

Isopropyl alcohol

Nitric acid

Sulfuric acid

Hydrogen gas

Sodium hydroxide

HEAT STRESS POLICY

1. Purpose

To prevent heat stress related injuries during field work operations.

2. Scope

This policy applies to all offices and divisions of Metcalf & Eddy (M&E) and its subsidiary corporations.

3. Policy

3.1 Heat stress monitoring shall be performed whenever operations are performed in ambient temperatures exceeding 70°F.

3.2 Appropriate measures shall be taken to prevent deep body core temperature from rising above 100.4°F.

4. Evaluation and Control

4.1 Heat stress shall be evaluated and controlled based upon measurement of environmental conditions and/or personal monitoring.

4.2 Measurement of Environmental Conditions

- Measurement of environmental conditions to evaluate and control heat stress shall be performed in accordance with the ACGIH TLV booklet section on heat stress. This method will require the use of a WBGT meter.

4.3 Personal Monitoring

- Personal monitoring to evaluate and control heat stress shall be performed in accordance with NIOSH/OSHA/USCG and EPA's Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, Section 8, Personal Protective Equipment.

5. Other Considerations

5.1 Employees shall be acclimated prior to performing work in heat stress situations.

5.2 Individuals experiencing vomiting or diarrhea or who have chronic cardiovascular diseases shall not perform activities in heat stress conditions until a medical approval is obtained.

- 5.3 Female and Male employees whose core body temperature remains above 100.4°F may experience temporary infertility.

Female employees who are potentially in their first trimester of a pregnancy and have a core temperature that exceeds 102.2°F for extended periods, are at an increased risk of malformation to the unborn fetus.

6. Water and Salt Intake

- 6.1 Fluids shall be replaced approximately every 20 minutes in amounts of at least 150 mL (3.6L/Day).
- 6.2 Water shall be kept cool (50° - 60°F) throughout the operation.
- 6.3 Electrolyte replacement shall be in the form of a 0.1% salt solution in drinking water or commercial electrolyte replacement drink (i.e. Gatorade or equivalent).

7. Prevention

- 7.1 Strenuous physical activities shall be scheduled at the beginning and end of the day when external temperatures may be cooler.
- 7.2 Potable water sprayers shall be provided so that employees can cool down skin surfaces.
- 7.3 Provide cool rest areas and seating.
- 7.4 Provide whole body cooling devices such as ice vests with frozen packs or recirculation systems.

198056

APPENDIX I

ACCIDENT/INJURY INVESTIGATION REPORT FORM

ACCIDENT/INJURY INVESTIGATION REPORT FORM

Date of Incident: _____

Location of Incident: _____

Time of Incident: _____

Date of Report: _____

Personal Injury: _____

Property Damage: _____

Description of Incident: _____

Causes (Minimum of 2): _____

Corrective Actions:

Actions	Responsibility	Date of Completion
_____	_____	_____
_____	_____	_____
_____	_____	_____

Investigated by: _____

Written by: _____

Date: _____

Reviewed by: _____

Date: _____

199057

APPENDIX J

CARSWELL AFB REGULATION 92-1 - BASE FIRE REGULATION

196053

APPENDIX J

CARSWELL AFB REGULATION 92-1 - BASE FIRE REGULATION

Bobbie Hovey

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7th Civil Engineering Squadron

198000

BASE FIRE REGULATION

This regulation implements AFR 92-1 and affixes definite fire prevention principles and objectives and fire protection procedures and responsibilities at Carswell Air Force Base. At least one copy of this regulation will be posted in organizational files and all personnel made aware of its contents; this includes vendors and contractors.

	Paragraph	Page
Responsibilities	1	2
*Fire Reporting and Evacuations	2	6
*Smoking	3	6
Housekeeping	4	7
*Warehousing and Storage	5	8
*Welding and Cutting	6	9
*Flammable and Combustible Liquids and Gases	7	9
Ground Servicing of Aircraft	8	10
*Electrical Installation and Equipment	9	10
*Cooking and Food Preparation	10	11
Aisles and Exits	11	13
*Places of Public Assembly	12	13
*Closing Inspections	13	14
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Vegetation Control	15	14
Mechanical Rooms	16	14
Hangars and Aircraft	17	15
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Powered Material Handling Equipment	19	15
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Hazardous Chemicals	21	16
Vehicle Parking, Traffic Control, and Storage of Gasoline Powered Equipment	22	17
*Military Family Housing	23	18
VOQ, VAQ, TLF AND UEQ	24	20
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Conditions Not Covered	28	22

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2. Building Managers Checklist	29
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Supersedes CAFBR 92-1, 11 Mar 83 (See page 23 for summary of changes)

No. of Printed Pages: 33

OPR: 7 CSG/DEF (GS-12 Donald D. Smith)

Approved by: LTC Charles Jackson

Editor: SSgt Satroplus

Distribution: F;X

1. RESPONSIBILITIES:

190000

a. Base Fire Marshal.

The Base Civil Engineer is the Base Fire Marshal and is responsible to the 7th CSG Commander for the accomplishment of overall fire prevention, fire protection, firefighting and crash rescue.

b. Base Fire Chief.

The Fire Chief, or in his/her absence, the Assistant Chief, acting under the Fire Marshal, will be in complete charge of all firefighting or crash rescue activities. All unauthorized personnel will be restricted from the fire area, and no person will interfere with the Fire Chief, firefighting personnel, or equipment. The Fire Chief will ascertain whether assistance is needed from neighboring fire departments. The Fire Chief has authority to commandeer vehicles, materials and personnel as required to combat fire and/or effect rescue. The Fire Chief is responsible to the Fire Marshal for the administrative and technical operation of the Base Fire Department. Investigations to determine the cause of fires will be conducted at the scene by the Senior Fire Protection Supervisors. In cases where arson is suspected, the OSI will be notified through the Fire Marshal.

c. Chief, Security Police.

The Chief, Security Police will provide personnel for traffic control at the scene of fires. Unauthorized vehicles and spectators will not be admitted to the fire scene. Control of children in the Military Family Housing Area is of prime importance. It is essential off-duty fire protection personnel be permitted access to the emergency scene. Upon request, guards will be posted at the scene to prevent unauthorized access and tampering until investigations are completed. Law enforcement personnel will respond and establish traffic control upon notification of simulated building fires.

d. Hospital Commander.

The Hospital Commander will establish procedures to insure immediate response of medical personnel and ambulances to the scene of fires when deemed necessary by the Base Fire Chief or his/her representative. Medical personnel will monitor the fire-crash radio net at the Medical Control Center during all fires for the purpose of medical response, should it be necessary.

e. CE Service Call.

CE Service or Call Zone Controllers will be notified by the Fire Alarm Communications Center of all emergencies and immediately dispatch appropriate utilities personnel to the scene. For structural fires and drills, only electrical technicians will be required immediately. Other technicians will be dispatched as requested.

196062

f. Unit Commanders.

Unit Commanders are responsible for and must insure that sound fire prevention procedures are established and practiced. They will:

1. Advise Technical Services of fire hazards which cannot be corrected by unit personnel.
2. Immediately inform Technical Services of any fire extinguishers which were discharged or damaged and any installed fire protection system which may have been damaged during operation by accident or by contact with material handling equipment.
3. Develop an operating instruction for his/her unit to follow when fire is discovered. Instructions must cover fire reporting, personnel evacuation, safeguarding classified information, and first aid firefighting (manning hose station and fire extinguishers). Depending on the type of activity, instructions also include such items as emergency removal of aircraft from hangars, protection of high-value and critical material, and accidents involving fuel handling. Forward copy to Base Fire Department.
4. Request Technical Services to provide appropriate lectures and demonstrations. Schedule training to obtain largest possible audience.
5. Insure a fire prevention orientation has been received by all assigned personnel, as outlined in AFR 127-12. Military and civilians must receive this training within 30 days after reporting for duty.
6. Perform fire prevention inspections of facilities; rooms or areas which are under continuous lock and key are the responsibility of the individual supervisor maintaining that secured area. Additionally, it is their responsibility to arrange access to these facilities for the Base Fire Department to perform scheduled fire prevention inspections.
7. Insure personnel under their jurisdiction comply with this regulation and all other applicable instructions to accomplish all tasks in a fire-safe manner.
8. Conduct periodic indoctrinations directed specifically toward hazardous conditions/operations associated with the working environment.
9. Coordinate with the Fire Protection Branch potential fire hazardous conditions which may appear in new procedures or operations, changes in the facility, etc.
10. Not allow any self-help work to be accomplished on any facility under his/her jurisdiction without an approved AF Form 332, "BCE Work Request", that has been coordinated through the Fire Department and approved by Civil Engineers.

8. Real Property Managers.

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Real Property Managers are responsible to the Unit Commander (functional manager) for the fire-safe condition of the facilities under his/her jurisdiction as specified in AFR 92-1 and AFR 127-12. The real property manager or his/her alternate will:

1. Accompany the fire inspector during scheduled fire prevention inspections and effects immediate corrective action of fire hazards noted during the inspection. Frequency of inspections will be as outlined in AFR 92-1. On completing the inspection the fire inspector will brief the real property manager, or his/her alternate on the results of the inspection. If an AF Form 1487 (FIRE PREVENTION VISIT REPORT) is issued, part 2 of the AF Form 1487 will be given to the facility manager or his/her alternate at the time of the inspection. Part 1 is sent to the functional manager who is responsible for seeing that the AF Form 1487 is properly annotated and signed, and returned to the Fire Department by the suspense date indicated on the front of the form.
2. Receive training on the job, conducted by the Base Fire Department to assure an efficient fire prevention program (Guide for Facility Managers, Atch 2). Step-by-step operation of fixed extinguishment systems will be covered where pertinent and as required.
 - a. To insure serviceability, the real property manager is responsible for performing monthly inspections on all fire extinguishers within their facilities.
 - b. Inspections are designed to insure extinguishers are located in their designated places, that they have not been discharged or tampered with, and to detect any obvious physical damage, corrosion or other impairments.
 - c. Records of monthly inspections performed will be maintained at the work area in the real property manager's six-part folder.
3. Report changes in his/her building which might affect fire extinguisher allocation.
4. Deliver defective extinguishers to the Base Fire Department for maintenance.
5. Instruct newly assigned personnel in the location and operation of all extinguishing systems, fixed or portable, and promptly report all system deficiencies to the Base Fire Department.

6. Conduct frequent briefings to insure all personnel understand and observe all fire regulations and to insure they are aware of the proper fire reporting and building evacuation procedures.
7. Arrange for fire evacuation training to be conducted quarterly in places of public assembly, hospitals, child care centers, and industrial occupancies; and monthly for family day care homes and billeting by the real property managers and monitored by the Technical Services Section, to insure that assigned personnel are thoroughly trained in proper procedures for fire evacuation and suppression in case of fire.
8. Insure that a fire inspection at the end of each day or shift is accomplished. See Attachment 3.
9. Maintain a six-part folder. Folder to contain:
 - Part 1. Base Fire Regulation
 - Part 2. OI Fire Prevention and Reaction Plan
 - Part 3. Extinguisher Log
 - Part 4. AF Form 1487's (if any)
 - Part 5. Training Log/Certifications
 - Part 6. Misc-AF Form 332, Variances, requests, waivers.

h. Supervisors.

Supervisors at all levels are responsible to the Unit Commanders for fire safe conditions and insuring personnel under their jurisdiction comply with sound fire prevention procedures as outlined in this regulation.

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***2. FIRE REPORTING AND EVACUATIONS:**

- a. Any person who discovers a fire will immediately report it to the Base Fire Department by the quickest means available.
 1. Phones: Dial "9-1-1" to report a fire. Stay on the line until told to hang up by the Fire Department Operator.
- b. Building Evacuation Alarm System: All manual pull stations should notify the Base Fire Department. To insure the Fire Department is notified, personnel discovering a fire should activate the fire alarm system and call the Fire Department (dial 9-1-1) on any base telephone. Personnel hearing an alarm system ringing should call the Fire Department.
- c. The following actions will be taken immediately after discovering a fire, regardless of how minor in nature.
 1. Notify all occupants to evacuate building immediately.
 2. Call the Fire Department. Dial "9-1-1".
 3. Attempt to extinguish the fire.
 4. If extinguishing efforts fail:
 - a. Close all doors and windows, **DO NOT LOCK**
 - b. Evacuate the building to a predesignated area and remain outside the building to direct firefighters to the scene of the fire.
- d. The willful transmission or reporting a false fire or emergency alarm is prohibited.

***3. SMOKING:**

- a. AFR 30-27, Smoking in Air Force Facilities, places responsibility on commanders and supervisors for determining smoking areas. All buildings are considered as no smoking unless marked otherwise. No person shall smoke in bed or while reclining on beds.
- b. Smoking is prohibited in all government vehicles. Smoking and the lighting of smoking materials is prohibited within 50 feet of:
 1. Aircraft maintenance hangar/nosedocks
 2. Paint and dope shops
 3. Petroleum, oil, lubricating (POL) storage or dispensing areas
 4. Flammable liquids
 5. Fuel dispensing vehicles (fueling, defueling)
 6. Ammunition storage areas
 7. Any other areas obviously hazardous but not listed, ie, loading docks with doors open.

- c. Flame or spark producing devices will be strictly controlled in accordance with pertinent directives inside hazardous areas; i.e., bulk fuel storage area. Ammunition storage and maintenance areas will take positive measures to collect these items at specific points.
- d. Tobacco ash receivers will be provided at the entrance to each building where smoking is prohibited. Smoking material will be emptied into metal receptacles that are identified for the disposal of same. Supervisors will assure the contents of these receptacles are wet with water or cold/safe before they are emptied into trash collection containers.
- e. The use of strike matches (kitchen) anywhere is prohibited. Only safety type matches are approved for use on Carswell AFB to include military family housing area.

4. HOUSEKEEPING:

- a. Buildings and areas will be kept as clean and free of debris as possible at all times. Good housekeeping practices will be enforced at all times.
- b. Waste paper containers will be emptied as often as necessary, at least at the end of each day and/or shift. Outside dumpsters will be kept closed and will be located at least ten (10) feet from the building.
- c. All rags will be kept in closed metal containers with lids marked either "Clean Rags" or "Dirty Rags" in industrial shops.
- d. Only metal containers will be used for waste collection, storage or transportation, except in dining halls and hospitals where other type containers may be used with the approval of the Base Fire Chief.
- e. Burning of rubbish or the use of open fires is prohibited on Carswell Air Force Base.
- f. Lint bags and filters on clothes dryers will be emptied as required to avoid backup of lint. Exhaust tubes will be disconnected and cleaned as often as necessary. Dryers are to be vented to the exterior of the facility. Vent pipes may not have more than two (2) ninety-degree bends in them to prevent clogging.
- g. Holes and cracks in all facilities will be properly repaired and will not be used for the disposal of combustible material.
- h. Live Christmas trees will not be used in dormitory day rooms or individual rooms.
- i. No open flame lighting devices will be used in any building except where necessary for ceremonial or religious purposes and then only on approval of the Base Fire Chief. Candles may be used on table utilized for food service if securely supported in non-combustible containers and so located to preclude ignition of nearby combustibles and the candle flame is protected.

***5. WAREHOUSING AND STORAGE:**

190087

- a. Only small amounts of packing materials will be brought into buildings other than designated packing and crating areas where proper storage facilities are available. Packing materials will be stored in containers with self closing lids. All flammable spills and combustible debris will be removed on a continual basis.
- b. All associated excelsior, paper and fiber, will be stored in metal containers with self closing cover.
- c. Aisles must be clearly marked and maintained to afford proper firefighting capabilities.
- d. Storage and warehousing will be in accordance with DOD 4145.19 R-1, Storage and Warehousing.
- e. Eighteen inch clear space will be maintained beneath all sprinkler heads. If storage exceeds 15 feet in height, a 36-inch clearance will be maintained beneath sprinkler heads.
- f. Fire Doors will be maintained clear of storage to insure proper operations.
- g. Sight or access to any firefighting appliance, sprinkler, riser, or control will not be blocked nor will these devices be used for purposes other than for what they were designed. Maintain a minimum 36-inch clearance away from all firefighting appliances.
- h. Authorized vehicles operating within warehouses will be maintained in a safe working condition, and a complete daily inspection will be made to prevent fire originating from such vehicles.
- i. Bins will be constructed as outlined in DOD 4145.19 R-1, Storage and Warehousing.
- j. Powered material handling equipment parked inside general purpose warehouses will be in compliance with DOD 4145.19.R-1, Storage and Warehousing.
- k. Attic space will not be used for any type storage or habitation and will be off limits to smoking.
- l. Do not store pallets where they obstruct fire lanes and personnel exits. Store idle pallets in warehouses or other storage inside or outside as follows:

(1) Outside

- (a) Store a day's working supply of idle pallets along the outer edge of facility loading dock.
- (b) Do not store exceeding a height of six pallets per stack.
- (c) Store other pallets away from the building as follows:

- [1] Less than 50 pallets - 20 ft.
- [2] Less than 200 pallets - 30 ft.
- [3] Over 200 pallets - 50 ft.

(2) Inside

- (a) Do not store higher than 6 ft.
- (b) Allow eight feet of clear space to separate pallet stacks. In addition, allow 8 ft of clear space to separate pallet stacks from other commodities.

***6. WELDING:**

Welding, cutting and soldering (brazing) will be performed in shops designated for this type work. An AF Form 592, "USAF Welding, Cutting and Brazing Permit" will be issued by a representative of the Fire Department on all work performed outside designated shops. All work will be inspected prior to issuing an AF Form 592. Also, the inspector will determine if a fire guard or vehicle is required to standby. Qualified personnel will perform the welding, cutting or soldering operations. Civilian Contractors will adhere to these requirements. Welding, cutting and or soldering will be performed IAW AFOSH 127-5, "Welding, Cutting and Brazing". AF Form 592 is to be returned to the fire department upon completion of the operation.

***7. FLAMMABLE AND COMBUSTIBLE LIQUIDS AND GASES:**

- a. Flammable and combustible liquid and gases will be stored IAW AFOSH 127-43, "Flammable and Combustible Liquids", and the National Fire Codes. These items will be stored in designated buildings except when otherwise specified. A one-day supply is authorized in buildings for daily use. The unused quantity and drop cloths will be removed from the building at the end of the work day. Sewers or storm drains will not be used for disposal of such contents. Metal safety containers with appropriate markings are authorized for storage, transporting, and dispensing flammable or combustible liquids. Cleaning vats will meet prescribed criteria and only approved solvents will be used in vats.
- b. Only non-sparking devices will be used where explosive residue of flammable vapors could be present.

8. GROUND SERVICING OF AIRCRAFT:**196089**

- a. Aircraft will be grounded when in parked status.
- b. All ground servicing operations will be conducted IAW T.O. 00-25-172 and applicable aircraft handbook.
- c. The senior fire protection representative at the scene has authority to stop any servicing operation not being performed according to the references in paragraph b. above.

***9. ELECTRICAL INSTALLATION AND EQUIPMENT:**

- a. All electrical equipment will be of the appropriate type specified by the National Electric Codes.
- b. Electrical equipment, frames and all associated parts will be effectively grounded.
- c. Replacement of appliance electric cords will be of the same types, size (gauge) and length of the electric cord originally furnished by the manufacturer and maintained in a safe condition and will not be frayed or spliced.
- d. Use of adapters that permit plugging into a light receptacle is prohibited IAW the National Electric Codes.
- e. Extension cords will only be used as a temporary measure to connect a lamp or small appliance to the permanent building electrical system.
 1. Extension cords and flexible cords will NOT be:
 - a. Spliced, taped or stapled in any fashion, but will be used in continuous lengths.
 - b. Used as a substitute for the permanent wiring of a structure.
 - c. Run from one room to another, run through holes in walls, ceiling, floors, doors, windows, or similar openings. They will not be concealed behind walls, ceilings, floors, or run under rugs, runners or coverings.
 2. Extension cords and flexible cords WILL:
 - a. Be constructed in such a manner that tension will not be transmitted to joints or terminal screws.
 - b. Be equal in size or exceed the size of the appliance cord to which attached.
 - c. Bear the Underwriters Laboratories (UL) Label or other nationally recognized testing authority and will not be smaller than 18 American Wire Gauge (AWG).

- f. No one will alter basic structural electric wiring system without Civil Engineering approval on an AF Form 332. All electrical wiring will comply with the National Electric Codes. The use of multiple outlet adapters without surge protection is prohibited.
- g. A clearance of at least 18 inches will be maintained around light fixtures. Fluorescent lights will not be mounted directly on combustible surfaces, but will have at least half inch clearance.
- h. Fluorescent bulbs will be replaced as soon as burned out or flickering to protect the ballasts (one bulb may be removed from the light for energy conservation). Short bulb life span may indicate electrical problems and Civil Engineering Zone should be notified.
- i. All portable appliances will be disconnected after use. The only exception is a large appliance such as a clothes dryer or vending machine where bulk would make this requirement unrealistic. The use of timers on portable appliances is prohibited in offices and shop areas, unless the timer is built-in to the appliance.
- j. Electrical panels and panel rooms are off limits, except to authorized Civil Engineering personnel.
- k. Portable heaters are prohibited in correctional detention and health care facilities. They are not to be used without prior authorization, in writing, from 7 CES/DEM and authorization will be renewed annually. If permission is granted, heater must be equipped with an automatic shutoff and tip-over switch. Placement of portable heater will be approved by the fire department. Do not store combustibles within 36 inches of any space heater.
- l. Fuses or circuit breakers will not be bridged, taped, tied closed, or tampered with in any fashion.
- m. Appliances will be marked with the name of the manufacturer, the normal rating and Underwriters Laboratories or equivalent seal.
- n. All equipment will be operated either with a switch or male plug and will not be wired directly into a circuit without benefit of a quick disconnecting device.
- o. Equipment for explosive, flammable, damp or corrosive locations will meet the standards set forth in the National Electric Codes.
- p. Motors and motor mount areas will be kept free of dust, dirt and debris to prevent overheating.
- q. Unsafe wiring or malfunctioning equipment will be immediately discontinued and reported to the Civil Engineer Zone.
- r. Any portable appliance having a heating coil (coffee pots, heaters, etc) will be placed on a noncombustible surface.
- s. All battery charger areas will be wired in accordance with the National Electric Code.

***10. COOKING AND FOOD PREPARATION:**

- a. Cooking and the use of any heat producing food preparation appliance in other than an authorized, designated area is prohibited.
- b. All commercial food preparation areas will be equipped with vapor exhaust, grease removal system, and a fixed fire extinguishing system in accordance with the standards established in AFR 88-15 and the National Fire Code Standard #96.
 1. Grease filters will be cleaned as often as necessary to keep them in a grease-free condition. If grease is visible on the filter, it should be cleaned. In any event, filters will be cleaned at least once each day or work shift. Spare filters are required in kitchens operated continuously to prevent the necessity of using a less effective wet filter.
 2. Exhaust systems will be in operation at all times while cooking is being accomplished, and should run for a period of at least one hour after cooking devices are turned off to allow deep fat fryers and other appliances to cool down.
 3. Systems will not be operated without filters in place.
 4. Detailed information and specifications of all systems will be furnished to the Base Fire Chief prior to installation and/or modifications.
 5. Using personnel will be responsible for the cleanliness of all fans, filters, hood and duct work that is within reach.
- c. Real Property building managers will maintain the following information on file for each range hood:
 1. Date hood and filters last cleaned.
 2. Date ducts last cleaned.
 3. Date ducts cleaned by Civil Engineering or Contractor
- d. Charcoal broilers or grills will be used only in safe areas.
 1. Where used in authorized indoor location, ignition will be accomplished only with an electric or installed gas igniter.
 2. Outdoor clearance from buildings will be commensurate with the type of facility and the size of the fire with a minimum clearance of 10 feet.
- e. All deep fat fryers will be maintained IAW AFOSH 127-56. Covers will be available for all deep fat fryers. All thermostats will be tested by Civil Engineering or contractor on a semi-annual basis.

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11. AISLES, CORRIDORS AND EXITS:

- a. Aisles will be clear at all times to afford access to fire fighting and building evacuation. Aisles will not be obstructed in any way, and will maintain the same width as the exit door(s).
- b. Exits will be marked IAW AFR 88-15 and the NFPA Life Safety Code.
- c. Exit doors in places of public assembly, retail mercantile facilities and buildings with a high personnel occupancy will be equipped with "Panic Hardware" IAW AFR 88-15 and NFPA Life Safety Code.
- d. Fire doors and/or fire exit doors will not be blocked, wedged or hooked in any manner which hinders the "as designed" operation.
- e. All building doors that are blocked will be clearly marked on the outside, "Door Blocked" in four-inch letters. Doors will not be blocked without prior written approval of the Base Fire Chief.

***12. PLACE OF PUBLIC ASSEMBLY**

- a. Theater projection booths will be equipped with automatic shutters over all ports leading to the seating area.
- b. Glass covered ports in projection booth will be replaced immediately when broken.
- c. Places of public assembly will not be used as sleeping areas nor will they be used as storage areas.
- d. Scenery, decorations, drapes, upholstery, curtains and all decorative material will be flame-proof. Do not use cardboard boxes, wood products, straw, hay or similar material for festive decorations. All materials used will be inspected and tested at frequent intervals to insure retention of flame-proof characteristic unless the material is certified as being permanently flame-proof by a nationally recognized testing organization. Prior to decorating for festive events the Fire Department Technical Services Section will be notified for inspection and approval.

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***13. CLOSING INSPECTION:**

- a. The following facilities are required to conduct and document a daily closing inspection. Use Attachment 3 and retain on file for one (1) year.
 1. Officers Club, NCO Club, Golf Clubhouse, Library, Theater, Recreation Center, Child Care Center, Bowling Alley, Youth Center and individual Hobby Shops if not located and controlled by another "call-in" facility.
 2. All other places of assembly not covered above and any facility or area designated by the Base Fire Chief.
- b. Closing inspections will consist of, but not limited to, insuring all waste material is removed from the building. Insure the contents of ashtrays are not mixed with waste paper. Inspect furniture to insure waste smoking material is not present. Cushions of upholstered furniture will be inspected to insure there is no smoldering smoking material. Inspect all electrical operated machines to insure they are disconnected, if not required for use, and inspect all cooking areas, restrooms and closets for fire-free condition.

***14. FIREWORKS:**

No type of fireworks will be handled, stored or used on the base except for public display by competent operators licensed in compliance with state and federal regulations and with the written permission of the Base Fire Chief.

15. VEGETATION CONTROL:

- a. Vegetation will not be permitted to grow excessively or to accumulate near buildings, tanks, aircraft parking areas, storage areas or other similar property.
- b. Shrubs and trees around buildings will be trimmed as often as needed to provide proper vegetation control. Dead trees will be removed immediately. The use of heat-producing devices for the control of vegetation is prohibited except by special permission of the Base Fire Chief.
- c. Only nonsparking devices will be used in areas where explosive residue of flammable vapors could be present.

16. MECHANICAL ROOMS:

- a. These areas will be kept neat and clean at all times and will not be used for storage of any materials.
- b. Mechanical rooms are off limits to all personnel except Civil Engineering Craftsmen. Storage or entry into these rooms is prohibited.

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17. HANGARS AND AIRCRAFT:

- a. Clear areas will be maintained around aircraft to allow access of fire equipment and for the evacuation of personnel and other aircraft.
- b. All aircraft will be connected to low resistance ground at all times when in parked and/or hangared status.
- c. All ground and bonding connections will be made prior to opening fuel, LOX or GOX caps or covers.
- d. Fuel from aircraft will not be allowed to drain on the ramp or hangar floors. Fuel bowsers will be used for continuous fuel leaks.
- e. All electrical equipment, installed and portable, will be in accordance with the requirements of the National Electric Codes.
- f. Only specially authorized vehicles will be permitted in hangars. These vehicles will be equipped with flashback spark arresters and vaporproof systems. These vehicles will enter hangars only for specific duties and will be immediately returned to the outside at the completion of the task.
- g. There will be no fuel operations inside a hangar or maintenance docks, except in designated approved fuel cell repair docks.
- h. Herman-Nelson or similar type heaters will not be used without prior approval of the Base Fire Chief.

18. STATIC ELECTRICITY:

- a. All personnel involved with aircraft or flammable liquids will be aware of and comply with the provisions of T.O. 00-25-172. The contents of the Technical Order covers ground servicing of aircraft and static grounding and bonding for transfer of flammable liquids.
- b. All personnel working in hazardous or explosive areas will wear non-spark producing clothing as outer garments. Nylon, wool and other materials are extremely dangerous in that they create static electricity.

19. POWERED MATERIAL HANDLING EQUIPMENT:

- a. This concerns cranes, forklifts, tugs, tractors, lawn mowers, AGE Ground Servicing Units, etc.
- b. Equipment will be in good operating condition and will be inspected by the user on a daily basis to insure safe condition.
- c. Parking, inside where permitted, will be to the extreme side of aisles with ignition shut off and the hand brake set.

- d. Equipment used in flammable or explosive atmospheres, warehouses, and other dangerous areas will be equipped with flashback spark arresters and appropriate safe (waterproof or shielded) ignition systems. When it is necessary to park inside warehouses, the vehicle will be parked only in approved areas authorized by the Base Fire Chief.

20. EXPLOSIVES:

- a. All entrances to the Munitions Storage area will be marked with appropriate "NO SMOKING" signs and all flame or spark producing devices will be surrendered to the guard or be placed in a suitable container provided for that purpose before entering the area.
- b. Boxes, containers, dunnage and lumber will be stacked in an orderly fashion and all paints and paint supplies will be stored in suitable metal cabinets, in limited quantities.
- c. Ground magazines and/or storage areas will be maintained IAW AFR 127-100, "Explosive Safety Standards".
- d. Storage areas will be marked with the appropriate fire symbol IAW AFR 127-100.
- e. Munitions will be stored only in buildings that have been designated and maintained for the specific purpose. An explosive facility license is required and may be obtained from the Explosive Safety Officer.
- f. Ammunition will be arranged by lot numbers and in stacks in such a manner that air may circulate freely around, beneath and through the stacks.
- g. Loose components will not be stored in magazines.
- h. Empty containers, excess dunnage or tools will not be permitted to remain in magazines.

21. HAZARDOUS CHEMICALS:

- a. Only approved DOT containers will be used for the storage or transportation of chemicals.
- b. Containers will be tightly and securely closed unless venting is required.
- c. Containers will be labeled to indicate contents.
- d. All chemicals will be stored or transported only with compatibles to insure fire safety in isolated areas, IAW AFR 125-37, "The Installation and Resources Protection Program".
- e. Scheduled and periodic inspections will be made of storage areas to detect deterioration and/or leaks.

22. VEHICLE PARKING, TRAFFIC CONTROL, STORAGE OF GAS POWERED EQUIPMENT:

- a. Parking of vehicles will be carefully regulated in all areas to insure access to all sides of buildings and fire hydrants. Where authorized, vehicles may be parked closer than fifteen (15) feet to a building.
- b. Fuel trucks will not enter or be parked within fifty (50) feet of hangars, paint shops, munitions storage, or thru critical areas except for the time necessary to load or unload cargo. Fuel vehicles will not be parked near highly populated areas. When in maintenance shops, parking will be in such a manner to assure rapid and safe removal in case of fire.
- c. Motorcycles, mini-bikes, major components or vehicles will not be stored or operated inside any building not specifically designed for that purpose. Any other facility or areas used will be required to have written approval from the Fire Chief.
- d. Gasoline powered equipment may be stored inside areas that do not have a ready source of ignition, i.e., hot water heaters, equipment with electric motors, etc. Areas must be approved by the Fire Chief prior to storage of equipment. During the season they are not used, the fuel tank must be drained before storage. At no time will refueling or fuel drainage be performed while equipment is running or the engine is still hot.
- e. Vehicles will not be parked:
 1. Within fifteen (15) feet of any building where immediate building evacuation or access for firefighting is obstructed.
 2. Within fifteen (15) feet of fire hydrants or in such a way as to obstruct immediate access to them.
- f. Vehicle operators, upon seeing or hearing emergency vehicles which are displaying flashing red lights and sounding audible electronic sirens, will immediately pull to the extreme right side of the road and come to a complete stop. When yielding to emergency vehicles, operators must keep well clear of intersections to provide room for large emergency apparatus.
- g. No person, other than emergency personnel directly involved in an emergency operation, will attempt to follow fire apparatus or enter the general emergency area. At no time will any vehicle follow closer than 500 feet behind emergency apparatus. This is a minimum distance to insure the safety of personnel who could possibly fall from the responding emergency vehicle.

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***23. MILITARY FAMILY HOUSING:**

- a. All portions of this regulation, as well as the following special precautions, are applicable to the family housing area.
- b. Each newly assigned housing occupant will be presented a "Fire Prevention Kit" at the time they receive their prevention briefing.
- c. Each occupant will be briefed and trained within thirty (30) days of occupancy. Random checks are conducted periodically thereafter. The military sponsor/spouse will be available at the scheduled time of visit to correct any hazards noted and to receive the indoctrination.
- d. No construction or alterations to family quarters will be made unless the occupant has an approved Work Request (AF Form 332) in their possession. Request, signed by the military sponsor, containing detailed descriptions and sketch of work to be accomplished, will be submitted to the Base Civil Engineer for consideration, and must be coordinated by the Fire Department and Ground Safety. Request for wood panel installation will not be approved unless the material is Class A or B. Class A only for sleeping areas and exits.
- e. Flammable liquids (gasoline, spray paint, thinners, cleaning fluid) will not be stored inside family quarters. Small amounts of flammables in approved metal containers, may be kept outside the building, well away from any source of ignition, or be maintained in the exterior storage closet provided. All flammables will be stored out of the reach of children.
- f. Furnace room, water heater rooms, attics and crawlspaces will not be used for any type storage or habitation.
- g. Clothes dryer filters and vent tubing will be cleaned by the occupant as required.
- h. Pressurized containers for paint, polish, hair spray, etc, are extremely dangerous when subjected to open flame or excessive heat. Cans must be stored and used according to manufacturers instructions and must never be incinerated when empty.
- i. Rags, paper, magazines and unnecessary storage will not be allowed to accumulate in the building but will be disposed of promptly.
- j. Sponsors will insure that dependents are aware that a grease fire should be extinguished by covering with a lid or using the fire extinguisher provided, and oven fires should be extinguished by closing the oven, covering the burning material or using the fire extinguisher. No attempt should ever be made to carry an ignited pan from the building. Dependents should also understand that long unsecured hair and loose fitted clothing are hazardous around open flame or heating elements.

- k. Deep fat cooking presents an extreme hazard. Under no circumstances will a deep fat fryer or substitute be turned on or placed on a stove and left unattended. These items will remain under constant supervision while in use. If it becomes necessary to leave the building, cooking appliances will be turned off.

- l. Necessary action will be exercised at all times to insure children are aware of the hazards associated with playing with matches, lighters, fire and with the practice of "sneak smoking".

- m. The military sponsor is the building custodian and is responsible for the fire-safe condition of the assigned quarters.

- n. Air Force policy requires that persons be held liable for damages to government property caused by carelessness or negligent acts. When warranted, appropriate administrative or disciplinary action will be initiated. Obtaining renter's insurance is highly suggested.

- o. 9-1-1 Stickers will be posted on or near each telephone.

- p. All fires will be reported whether or not they can be or have been extinguished without the aid of the Fire Department.

- q. When doing home cleaning, use only approved household cleaning agents. Read directions carefully! Do not mix incompatible cleaners.

- r. Handloading equipment: All occupants wishing to use handloading equipment must receive approval from the Base Safety Office. Bulk gunpowder in excess of two (2) pounds will not be stored in the Family Housing area. Primers must remain in original cartons until used and will not be stored where one primer may touch another.

- s. Storage or parking of gasoline powered equipment inside military family housing units is prohibited. Fuel operated equipment (motorcycles, lawn mower, etc) will not be parked where they will obstruct the path of egress.

- t. Each housing occupant is responsible for insuring installed fire extinguishers are readily accessible for use, and are in serviceable condition at all times. If extinguishers are used or accidentally discharged, it is the responsibility of the sponsor for exchanging it at the Self-Help Store, Building 1231.

24. VOQ, VAQ, TLF AND UEQ:

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- a. All portions of this regulation, as well as the following special precautions, are applicable to all living quarters on Carswell AFB. Only structures designated for billeting or quarters will be utilized for such; any exceptions will require written approval by the Base Fire Marshal.
- b. No construction or alterations to any quarters will be made unless the occupant has an approved AF Form 332 in his/her possession. Requests containing detailed descriptions and sketch of work to be accomplished will be submitted to the Base Civil Engineer for consideration, and must be coordinated by the Fire Department and Ground Safety. Request for wood paneling installation will not be approved unless the materials are Class A or B. Class A only for sleeping areas and exits.
- c. Storage or parking of gasoline powered equipment inside sleeping quarters is prohibited. Flammable liquids (gasoline, paints, thinner, cleaning fluid) will not be stored inside quarters.
- d. Dryer lint bag, filters and vent tubing will be kept cleaned at all times.
- e. Pressurized containers for paint, polish, hair spray, etc, are extremely dangerous when subjected to open flames or excessive heat. Cans must be stored and used according to manufacturers instructions.
- f. Rags, paper, magazines and unnecessary storage will not be allowed to accumulate in the building but will be disposed of promptly.
- g. Any container used for the disposal of smoking material will be non-combustible and emptied as needed. Containers will not be overfilled at any time.
- h. 9-1-1 Stickers will be posted on or near each telephone.
- i. All fires will be reported whether or not they can be or have been extinguished without the aid of the Fire Department.
- j. When doing any cleaning, use only approved cleaning agents.
- k. No fireworks, ammunition or reloading of ammunition will be allowed.
- l. Cooking and burning of incense or candles is prohibited.

25. PETROLEUM, OIL, LUBRICATING (POL) STORAGE AND DISPENSING AREAS:

- a. All vehicles operating or entering the POL storage area shall be equipped to comply with requirements stated in T.O. 38-1-23 and other pertinent directives. Civilian or privately owned vehicles entering the area will be strictly controlled to assure maximum safety conditions exist.
- b. Refueling vehicles will be filled by the "bottom loading" method only.
- c. Fuel transfers will be made only after all parts and containers have been effectively bonded and grounded.
- d. Only nonsparking mowers will be used in the area for vegetation control.

26. FIRE EXTINGUISHERS:

- a. Real property managers will insure that their personnel are receiving fire extinguisher training in accordance with paragraph 1.g. of this regulation.
- b. Extinguishers will not be moved from assigned locations for any reason other than to combat a fire or for repair.
- c. Real property managers or supervisors will be responsible for preventive maintenance of fire extinguishers located in facilities or designated work areas. This maintenance will consist of keeping extinguishers clean and insure they are not blocked from view or obstructed.
- d. Aircraft maintenance supervisors having jurisdiction over exterior areas will assume responsibility for fire extinguishers placed there for the protection of parked aircraft, engine starts and aircraft upon which maintenance is being performed.
- e. Recharging and repair of portable fire extinguishers will be accomplished by the Base Fire Department. The building custodian, supervisor or aircraft maintenance personnel are responsible to insure immediate delivery of damaged or used extinguishers from within their area of responsibility to the Fire Department for maintenance. The Fire Department will insure immediate repair is accomplished and the responsible person notified for extinguisher pick-up.
- f. The using organization is responsible for the procurement, placement and inspection of portable extinguishers on mobile and stationary equipment. They will be delivered to the Base Fire Department for inspection, recharging and repair.

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- g. Unit Commanders/Supervisors are responsible for notifying Fire Department supervisory personnel of changing conditions within structures involving the allocation of fire extinguishers.
- h. Portable fire extinguishers must be maintained in accordance with applicable Technical Orders.
- i. Portable fire extinguishers will be provided by the contractor during construction.

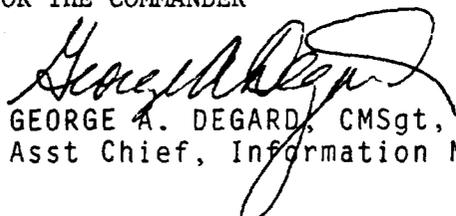
27. PENALTIES:

- a. The provisions of this regulation are not intended to be punitive in nature. Violators are subject to action under the Uniform Code of Military Justice.
- b. Commanders will initiate appropriate investigations and administrative or disciplinary action in instances of willful or negligent violations of the fire prevention standards contained in this regulation. Liability will be initiated in all cases where there is damage to government property, including family housing, caused by misconduct or negligence in fire prevention practices.

28. CONDITIONS NOT COVERED:

Fire safety problems not covered by this regulation will be resolved with common sense and good judgment by the Fire Protection Branch.

FOR THE COMMANDER


GEORGE A. DEGARD, CMSgt, USAF
Asst Chief, Information Management

3 Attachments

- 1. Contractors Checklist
- 2. Building Managers Checklist
- 3. Closing Checklist

196082

SUMMARY OF CHANGES

Delete 117 reporting phone, change to 9-1-1. AF Form 1487 routing procedures. Add six part building managers fire protection folder and building manager's guide. Incorporates AFR 30-27 Smoking Policy. Explains pallet storage criteria. Changes procedures on AF Form 592. Expands flammable storage request letters. Deleted waste and packing material (incorporated into other section changes), plastics and films, and railway systems. Prohibits portable heaters in correctional and health care facilities. Requires hood/duct spare filters. Changes clearance on Bar-B-Que grills. Changes deep fat fryer test to semi-annual. Prohibits combustible festive decorations. Consolidates public assembly list. Provides sample checklist for closing inspection. Adds requirements for fireworks operator to be licensed. Sets random visits for base housing occupants. Suggests renter's insurance. Makes sponsor responsible for exchange of housing extinguisher. Reorganizes paragraphs and information to applicable sections. Changes contractor checklist to include storage trailers. Deletes reference to Foam and 'CB' fire extinguishers.

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CONTRACTOR FIRE PREVENTION

1. It is of the utmost importance that the elimination and/or control of fire hazards be strictly adhered to at all times. The following is a condensed version of Base Regulation 92-1 for private contractors. Call the Base Fire Department, 6334 or 6335, for clarification and fire prevention guidance. Engineering contract liaison personnel will insure contractors have a copy of this portion of CAFBR 92-1.

2. Any person who discovers a fire will report it immediately to the Base Fire Department by the most readily available means.

a. How to report a fire:

(1) Standard Telephones: Standard administrative telephones in offices and buildings may be used to report a fire by dialing "911" and giving information as follows: state your name and the location of the fire. If the building number of the building on fire is unknown, give the number of the nearest building to the fire or the name of the using organization; i.e., Hospital, Dental Clinic, Commissary, etc.

(2) Housing Area and other Commercial Telephones: To report a fire from any commercial telephone on base, dial fire emergency number "911", give name and location of fire.

3. Smoking:

a. All buildings are considered as no smoking unless marked otherwise.

b. No smoking, striking of matches, or operation of mechanical lighters will be permitted within fifty (50) feet of any aircraft on the flightline.

c. Receptacles provided for the disposal of smoking materials will not be used for the disposal of other waste material.

d. Ashtrays will be emptied into metal receptacles and wet with water or cold/safe before they are dumped into trash collection containers.

4. Housekeeping: Good housekeeping is of the utmost importance in eliminating fire hazards.

a. Waste paper baskets will be noncombustible and will be emptied at the close of the day.

b. Trash will not be allowed to collect inside any building. When waste paper baskets become full, they will be emptied into metal trash containers on the outside of the building. These containers will have covers and will be located at least ten (10) feet from the building.

c. Oily rags will be kept in covered metal containers.

d. Oily rags, grease, and paints will not be placed in containers with other combustibles.

e. Burning of rubbish or the use of open fires within the limits of the base is prohibited except when approved by the Base Fire Department.

196084**5. Storage of Supplies:**

- a. In buildings having sprinkler systems, a clearance of 18 inches will be maintained at all times between storage and sprinkler heads.
- b. Fire doors will be maintained clear of storage to insure that storage operation will not interfere with the operation of the doors.
- c. Storage will not block or hide fire extinguishers, stairways, electric switch boxes, sprinkler valves, standpipes or other fire system apparatus.

6. Welding and Cutting:

- a. Welding apparatus will be in good mechanical condition.
- b. Work leads will be kept short. Leads overhead and conductors on floors or ground will be protected from damage or from passing personnel.
- c. Electrodes will be removed from holder when not in use.
- d. Power will be shut off and the unit disconnected during appreciable work stoppage.
- e. Connections between regulators and cylinders will be gas tight.
- f. Cylinders and fittings will be maintained free from grease and oil. Hose will be in good condition and not frayed, cracked, or spliced.
- g. Gas cylinders will be stored in an upright position and will not be used as rollers or supports. Cylinders will be secured where there is no danger of being knocked over. Cylinder caps will be installed when not in use.
- h. Oxygen cylinders will not be stored near acetylene or fuel gas cylinders. Empty and full cylinders will not be grouped together in storage.
- i. Sheet metal guards, blankets, or similar protection will be provided to prevent hot metal and sparks from falling on wooden floors, partitions, or combustible materials which cannot be removed.
- j. One person will be provided in the welding team whose sole responsibility will be to watch the falling sparks and promptly use the fire equipment if needed for all operations outside an approved welding shop.
- k. During construction projects where welding and cutting is a continuous operation, a one time permit, AF Form 592, will be issued. It is not necessary to notify the Fire Department on a daily basis; however, notification is required for all other operations of this type outside an approved welding shop. Permits for noncontinuous welding and cutting operations will be issued on an individual basis. When welding operations are completed, the AF Form 592 is to be returned to the Base Fire Dept.
- l. Welding operations should be stopped in sufficient time to allow a thorough check of the area before securing the job site.

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7. Flammable/Combustible Liquids and Gases:

- a. Flammable or combustible liquids such as paint, oil, gasoline, etc., will not be stored in any building except those buildings especially provided for such purposes.
- b. At no time will there be more than one day's supply of paint and other flammables stored in buildings being renovated.
- c. Paint and thinners will be stored in sealed containers.
- d. At no time will gasoline or similar flammable liquids be used as cleaning agents.
- e. Waste flammable or combustible liquids such as oil, gasoline, and hydraulic oil will not be drained into sewers or storm drains.
- f. Flammable or combustible liquids will be stored at least ten (10) feet from any building or structure.
- g. Flammable or combustible liquids will be stored or transported in approved metal containers and will be painted red with yellow band and with the contents plainly lettered on the side of each container.
- h. Insure adequate ventilation is provided for any spray application.

8. Electrical Installation and Equipment:

- a. Electrical equipment used in the vicinity of flammable gases and vapor will be of an approved explosion-proof type.
- b. Double sockets and other electrical fixtures that tend to overload circuits will not be used.
- c. Extension cords will be an approved heavy-duty type.
- d. No cord will be nailed or stapled in place nor draped over pipes or other supports.
- e. Flexible cord will be used only in continuous lengths without splices or taped sections.
- f. Combustible materials will be kept away from electrical light fixtures at all times.
- g. Electric coffee percolators and coffee urns must have a thermostatic control switch.
- h. Electrical appliances which do not meet the specifications of the National Electrical Code will be removed.
- i. Fuses will not be bridged in any manner.
- j. Only non-metallic electrical plugs will be used.
- k. Remove all sources of possible ignition when using spray application during construction process

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9. Aisles and Exits:

- a. Aisles will be clear at all times to give access to the Fire Department.
- b. Space under stairways will not be used for storage.
- c. Self-closing type fire doors will not be wedged, blocked, or hooked open.

10. Vehicle Parking:

- a. Parking of vehicles, especially overnight parking, will be carefully regulated so that access to all sides of buildings and fire hydrants is not materially affected.
- b. Vehicles will not be parked in buildings overnight, unless authorized for that purpose.
- c. Parking is prohibited within a distance of fifteen (15) feet of any building except where surface parking areas are available and parking is authorized by the Chief, Security Police.
- d. Parking will not be permitted within a distance of fifty (50) feet of aircraft hangars.
- e. Vehicle parking within fifteen (15) feet of a fire hydrant is prohibited.
- f. Vehicles operating in buildings must be approved by the Base Fire Chief.
- g. Storage trailers. General purpose supply trailers will be parked with four foot clearance between each. Flammable material storage trailers will have ten foot clearance between themselves and other trailers. Adequate aisle space will be provided and the area will be maintained in a neat and orderly manner.

11. Hangars:

- a. Electric motors, switches, fixtures, extension lights, and similar devices used within the hangar will be of an approved explosion-proof type where a fire or explosion hazard exists.
- b. Only specially authorized vehicles will be permitted in hangars. All vehicles must be equipped with a suitable flashback spark arrestor and explosion-proof ignition system.

12. Fire Apparatus Priority:

- a. Fire apparatus will have the right-of-way at all intersections, stop signs, and thoroughfares while on emergency movements on base.
- b. Vehicles will keep clear of intersections upon hearing or seeing an emergency vehicle.

13. Use and Maintenance of Fire Extinguishers:

a. Classes of Fires:

(1) Class A - Wood, Paper, Rags, etc.

Extinguisher to be used:

Water

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- | | |
|---|---|
| (2) Class B - Oil, Gasoline (Flammable Liquids) | CO ₂ , or Halon 1211, Dry Chemical |
| (3) Class C - Electrical Equipment and Appliances | CO ₂ , Halon 1211, Dry Chemical |
| (4) Class D - Metals | Dry Powder |

b. Portable fire extinguishers will be provided by the Contractor during construction. Private contractors may make arrangements with Fire Protection Technical Service for fire extinguisher demonstrations for their personnel by dialing ext 6335.

c. Fire extinguishers located in buildings will not be removed from their location by other than Fire Department personnel except in the event of a fire.

d. The Base Fire Department will be notified immediately of extinguishers having been used or damaged and having broken seals. Seals are not to be broken unless actual use of fire extinguisher is deemed necessary.

14. It is of the utmost importance that at the end of the workday a responsible person be designated to make a thorough check of the area, so as to eliminate fire hazards. Some of the items to check are as follows:

- a. Smoking materials.
- b. Paint left in building.
- c. Lights are off.
- d. Electrical tools or appliances disconnected.
- e. Rubbish and trash removed from building.
- f. Oily or painter's clothing removed from building.
- g. Flammable material removed from building.

REMARKS: In the interest of firefighter's safety, it is requested that heavy duty power leads into construction areas be equipped with a switch at point of origin and be turned off at the close of the workday.

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FIRE PREVENTION GUIDE FOR FACILITY MANAGERS

This guide is designed to provide Facility Managers with information needed to establish and execute an effective Fire Prevention program in their area of responsibility.

1. TERMS EXPLAINED:

a. Area of responsibility - The facility and open area adjacent to the facility assigned to an individual.

b. Fire hazard - Any condition or situation, if not corrected, could result in a fire. This is a situation which reduces personal safety and may be assigned a risk assessment code (RAC); i.e., overloaded extension cord, improper storage of flammable liquids, etc.

c. Fire prevention - Any action directed toward avoiding the start of a fire.

d. Fire safety deficiency (FSD) - A condition which reduces fire safety below acceptable levels including noncompliance with standards, but by itself cannot cause a fire. It could also increase the severity should a fire occur or delay in the detection and reporting of a fire; i.e., exit light out, blocked exit, inoperable smoke detector, etc.

2. RESPONSIBILITIES:

a. Insuring fire safe conditions in their area of responsibility.

b. Be familiar and comply with the fire prevention principles in the following directives:

(1) AFR 92-1, chapter 9.

(2) CAFBR 92-1.

(3) AFR 127-12.

3. DUTIES:

a. Perform fire prevention duty in a timely manner, to the best of your ability.

b. Take immediate action to correct fire hazards. Any fire hazards which cannot safely be corrected by yourself, contact the Fire Department at extension 6334/6335/6340.

c. Perform daily fire prevention inspection of your area (see atch 1).

d. Insure serviceability of all fire extinguishers assigned to your facility by performing a monthly inspection and annotating the date on an extinguisher log. The monthly inspection should include the following:

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- (1) Check for proper location and accessibility.
 - (2) Check gauge for proper pressure.
 - (3) Insure the pin and seal are in place.
 - (4) Check the cylinder for damage or corrosion.
 - (5) Check the hose and nozzle for damage.
- e. Conduct training:
- (1) Newly assigned personnel must receive training within 30 days after reporting for duty. Training should include the following:
 - (a) Fire reporting and location of pull stations.
 - (b) Personnel evacuation.
 - (c) Location and use of fire extinguishers.
 - (d) Safeguarding classified information.
 - (e) Hazards in their facility, or associated with their work.
 - (f) Fire protection features of your facility, i.e., halon system, sprinkler system, etc.
 - (2) Periodic:
 - (a) Fire drills as prescribed in CAFBR 92-1.
 - (b) Extinguisher training.
- f. Insure the following actions are taken if a fire is discovered.
- (1) The facility is evacuated.
 - (2) The Fire Department is notified on extension 9-1-1.
 - (3) Someone is available to direct fire fighters to the specific location of the fire.
- g. Maintain a Fire Prevention folder with the following:
- (1) CAFBR 92-1.
 - (2) Organizational O.I. on fire prevention program.

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- (3) Fire extinguisher log (see atch 2).
- (4) Copy 2 of AF Forms 1487 from previous inspections.
- (5) Training documentation for personnel under your responsibility.
- (6) Miscellaneous documentation, i.e., work orders, waivers, etc.

h. Fire Inspections:

(1) Fire prevention inspections are periodic inspections made to every base facility to insure prescribed fire prevention practices are followed and to note any FSD's which may have occurred through building modification or change in occupancy.

(2) The facility manager or their alternate should accompany the Fire Prevention Inspector and insure the inspector is able to access all areas of their facility during the inspection.

(3) Walk-through inspections are conducted by the Fire Chief, Assistant Fire Chiefs, supervisors, and Technical Services personnel on a no notice basis.

(4) When the inspection is completed the person with the inspector will be briefed on the results and should inform the functional manager of the results.

(5) AF Form 1487 will be issued for a fire inspection:

- (a) When hazards cannot be corrected on the spot (COS).
- (b) When COS hazards are reoccurring.
- (c) When a fire safety deficiency (FSD) is noted.

(6) AF Form 1487 will be sent through command channels:

- (a) When COS hazards are reoccurring.
- (b) When an effective fire prevention program has not been set up.
- (c) When the facility manager is not enforcing fire prevention practices.
- (d) When corrective action on noted hazards are delayed for an unreasonable time.

(7) When an AF Form 1487 is issued for an inspection the facility manager will keep copy 2, but it is the functional managers responsibility for seeing that copy 1 is properly annotated, signed, and returned to the Fire Department by the suspense date in block 4 (see atch 3).

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FIRE INSPECTION CHECKLIST

1. Fire Detection and Protection equipment:
 - a. Are fire detectors and sprinkler heads clear for 18 inches?
 - b. Are fire extinguishers and fire alarm pull stations visible and unobstructed?
 - c. Does the equipment look in good condition?
2. Exits:
 - a. Are exits clearly marked?
 - b. Are bulbs in exit lights lit?
 - c. Are the exit doors free opening?
 - d. Are they unobstructed both inside and outside?
3. Electrical:
 - a. Is all equipment and cords in good repair?
 - b. Is equipment being used properly?
 - c. Is unnecessary equipment turned off?
4. Building services:
 - a. Check for natural gas and water leaks.
 - b. Check condition of equipment and piping.
5. Building exterior:
 - a. Check for excess vegetation.
 - b. Is there 15 foot clearance around fire department sprinkler connection?
 - c. Is there 15 foot clearance around fire hydrants?

S A M P L E

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ALL PURPOSE CHECKLIST		PAGE 1 OF 1 PAGES		
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA		OPR	DATE	
CLOSING INSPECTION CHECKLIST				
NO.	ITEM <i>(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph.)</i>	YES	NO	N/A
1.	Was the facility inspected and left in a fire-safe condition at the close of business (or the end of duty shift), according to Base Reg 92-1?			
2.	Have all chairs, lounges and removable sofa cushions been removed and inspected for possible sources of ignition; ie, smoldering smoking material?			
3.	Have all smoking material receptacles been emptied into noncombustible containers with self-closing lids?			
4.	Have non-essential electrical appliances been disconnected?			
5.	Have all open flame heating devices been checked and turned off?			
6.	Have all rooms (including latrines and closets) been checked to make sure trash cans, smoking material containers, and other combustible debris have been placed in proper noncombustible containers? Are they at a safe distance and designated area outside the facility?			
7.	Have all doors and windows been closed and locked?			
8.	Has the entire building been checked to make sure unauthorized personnel are not present?			
9.	Have all pertinent directives (regulations and OI's) been complied with to leave the facility in a fire-safe conditon?			

S A M P L E

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE