

Pioneer Fire Protection District Standard Operating Guideline Manual

Our Mission...

Pioneer Fire Protection District strives to provide cost effective, professional, quality emergency response for the protection of life, property and the environment within the district.

We will accomplish this by...

Delivering exceptional service and compassionate solutions as a cohesive team with dedication, vigilance and pride.

Purpose:

The purpose of this fire district "Standard Operating Guideline (SOG) Manual" and its **67-SOG's** are to provide guidance in day-to-day emergency fireground/medical/rescue operations/assignments and/or day-to-day guidance in non-emergency fire district operations/assignments. These 67-SOG's shall be adhered to at all times by all district fire personnel with a **no exceptions policy**, unless authorized in writing via the district fire chief of a change to a specific identified Standard Operating (SOG) Guideline.

Pioneer Fire Protection District, a **combination** (paid & volunteer) fire protection district was formed pursuant to the Health & Safety Code on December 30th 1980 by LAFCO Resolution L-80-26. Pioneer Fire Protection District is located in the southern portion of El Dorado County, on the western slope. The district is bounded on the west by Diamond Springs/El Dorado FPD, on the north/northwest by El Dorado County FPD, on the north/northeast by the El Dorado National Forest, and on the south/southeast by Amador County FPD. The district boundary includes the communities of Mt. Aukum, Fair Play, Outingdale, Grizzly Flats, Omo Ranch and Somerset. Pioneer Fire also provides mutual-aid service to River Pines located in Amador County. Major access roads/inhabited corridors include County E16/Mt. Aukum, Sand Ridge Road, Omo Ranch Road and Grizzly Flats Road. Pioneer Fire boundary encompasses approximately 296 square miles/187,000 acres. Most of the district's territory (96,920 acres) is within the El Dorado National Forest. The national forest lands are Federal Responsibility Area (**FRA**) and the remaining territory is State Responsibility Area (**SRA**). There is no Local Responsibility Area (**LRA**). The majority of private land use is agricultural, and 3,000 acres are in Williamson Act contracts. The remaining private land includes 3,276 developed and 2,134 underdeveloped residential parcels, 34 developed and 11 undeveloped commercial parcels, and 884 miscellaneous parcels. The district also currently contains 29 wineries, 4 schools and 2 churches. The 2003 ISO rating is **5/9**. The five rating pertains to the communities of Grizzly Flats and Outingdale, where for parcels within 1000 feet of a fire hydrant and within 5 road miles of a fire station. The remainder of the district is a 9 rating. Pioneer Fire Protection District's Station-38 District Headquarters, located at Three Forks/Somerset is a designated "**Baby Safe Surrender Site**". Pioneer Fire Protection District is also augmented by Grizzly Flats C.E.R.T. Team. Annual fire district calls for service years 2005 thru 2007 listed, **Year 2007-481; Year 2006-464 and Year 2005-419**.

Current Pioneer Fire Protection District Fire Station Locations:

- **Fire Station-31 (Willow)**
7960 Grizzly Flat Road, Somerset, Ca
Telephone: (530) 344-8416
- **Fire Station-32 (Sand Ridge)**
4770 Sandridge Road, Somerset, Ca
No Telephone!
- **Fire Station-34 (Mt. Aukum)**
2400 Omo Ranch Road, Mt. Aukum, Ca
No Telephone!
- **Fire Station-35 (Grizzly Flats)**
4837 Sciaroni Road, Grizzly Flats, Ca
Telephone: (530) 622-1600
- **Fire Station-37 (Omo Ranch)**
6021 Omo Ranch Road, Omo Ranch, Ca
No Telephone!
- **Fire Station-38 (Three Forks) District Headquarters**
7061 Mt. Aukum Road, Somerset, Ca
Telephone: (530) 620-4444
FAX: (530) 620-4317

Administrative Offices Open For Business: **9 a.m. - 4: 30 p.m., Monday thru Friday, Except holidays / weekends!**

Agency Email Address: srennert@pioneerfire.org

Agency Website: www.pioneerfire.org

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Courage is not the absence of fear, but the realization that there is something more important than fear!

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, 2nd Revision Monday, March 23rd 2008, and 3rd Revision Thursday, October 16th 2008

Pioneer Fire Protection District Standard Operating Guideline 1

Personal Protective Equipment

PPE includes the firefighter coat, pants, SCBA, helmet, nomex hood, gloves and boots.

When arriving at the scene of an emergency, the appropriate level of PPE shall be worn.

Any emergency where smoke, flame or suspected hazardous materials are involved, full PPE, including SCBA will be donned. Doffing instructions will come from the Senior Fire Officer and/or COMMAND, as the situation dictates.

Members riding in a mask position, i.e., company officer and hoseman will initially have SCBA and mask in a ready position upon arrival at the scene or as soon as possible after arrival if conditions do not permit donning while en route.

Drivers will, as a minimum, wear their coat, helmet, gloves, and approved leather foot wear.

Chinstraps on helmets will be snug.

Face shields will be down when raising or lowering ladders, using equipment, operating power saws, or performing interior overhaul work that creates airborne hazards.

Air pressure in district's Self Contained Breathing (SCBA's) Apparatus shall be not be less than 2216 p.s.i. at the time of entry into any hazardous atmosphere.

All mask straps will be fastened when wearing SCBA, and all face piece and head harness straps will be worn under the nomex hood.

SCBA will not be removed during overhaul phases of interior operations due to the accumulation of carbon monoxide and other fire gases after extinguishment. A Carbon Monoxide CO2 Detector shall be used to monitor the atmosphere for this purpose.

PASS Devices will be armed prior to entry into any hazardous area.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 2

Structural Apparatus Minimum Response

Building Alarm Activation, Smell of Smoke, Reported Fire:

- Two Engine Companies
- Squad
- Water Tender (Reported Fire)

Interior Gas Leaks:

- One Engine Company
- Squad

Exterior Gas Leaks:

- One Engine Company

"Stuck" Elevators:

- One Engine Company

Others:

- As directed by the Senior Fire Officer (SFO)

** PIO Fire Company Officer to complete and submit "Fire Recovery USA Report" **if billable incident.**

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 3

Structural Tool Assignments

First-In Engine:

- Company Officer (SFO): SCBA, radio, flashlight and key ring.
- Firefighter: SCBA, extinguisher or hose line, as directed.
- Firefighter: SCBA, halligan tool, or hose pack/hose line, as directed.

Second-In Engine:

- Company Officer (SFO): SCBA, radio, flashlight and key ring.
- Firefighter: SCBA, hand tools or hose line, as directed.
- Firefighter: SCBA, pike pole, pick head axe, or hose pack/hose line, as directed.

Rescue Vehicle (Squad):

- Firefighter: SCBA, radio, flashlight and key ring.
- Firefighter: SCBA, halligan tool/flathead axe.

Others: Thermal Imaging (TIC) Camera (on E38, or E31) and Combustible Gas (CGI) Indicator (on E38, or E31). *Chief8600 has back-up CGI.

Water Tender:

- As directed, by Senior Fire Officer (SFO).

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 4

Structural Fire Attack

- An aggressive, Interior Attack will be attempted whenever possible.
- All fire control efforts should support the Primary Search and rapid control of the fire.
- Fire Attack will be based upon the following fire control methods.

Offensive Mode: An offensive attack requires an aggressive interior fire attack. Engine Company Officers or Acting Company Officers are responsible for the following:

- The safety of firefighters under their supervision.
- Proper use of protective equipment.
- Obtaining a continuing supply of water.
- Selecting the appropriate hose line from the options provided on each pumper/water tender.
- Keeping COMMAND advised of fire control progress.

Defensive Mode: Defensive fire attacks are mounted in those situations that interior attack and saving of life is not possible or necessary.

- This mode is designed to flow the maximum amount of water in the shortest time.
- When absolutely necessary defensive attacks should start with no less than one 1 ½" hose line.
- Master streams will be used for a rapid knockdown when possible.
- Truck (fixed) or ground-mounted deck guns (Manned or un-manned) may be used.
- Reverse Lays with pumped hose lines may be necessary.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 5

Structural Search & Rescue Procedures:

The engine company or squad is responsible for primary search of all buildings.

The members will enter all buildings wearing the proper level of PPE and **deploy district's Thermal Imaging Camera.**

The company officer or acting company officer will determine the search process to be used in the structure.

Primary Search of the structure shall be conducted in the following order, unless conditions dictate otherwise:

- Immediate fire area-
- Floor above the fire-
- Uppermost floor, then work your way down-
- Other exposed areas-

Engine Companies will assist in the search as soon as possible after fire control efforts are established, with assistance of district's thermal imaging camera (TIC). Refer to SOG-62, Thermal Imaging Camera Guidelines!

The Rescue Company will not be used to deploy hose lines unless it is absolutely necessary.

Status of the search will be reported to COMMAND in a timely manner.

A report of "ALL CLEAR" shall be transmitted on the air when all victims have been removed or a thorough primary and secondary search has been completed.

When appropriate, crews will begin Interior Ventilation as they conduct their primary & secondary searches.

Exterior Ventilation will be accomplished as a support function.

When necessary, the assigned engine company, squad or ambulance is responsible for establishing triage in a safe area.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 6

Structural Hose Loads:

Supply Line:

- No less than 600 feet of 3" supply line flat-loaded in the right hose bed.
- No less than 400 feet of 2 ½" hose is loaded on the left side of the hose bed.

Working Line:

- No less than 200 feet of 1 ½" hose/1 ¾" hose on structure fires and vehicle fires.
- The hose will be loaded left-to-right on all layers.

Pre-connects:

- All pre-connected hose lines will be 200 feet of 1 ½" line/1 ¾" line.
- The load will be flat loaded.
- Combination Nozzles shall be used.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 7

Water Supply:

The first two arriving engines will secure separate water supplies, if available.

Additional engines may tandem-pump when the water system/tenders can support the operation.

Additional supply lines may be laid into operating engines when hydrants are available.

Drivers will monitor the hydrant pressure after hooking up.

It is the driver's responsibility to advise COMMAND of water supply problems.

Unused discharge lines will not be operated unless the water system can support the **maximum expected flow** from the line (s).

When engine tank water is used to supply the first attack line, a second line will not be charged until a permanent water supply is established.

Three inch supply lines will be connected to hydrants whenever possible.

Only one un-pumped supply line should be used. A second supply line should be pumped.

Note: Remote water storage tanks, for fire suppression located within the Fire District locations noted on district map books.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 8

Standpipe Operations:

Response to buildings with **single** Fire Department Connection (FDC) and a known fire location:

The first-in engine company will position their vehicle for a fire attack and, if possible, in a position to connect to the FDC, if needed.

The second-in engine company is responsible for connecting to the FDC.

Responses to buildings with **multiple** FDCs and a known fire location:

The company officer or acting company officer will notify COMMAND when the FDC is being fully supported.

On responses without a fire location, engine companies will standby and **not commit to a FDC**. Companies will advance into the building with hose packs for size-up.

General Requirements:

The first two arriving engine companies will connect to separate FDCs. Crews will advance into the building with at least 200 feet of hose per company. The two companies will use separate stairwells to enter the building for size-up, search, ventilation and suppression.

Only fire department carried hose and nozzles will be utilized.

The second engine company will, when necessary, be responsible for water supply and will charge the FDC when visible smoke or flames have been reported.

Placement of standpipe lines into service will have a direct effect on fire loss and firefighter safety. Standpipe lines should be connected, charged and cleared in the stairwell or from behind a fire door (when possible) before entering a fire area.

In heavy fire conditions, the second arriving engine will advance **a minimum of one 2 ½" working line** to the fire area from the standpipe or the engine.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 9

Ventilation Practices:

When appropriate, members working in a smoke filled environment will ventilate as they go.

In critical rescue situations, crews will **immediately ventilate the structure** from the outside.

Upper floor windows will be removed using a ladder or pike pole.

Vertical ventilation will be accomplished **prior to entry into a structure in which backdraft conditions are suspected.**

When performing roof work, crews will utilize roof ladders.

All tools necessary for roof ventilation will be in place before starting work. Power saws will be start-tested **prior to being raised to the roof.**

When possible, ladders being placed to a roof will have three rungs extended above the roofline for visibility. Ladders are never removed until everyone that went up the ladder is off the roof.

Crews will step down onto roofs, not up onto them.

The first firefighter to the roof will carry an axe to check the integrity.

For Structures with heavy fire, a roof rope and second ladder will be properly placed as an escape route.

COMMAND will designate a "Roof Division Officer" **prior** to initiating a roof operation and ensure the officer has a portable radio.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 10

Staging:

Level-1

The first arriving companies will respond to the appropriate position at the emergency address. Position all fire apparatus so that escape routes are available, if possible.

The first arriving engine company will secure a continuing supply of water.

The second arriving engine company will provide the supply line for the first engine (if required) or report to the opposite side of the structure. The company officer or acting company officer will determine the best position to support the fire ground operation unless otherwise directed by COMMAND.

The water tender will respond to a position that allows the most options for vehicle positioning. It **will not** commit any lines unless directed by COMMAND.

Level-2

Level-2 staging occurs when apparatus in excess of the first alarm assignment is requested.

Fire companies from mutual aid departments will be directed to an area close to the incident location, but not committed to any task.

Company officers or acting company officers will report in person (Face-to-Face) to the staging officer or COMMAND, when a designated staging officer is not assigned.

Level-2 units **will** be used as team.

Note:

Three (3) Status Conditions are established for use with tactical resources at the incident:

- Assigned Status: Performing an active assignment.
- Available Status: Ready for assignment (all resources in staging areas should be available, **3-minute** response)
- Out-of-Service Status: Not ready for available or assigned status.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 11

Command

The first arriving fire department officer will establish or pass COMMAND at any reported or actual structure fire, wildland fire, aircraft accident, hazardous materials incident, or other emergency situation. In those situations where an officer is not present, the senior firefighter on the first arriving unit will establish COMMAND. The passing of COMMAND should be done "face to face", when practical.

The first arriving unit will:

Acknowledge arrival on scene by radio.

Provide a brief description of conditions observed.

Example: Engine-38 arriving, multi-story residential occupancy, nothing showing, evacuation in progress. Engine-38 will pass command and will be investigating.

Example: Command Crash-114, aircraft is down safely, crew is egressing the aircraft.

Example: Heavy Rescue-115 arriving, single vehicle accident, multiple injuries, extrication required.

Confirm assumption or passing of COMMAND.

The first arriving officer **must elect an appropriate commitment** for the company as follows:

Nothing Showing/Investigation Mode: The officer or acting officer assumes or passes COMMAND and may go with his crew to investigate while using a portable radio to exercise COMMAND.

Fire Attack Mode: If the officer decides to proceed with "Fire Attack", he or she announces that in a brief radio transmission, i.e. "Engine-38 "performing fire attack", and leads the crew in an attack. The next arriving officer, if conditions warrant, assumes command and establishes the appropriate levels of supervision and fire attack functions as necessary.

Command Mode: The first arriving officer recognizes a working situation, which requires formal COMMAND from the outset. The officer establishes a fixed command post and begins to exercise the responsibilities of COMMAND immediately.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 12

Personnel Accountability System/Field Accountability Tracking (PAS/FATS) System

The Personnel Accountability System (**PAS**)/Field Accountability Tracking System (**FATS**) shall be used to specifically to identify and keep track of members operating at an emergency scene.

- The Incident Commander (**IC**) is responsible for implementing the appropriate level of accountability to ensure each operation is handled safely.
- **PAS/FATS Officer**: The individual assigned to monitor the entry, status and safety of all personnel at an incident.
- Personnel Accountability Report (**PAR**): A report to the Incident Commander, or his or her designee verifying the status of all assigned incident personnel on the fire ground.

The PAS/FATS Personnel Tracking System is comprised of the following components:

- **PAS/FATS Status Boards**: A status board with Velcro attached is used by the **PAS/FATS Officer** to hold passports from companies assigned to incident. These shall be located in the district's Fire Chief's vehicle, or district company officer apparatus having potential accountability responsibilities.
- **Apparatus PAS/FATS Passports**: Each piece of district fire apparatus shall have two (2) Velcro type **passports, one green and one yellow**. The green passport is for **primary** use, the yellow passport is a **backup**. The passport shall be engraved with the **apparatus number**. The Company's passport is located on the left side of each piece of district fire apparatus, i.e., the Engineer/Drivers door.
- **Individual Helmet Velcro Tags**: Each district firefighter shall be issued **four** (4) removable Velcro tags for their personal identifier with number. **One** is to be kept on individuals' structural fire helmet. **Two** to be placed on assigned fire apparatus's passports for the shift, or the incident assigned passport, and **one** to be placed on "Station-38's PAS/FATS Status Board" in the apparatus bay at the beginning of each tour of duty. Extra PAS/FATS Tags **maybe** carried by senior fire personnel for field use.

If a member's **position changes**, the member is responsible to change the tag to the new vehicle.

- **Level-1 Accountability**: will be the normal use of the system, using the Velcro individual personnel tags and the apparatus passports. Tags are normally left on the apparatus in this mode.
- **Level-2 Accountability**: occurs during working fires or hazardous situations. Whenever an attack line is laid, the driver/engineer of the closest pumper to the hazard point shall establish a collection point for the PAS/FATS Tags. Crews entering the hazard area shall give their apparatus passport with the correct names to the Engineer/Driver at the collection point.
- **Level-3 Accountability**: shall occur when COMMAND collects any or all passports or appoints a PAS/FATS Officer to manage the Incident's PAS/FATS System. COMMAND may establish as many collection points as necessary to safely handle the incident.

General Fireground Accountability Rules:

- All crews shall enter, work, and leave the hazard area together. **No freelancing!**
- All crews **shall report** to Command.
- All crews shall have a radio; if the radio fails, the crew **shall exit** the hazard zone.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 13

Automotive Fire Fighting Operations

You are operating in an inherently hazardous environment. Hazards may affect you at any time. It is critical that you remain extremely alert.

Do not focus so closely on the fire attack that you forget about other vehicular traffic around you.

The total flow from hose lines deployed in an offensive attack on an automotive fire must exceed the required fire flow for the anticipated level of involvement.

Base your fire flow on potential conditions.

Selections of hose lines for the fire attack should provide the maximum flow rate possible with the available staffing and water supply.

Avoid direct frontal or rear exposure to charge bumper systems.

Hose lines should be placed to protect exterior exposures (structures, other vehicles, etc.) that present an imminent life risk or extension of the fire.

Protect means of egress imminently threatened by fire.

Protect exterior exposures that present a potential life risk.

Confine and extinguish the fire.

Check for extension (within the vehicle or to exposures).

Caution must be exercised with vehicles equipped with airbags-they may activate during a fire or during salvage and overhaul.

PIO Fire Company Officer to complete and submit "Fire Recovery USA Report" if **billable incident.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 14

Water Tender Operations

The off-loading sites must be designed to minimize the backing and turning of water tenders. This may necessitate the off-loading site be established at a point remote from fire ground operations.

The fill site must also be designed to minimize the backing and turning of water tenders. This may necessitate that the fill site be located at a point remote from the water source.

The hose layout selected should permit filling of water tenders at a minimum rate of 500-GPMS. This will require a large diameter or multiple fill lines. Tenders should be filled from the bottom and directly into the tank. If there are tenders in the shuttle that can not be filled in this manner or have a slow fill rate, consider filling them at a separate location, so they don't interfere with the filling of other water tenders.

Recognize a water tender is a heavy vehicle. It takes a considerable amount of time and distance to stop.

Always set water tender off-loading to maximize flow capability and tactical flexibility. Use shuttle and dump tactics whenever possible. The more time a tender spends stopped, the less it contributes to the development of water flow.

Establish the fill site based on potential. **Do not make this determination based on the probability of control with tank water.**

Set up fill site for maximum flow regardless of the perceived flow requirements. A high flow layout can meet smaller demands. A low flow hose layout cannot meet larger demands.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 15

Confine Space Rescue

When possible, confined space rescues will be pre-planned and pre-staged evolutions in accordance with provisions established during permit authorizations of a "Permit Required Confine Space Entry".

Appropriate ventilation, PPE, and pre-rigged retrieval systems will be staged before "Permit Required Confine Spaces" are entered.

Emergency rescues from "Non-Permit Required" confine spaces will require appropriate resources be staged and rigged with atmospheric monitoring of the confined space prior to rescue team entry.

A retrieval system will be in place and sufficiently attached to each rescuer prior to entry.

SCBA or a Supplied Air Respirator (With separate 10-minute escape bottles) will be used by each rescue team member entering a confine space with an unknown or insufficient atmosphere for continuous habitation.

A continuous atmospheric monitoring device with the capability of monitoring (*district's 4-gas CGI, the yellow hand held GasAlertMicroClip Unit) Carbon Monoxide, Explosive Gas and Oxygen levels will be carried with all rescue teams making emergency entry of confine spaces.

Under no conditions will a rescue attempt be made in any confine space containing a flammable or explosive atmosphere greater than 10% of the lower explosive limit (LEL) or lower flammable limit (LFL). Ventilation of the space will be accomplished prior to entry.

An attendant will be assigned to each entrant of a confine space rescue. Attendants will maintain communication with the assigned entrant at all times. Attendants will have no other duties while assigned to entrants within a confine space.

A rapid intervention team equal to the rescue team will be standing by and will wear, (as a minimum), the same level of PPE as the initial entry team.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 16

Rescue Company Responses

The engine/rescue company will respond to:

- Any alarm where a full assignment is required-
- Vehicle accidents-

Medical responses, limited to "Major" incidents, or incidents within the assigned district.

- Hazardous Material Incidents-
- Interior Gas Leaks-
- Aircraft emergencies-

Any rescue situation involving:

- High/Low angles-
- Confine Space Entry-
- Water rescue-

Squad-34 or Squad-35 will not normally respond to:

- Exterior Gas Leaks-
- Electrical, unless directed by Senior Fire Officer (SFO)-

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 17

Wildland Fire Fighting Operations

All initial attack forces will be provided with the appropriate level of PPE for wildland operations prior to being allowed to engage in firefighting operations.

Exception: During structure protection operations, structural PPE may be appropriate.

Follow on crews will be required to don wildland gear prior to departing the fire station. Additional gear may have to be brought to the scene for initial attack forces.

Minimum PPE will be wildland gloves, hardhat, fire retardant outerwear and fire shelter, and will require web gear and canteens.

Each wildland crew will maintain radio contact with the next higher level of the ICS structure.

Prior to entry, each crew will be briefed on their assigned task, escape routes, and safety zones.

District fire personnel shall be certified at the **minimum** level of CICCS Firefighter (Type II) for Wildland Fire Operations.

L.C.E.S.

Briefing First Always!

- L-Lookouts-?
- C-Communications-?
- E-Escape Routes-?
- S-Safety Zones-?

****Note:** All district fire/rescue response personnel **shall maintain in their possession** at all times their "CICCS ID/Qualification Cards" to fulfill the requirements of the CFAA, OSHA IAW-NWCG 310-1, dated January 2006.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 18A

Hazardous Materials Decontamination Procedures:

Purpose: Process of removing contamination (from dirty to clean). Why: To limit spread of contamination IAW-29CFR1910.120 (q) and Title-8, CCR 5192 (q). These procedures are based on the Product, Circumstances, Resources and an Assessment and the use of Level-B PPE. District trained decon personnel may be used in support of county hazardous materials operations as needed upon request through fire dispatch. Decon Staffing: Minimum 3 people needed (including: Decon Leader, Greeter/Rinser, Washer/Bagger). Members of the Decon Team report to the Decon Leader. The Decon Leader is responsible for the operations of the decontamination element, providing decontamination as required by the Incident Action Plan (IAP) within the CRC and CRZ. The Decon Leader reports only to the HazMat Group Supervisor who in turn reports to the Operations Chief IAW-ICS-HM-222-3.

PIO Fire's 9-Step Decontamination Procedures

- **Step-1:** Establish an Entry Point-
- **Step-2:** Primary Decontamination (Emergency Decon and Full/Primary Decon)-
- **Step-3:** SCBA Removal-
- **Step-4:** Removal & Isolation of Protective Clothing (PPE)-
- **Step-5:** Removal of Personal Clothing-
- **Step-6:** Body Decontamination-
- **Step-7:** Drying Off & Providing Clean Clothing-
- **Step-8:** Medical Evaluation of Response Personnel-
- **Step-9:** Transportation & Documentation-

Districts Methods of Decontamination:

- *Dilution-
- *Absorption-
- *Chemical Degradation (Neutralization)-
- *Isolation/Disposal-

Note: The district has a "NO Exceptions" Decon Policy, with personnel "SAFETY" in mind! Decon Site Selection shall be at the least environmentally sensitive location.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 18

Hazardous Materials Response

Hazardous Materials are any substance or materials, in any form or quantity, which pose an unreasonable risk to life, the environment, or property when stored, transported, or used in commerce.

Level-1 Incidents: require a minimum of a single engine company, squad and senior fire official for initial response.

Level-2 Incidents: require all available resources, County OES Representative and may include mutual aid.

Level-3 Incidents: begin large in the early stages and require countywide support in control and containment/mitigation operations. A unified command may be more effective and desirable to place massive resources at Command's disposal.

Except in favorable rescue conditions, all entries into hazard areas requiring PPE beyond the structural firefighting ensemble will require the establishment of a full decontamination corridor prior to entry.

Any leak/spill larger or more serious in nature than the first arriving engine company is able to contain will require the immediate request of a local HazMat Response Team through Cal-Fire ECC-Camino.

Response Rules of Thumb for Isolation Distances:

- Minor Event (1 Drum, 1 Bag, etc.) = 150 feet all directions
- Major Event (1 Drum, or More, etc.) = 500 feet all directions
- Residential & Light Commercial = 300 feet all directions
- Open Areas = 1,000 feet all directions
- Boiling Liquid Expanding Vapor Explosion (**BLEVE**) Potential = 2,500 feet or more all directions!
- Stage incoming units 2,500 feet upwind, uphill and upstream!
- Position apparatus/vehicles point out!

FRO's perform only Defensive Operations. HazMat Technician & Specialist perform both Offensive & Defensive Operations.

S.I.N.

- S-Safety is the number one (# 1) priority for yourself first and fellow responders.
- I-Isolation and deny entry-Isolate material and don't let anyone enter hazardous area.
- N-Notifications (Make them), local, state and federal through fire dispatch.

****Always request needed assistance via a safe route!**

** PIO Fire Company Officer to complete and submit "Fire Recovery USA Report" **if billable incident.**

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 19

Media Interview Guidance

Emergency responders can be interviewed by media on-scene regarding their involvement in an incident or rescue.

Remember: All media information released must be cleared through the Incident Commander.

Although desirable, county Public Information Officers (PIO's) do not have to be present for the interview.

Emergency responders should never speculate on what led to the cause of any accident or incident.

Names of those rescued or involved in accidents/incidents/ rescues will not be mentioned.

Interviews should confine their responses to the issue at hand. Do not expand responses to issues not related to the incident at hand. For example, providing opinions of other fire rescue organizations, good or bad, would be inappropriate.

During normal work hours, a County PIO Representative can be reached at: (530) 647-5222

During non-work hours, contact the County PIO Representative through the Cal-Fire ECC Camino at: (530) 647-5222

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 20

Aircraft Emergencies

In-flight Emergencies:

- Proceed to appropriate standby location according to active runway.
- Position no closer than 100 feet of the runway.
- After aircraft has landed, give preliminary reports such as: "Aircraft's down with a good roll out".
- If it is necessary to follow the aircraft down the runway, request permission from "Ground Control".
- Check with pilot to ensure aircraft aircrew is OK, if so, terminate emergency.

Ground Emergencies:

- Position apparatus to attain optimum fire coverage while providing for safe ingress and egress for the crew.

Fuel Spills:

- Foaming of the area maybe required, especially if personnel must enter the area.

Precautionary Landings:

- Pull apparatus in front of station and standby in full PPE until aircraft has landed safely.

Reference: "Aircraft Accidents, A Practical Guide for Responders", **Delmar Cengage Learning**, Clifton Park, New York
www.delmarlearning.com

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 21

Aircraft Brake Overheat/Fire

- The hazard area for hot brake situations is 300 feet at a 60-degree angle from the wheel(s).
- All firefighting apparatus and personnel must remain clear of this area.
- A dry chemical extinguisher must be ready to extinguish wheel fires.

Do not apply any agent unless the wheel or brake is actually on fire.

- If hot brakes exist, a 30-minute cool down period will begin.
- Blowers may be used to cool the brakes.
- If brakes are still hot, check every 15 minutes until they are cool.
- Aircraft maintenance personnel will decide if deflation of tires is required.
- Aircraft with hot brakes will be parked at least 300 feet from other aircraft.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 22

Two In/Two Out

Definitions:

Area of Immediate Danger to Life and Health (**IDLH**):

Structural: The area immediately inside the structure involved.

Aircraft: The area within 75 feet of any exterior portion of the aircraft involved.

All personnel responding to potential or existing IDLH situation must be dressed in full PPE, to include SCBA.

All personnel working inside an IDLH area must operate in teams of at least two firefighters.

Personnel in each team must maintain voice or visual contact with each other while operating in IDLH area.

Using radios as the sole means of contact between members of a team is not permissible also use hand signals!

Two firefighters in full PPE and a Thermal Imaging Camera must be assigned outside the IDLH area to serve as a Rapid Intervention (RIT) Team, prepared to rescue firefighters, if necessary. They cannot affect a rescue without prior Incident Commander approval.

A driver/operator may be used to comply with this requirement during initial response. Once a second team enters the IDLH area, it is considered a full response, and a dedicated RIT Team of two members shall be assigned outside the IDLH area.

Deviations from this SOG may only be made during a situation with a known life-hazard.

Rescue Situation: A known rescue situation is one where there is a compelling factor beyond a reasonable doubt to start an interior rescue before all required personnel have arrived on scene.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 23

High and Low Angle Rescue

- Initial response requires a minimum of three High and/or Low Angle trained personnel.
- A Team Leader and Safety Officer will be designated by the SFO.
- Initial response equipment includes a rescue rope pack, a safety rope pack, a stokes backpack, two portable radios and a lantern.
- Only approved rope rescue equipment will be used.
- Minimum PPE: Helmet, leather gloves, approved leather footwear and safety glasses.
- Prior to any operation, qualified personnel must conduct a safety check of the system.
- Backup safety system shall always be in place **before** beginning any operation.
- Automatic belay systems **must** be used.
- Personnel working near any ledge will be tied off.
- When fire apparatus are used as anchors, apparatus will be chocked, and the keys removed or the ignition taped.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 24

Radio Discipline

- All transmissions will be in clear language (**Clear Text**).
- Transmissions should be short and to the point.
- All fire/emergency frequencies are assumed to be monitored by others.
- No unauthorized information will be transmitted on fire/emergency frequencies.
- Radio "checks" will only be accomplished after maintenance or when transmission capability is in question.
- The term "**Emergency Traffic**" will be used to clear the fire net of all other radio transmissions when a firefighter's life is threatened at the fire scene. Also, currently used when undeclared emergency is observed.
- Tactical frequency may be used to segregate incidents when more than one emergency is in progress.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 25A

Flight for Life Protocols

Guidelines for requesting the air-medical ambulance depend on a variety of factors including distance from hospital, location and number of trauma and heart centers, certification level of pre-hospital care, ground accessibility, and terrain:

Anatomic Factors:

- Severe penetrating trauma to the head, neck, torso-with shock-
- Amputations-
- Major burns associated with trauma-
- Paralysis-
- Acute airway obstruction or respiratory system compromise-

Medical Conditions (One or more conditions under "Situational Factors" must also be present):

- Shock-
- Unconscious or decreasing level of consciousness-
- Exposure to deadly chemicals or toxins-
- Hypothermia-
- Drowning-
- Electrocution-

Situational Factors:

- Prolonged Extrication Time, 20+ minutes-
- Increased ground transport time due to snow, ice, construction, gridlock, etc.-
- Rural or isolated areas-
- Need for specialized equipment and/or personnel at a disaster scene-

Levels of Response:

- Standby: Crew moves to aircraft and prepares to launch-
- Rapid Response: Aircraft launches and orbits the scene. Will not land until requested-
- Immediate Go (Launch): The aircraft launches and responds to the scene-

****PIO Fire Company Officer to complete and submit "Fire Recovery USA Report" if billable incident.**

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 25

Helicopter Landing and Safety Considerations

Note: Refer to **SOG 25A** for guidelines when requesting Flight for Life

Minimum 75' X 75' landing area day, and 125' X 125' @ night (**Optimum is 150' X 150'**)

*Larger area may be required for a larger helicopter.

Area should be reasonably level with a slope not greater than 10 degrees.

Area should be free of loose debris, litter or objects.

Order of preference for **designated landing sites:** Concrete, grass, asphalt, gravel, slick rock, snow, and dirt

Provide wind direction and speed.

Use banner tape on a pole (or hold overhead) to indicate wind direction

Be prepared to provide **our radio frequency** to the helicopter crew; when you make contact with the crew, advise them of any potential hazards,

Once the aircraft lands, do not approach it while the blades are turning unless the pilot acknowledges your presence and signals that you may approach.

NEVER approach from the tail; Approach from the front or side but **ONLY** with permission from pilot.

Approach and leave the aircraft in full view.

On sloping terrain, approach/depart aircraft in area of greatest clearance under the rotors.

Keep well clear of landing area when helicopter is landing or taking off.

DO NOT RAISE ARMS ABOVE HEAD when approaching/departing aircraft with the blades turning (IV poles, etc.)

DO NOT THROW OR JAM equipment into or out the aircraft.

Load and secure patient and equipment as the crew instruct you to do so.

DO NOT SLAM DOORS. The crew will close the doors if you are not familiar with them.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 26

Medical Responses

The senior fire department responder to medical emergencies is responsible for overall scene control. This responsibility includes safety, providing optimum route/victim (s) location to ambulance units, fire apparatus positioning, and crowd control and rehabilitation of all responders.

- Firefighters will initiate medical care within the scope of their abilities.
- Firefighters will ensure that a safe environment is established for ambulance personnel to work in.
- All responders shall wear the appropriate level of infection control protection, including latex gloves at all times.
- Upon arrival of ambulance personnel, firefighters will assume a support role.
- At least one fire department crew will remain on scene until a mutual agreement with ambulance personnel is reached on the need for continued support or a higher priority call is received.
- In the event that fire department and ambulance personnel disagree on patient care, ambulance personnel shall act in the best interest of the patient.

Documentation of Medical Responses:

- All medical responses will be documented on the Medical Response Sheet, carried on each assigned fire apparatus.
- The original form will be given to the ambulance crew upon their arrival; the copy will be sent to the fire districts administration office for filing within one duty day after it is completed, and attach it to an Emergency Response Form.
- Medical Response Sheets will be maintained in the administrative office for 2 years.

Note: Critical Incident Stress Debriefings (CISD'S) Post Incident -May be requested!

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 27

Civil and Family Disturbances

- Local law enforcement having jurisdiction are the lead agency in the control of these situations.
- The senior fire officer (SFO) will work within the incident command system and communicate with law enforcement to ensure the safety of all fire department members.
- Turn off lights/sirens several blocks from the scene.
- Do not park in front of the address/structure.
- Do not enter the area until law enforcement has declared the incident area SECURE.

Even after the scene is considered secure:

- Crewmembers must work in teams of two; **be cognizant of weapons in the area-**
- Stand at a partial right angle out of arm's reach of family members-
- Don't stand against a wall-
- Don't fold your arms (indicates you are making a judgment)-
- Don't put your hands in your pocket (shows lack of concern)-
- Use physical barriers between yourself and any violence-

If violence occurs during our operations, the SFO will withdraw all fire forces to a safe staging area.

- In the event emergency withdrawal of firefighting forces is required, utilize the HI-Lo siren on the fire apparatus to signify the withdrawal.
- All fire protection responders will stage at least two blocks away and await further instructions from the SFO.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 28

Dive Rescue and Recovery

The minimum response to any dive rescue situation will involve three dive team members and two support personnel trained in shore-based operations. One of the dive team members will assume the position of Team Leader and will not dive unless needed. Mode of dive will also be determined by time factor submersion of victim and water temperature. (Rescue vs. Recovery)

The minimum equipment response will be for each diver: wet suit, set of fins, set of booties, mask, hood, and pair of gloves, BC, regulator assembly, 2 tanks and a light. In addition, search lines; buoys, tarps and weight box are required.

Dive Team Leader:

- Reports to IC and is solely responsible for dive team's actions, safety and planning of the dive. Will not dive unless absolutely necessary.

Diver:

- Don appropriate dive suit and direct/assist shore personnel in staging of equipment. Will buddy with at least one other diver/line tender and perform an equipment check.
- Will perform dive as planned and directed by Dive Team Leader.
- If victim/item is found will act accordingly with dive plan and type of dive condition. (Rescue/Recovery)
- Has the responsibility to acquire time of dive/air consumption from dive tender.

Safety Diver:

- Must remain alert to the scenario and capable of instantly responding with direction from a tender's signal or diver's call for help.
- Position will be determined by the number of divers he/she is to provide coverage for.
- Will be fully suited to include fins, and should be immediately adjacent to the water.

Tender:

- Individuals who have prior training in dive tending and have worked with the dive team should man this position. The tender is to be positioned as directed by the Dive Team Leader and his search diver to ensure that the pattern and area are those prescribed to cover based upon all valid information.

In the event of a diver signaling a find, the tender should tie a double figure 8 to mark the distance on the line for future investigation.

- Responsible for ensuring that the search diver does not exceed the planned time of dive as outlined from the Dive Team Leader.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 29

Environmental Compliance

All waste materials, to include petroleum products, solvents, and contaminated rags will be disposed of in an approved container.

Fire apparatus will be washed in areas where all water run off flows into a least environmental sensitive area.

Whenever AFFF is to be released "above" the mixture of 3 gallons of AFFF to 100 gallons of water it must be reported to county environmental health. This includes intentional, incidental and accidental releases.

During emergency operations it will be necessary to estimate total release of AFFF. This amount will be reported to county environmental health after the emergency is terminated.

Fire Apparatus Class-B foam test will be performed at the training area, in conjunction with live fire training. Routine testing releases will be included in the permit for air releases. No further reporting is required.

When Class-B foam is used at locations remote from a wastewater treatment plant (WWTP) detain foam to prevent drainage into water bodies until acceptable and authorized treatment and/or disposal can be conducted.

Hazardous materials will be kept in a container approved for that particular material. All containers must be properly labeled; any container not labeled will be turned in as hazardous waste. (Clean rag container and a Dirty rag container)

Material safety data sheets (MSDS) will be kept in the perspective MSDS book in the work area to which the material is used.

Turn in all hazardous waste materials to the County's Accumulation Site. Hazardous waste must be properly labeled prior to turn in.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 30

Petroleum Oil/Tank Fire

- At no time will fire attacks be conducted from downhill or down wind positions.
- Assess the tank's structural condition to ensure no immediate danger of shell collapse or failure is present.
- Maintain the structural integrity of the tank shell with cooling agents.
- Extinguish ground fires and three-dimensional fires first.
- Assign an Incident Safety Officer for each operational division. Establish "**react teams**" operating portable monitors and hose lines ready to protect personnel operating near the tank.
- Extended firefighting operations could produce a significant buildup of water in diked areas. Such buildup can be reduced using pumps or fixed drains in the dike wall.
- Stagger relief companies to allow for operations/attack continuity.
- Isolate hazards if possible and determine available resources. Use dry-chemical followed by foam "securing" streams to extinguish three-dimensional fires. Solely applying class-B foam to a manifold fire usually is **not effective**.
- If not available protect exposures, apply cooling streams above product line and consider transfer of product.
- Once fire is extinguished ensure the source of fuel is shutoff.
- Control flowing fuel by damming, diking or diverting.

Note:

The AFFF quantities are determined by using the following formula: Diameter squared X .785 X .16 (for portable device such as trucks and monitor devices) X .03 (3% AFFF x 65 mins). To calculate the total water requirements you multiply the sum total of your finish foam by 97. For total agent requirement you add the sum of the AFFF and water.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 31

Risk Management

Risk management has universal application, it begins with YOU! It is not new, but like everything else it does take practice. Risk management is a continual process, don't make RM hard. Consider the simple process below for all daily tasks.

Risk Management Process:

1. **Identify the hazards**-Do you know what is involved or required from start to finish? What can cause things to go wrong? Is there a better way?
2. **Assess the risk**-If one or more of the hazards happens, how bad is it? How likely is it to happen?
3. **Analyze risk control measures**-What can you do about it? What are your options? How much will it improve things?
4. **Make control decisions**-What are the best choices? Who decides which choices to use? It is time for decision makers to make decisions.
5. **Implement risk controls**-What do you need to make it work? Who is doing each part?
6. **Supervise and review**-How well did it work? What future improvements are needed? Who else needs to know?

KEEP YOUR RM PROCESS SIMPLE, SO YOU CAN USE IT!

- Apply your **RM 6-Step Process** to all tasks
- Don't use a complicated solution if a simple one works
- When in doubt, remember the basic RM six-step process

BOTTOM LINE: IF IT'S NOT WORTH THE RISK-DON'T DO IT!

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007,*Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 32

Fire Department Drills:

1. The department shall be fully trained and maintained to safely mitigate any emergency as quickly as possible.
2. Drills shall always be carried out under strict control and discipline, using good safe practices and procedures.
3. During such drills, firefighters and officers will be required to wear their protective safety equipment, as directed by the Drill Officer.
4. The handling and maneuvering of fire apparatus shall be as outlined in the SOG's and shall closely approximate actual emergency conditions.
5. At the conclusion of practice drills, company or companies shall return to the fire station with their apparatus and promptly place it in safe readiness to respond to any emergency call. If hose has been wet or dirty, it shall be thoroughly cleaned and dried before being placed upon the apparatus and, if possible, replaced with spare hose during the drying process.
6. Training sessions shall be coordinated through the Senior Fire Officer and approved by the Fire Chief, and shall be held on the 2nd and 4th **Wednesdays**, with the exception of holidays. It shall consist of a study of the safe, modern and generally well-recognized methods of fighting fires. A review of all fires during the week should be made and a discussion held on safety and how the Standard Operating Guidelines used at these fires could have been better or more effectively used.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 33

Fire Ground Safety:

1. All members of the department shall become fully aware of, and conform to the California OSHA Regulations concerning fire fighters.
2. The department is committed to the safety of its members, and any unsafe practices will not be tolerated.
3. Department members shall wear their personnel protective equipment when working at scenes of emergencies, or as otherwise directed by the officer in charge.
4. No member shall ride the tailboard of any apparatus.
5. Member shall be securely strapped in seatbelts before the unit is moved. No multiple personnel using the same seat belt at any time.
6. Additional safety practices will be found in the SOG's.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 34

Company Officer Safety:

The fire officer's primary responsibility is the safety of firefighters operation under his control and those around him. The following is a list of ways to improve the safe daily operations of YOUR ENGINE COMPANY.

1. Identify your company and the fire location precisely for the Incident Commander (IC). For example, "Engine- 38, second floor, "A" wing, corner apartment, exposure 2-3".
2. Look for potential hazards around the fire station. Are objects placed too close to a posthole? Is equipment stored safely?
3. Maintain radio discipline. Keep messages brief and to the point and avoid stepping on someone else's message.
4. Use your response area to sharpen everyone's skills. Observe new construction or ask how a firefighter might force a particular door.
5. Check that your company is correctly logged in when assigned to a location by command post before proceeding to that area.
6. Verbally confirm that all members are ready to proceed and are properly equipped prior to entering the fire area.
7. Train engine operators to inform their officer of any difficulties in getting water or obtaining water from a limited source.
8. Gather as much information as possible on the floor below the fire so that your operations on the fire floor will be that much easier.
9. Keep your company together at potential collapse operations. Stay well out of the collapse zone and restrict any freelancing.
10. Break in new members slowly. Allow them to work their way up the responsibility ladder. Assign them the roof position during the day or the nozzle at outside fires.
11. Insist that members be protected (even overly protected) on medical calls to avoid infectious disease accidents. Always use universal procedures.
12. Avoid tunnel vision. Get the whole picture so that you're not working against yourself or endangering others.
13. Take a rest period. Some firefighters may be more fatigued than others and uneasy about asking for time.
14. Prepare the apparatus for service on your arrival at the station after an incident and before members wash up.
15. Drill on company operations such as search techniques; hose line positions, and inter-company communications.
16. Get your company together and leave the building quickly when you've been ordered out. Don't plead your case for staying. **Remember, the IC has the big picture.**
17. Train your drivers to drive defensively. When returning to quarters, give pedestrians and other drivers a brake, even if they don't deserve it. Being cooperative will add only a few seconds to your trip.

Pioneer Fire Protection District Standard Operating Guideline 34 – Continued

18. Cross-train your firefighters to raise aerials and get water from the pumper, just in case.
19. Preplan a standard designated company meeting place (the rear of the first-due pumper) for emergency roll calls.
20. Call for additional help early. It's better to err on the side of too much help than to have to explain why you thought you could handle it alone.
21. Stick to the basics when training. Teach the skills that are used most often and that every firefighter needs to be proficient in.
22. Don't take risky shortcuts. They tend to backfire at the worst time.
23. Encourage your firefighters to speak up about potential hazards. The officer can't see everything. Sharp firefighters make the officer's role easier.
24. Verbally confirm that the apparatus and equipment were checked at the start of the shift and ready for fire duty.
25. Keep abreast of your firefighter's location and frequently check on their progress or difficulties they may be encountering.

Note:

The fire officer is charged with keeping his engine company safe. The responsibility can never be taken lightly. Operating safely doesn't mean that aggressiveness is abandoned. Both tactics are comparable. The trick is knowing when to apply one in a larger dose than the other.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 35

Personal Safety:

Firefighters can help ensure their personal safety in various ways. The following are fifty tips.

1. Wear all your assigned fire gear.
2. Activate your PASS device at all structural fires.
3. Carry a 50-foot length of personal search rope.
4. Size up all buildings before entering them.
5. Carry at least two door chocks and use them.
6. Carry an extra flashlight in your turnout coat.
7. Critique all fires and unusual incidents.
8. Wear a hood.
9. Report all hazardous conditions to your officer.
10. Regularly inspect your tools and know how to use all of them.
11. Fully open your SCBA air cylinder valve.
12. Monitor all radio transmissions.
13. Use infectious-control equipment on all medical calls.
14. If operating remote from your officer, keep in touch.
15. Go to and cover your assigned position.
16. Use tape or barricades to cordon off unsafe areas.
17. Climb down fire escapes facing the stair treads.
18. Watch out for moving vehicles as you dismount the apparatus.
19. Leave the building immediately on orders to do so.
20. Stretch hose lines out of the path of falling glass.
21. Use a search rope in large areas, even in light smoke.
22. Remove any door that you have to squeeze through the entry.
23. Butt or secure all portable ladders.
24. Know your response area.
25. Cross roofs at the front where they line up
26. Test the flooring with pike pole or axe before entering from a window.
27. Be aware that some old elevator doors open outward: apartment doors open inward.
28. Shutdown gas appliances at pipe connections, not flex lines.
29. Find an area of refuge first when operating above the fire.
30. Maintain control of the door to the fire area.
31. Keep your riding list up to date and a copy on the apparatus.
32. Perform inspection activities that could affect your safety.
33. Drill on frequently occurring topics as well as common responses.
34. Cross train: Know both engine and water tender operations.
35. Post a guide at the apartment door during searches.
36. Use a guide when cutting a roof or flooring.
37. Ride in an enclosed position and use restraining devices.
38. Crawl on a roof surface if visibility is zero.
39. Let the tool do the work, and use the right tool for the job.
40. Keep your booster tank full at all times.
41. Use lights and fans during overhaul operations.
42. Take a blow; let the others have a piece of the job as well.
43. If injured, tell your officer and seek medical help.
44. Don't overload fire escape landings, balconies or porch roofs.
45. Avoid making standpipe connections on the fire floor.
46. When climbing unenclosed stairs, stay close to the wall.
47. Use the proper terminology when reporting conditions.
48. Know your location in the fire building.
49. Develop hand signals when working in high-noise areas.
50. Keep in contact with your partner while searching.

Pioneer Fire Protection District Standard Operating Guideline 35 - Continued

Note:

All of these points revolve around a central premise-“**knowing your job**”. To increase your personal safety, you must do the little things that when added together increase the chances of a safe operation. By incorporating these tips into your regular routine, you can be assured that you've done the right thing.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 36

Strike Team/Task Force Assignment:

Personnel:

1. Must be ready for deployment 7 to 10- days, and be minimum certified at the CICCFS Firefighter (Type II) level.
2. Must have PPE (Red) Bag and some cash money on hand or ATM card for personal items, if needed.
3. Must have Structure & Wild land PPE.
4. Must have prior authorization from Fire Chief or his designate.
5. Must be a minimum of three personnel (Company Officer/Acting Company Officer, driver operator and hoseman).
7. Must be knowledgeable about apparatus & assigned equipment.
6. Names and information on blackboard.
8. Pre-trip inspection performed prior to leaving on apparatus (Exception: Code 3 Response, Immediate Need).
9. Get ice chest, ice & drinks if time permits.

Information Required:

1. Type of Strike Team Assignment:
Type-I (Structure Protection)?
Type-II or Type-III (Pump/Roll Capability)?
2. Response: Immediate Need (Code 3)? Or Not an Immediate Need?
3. Apparatus Starting Mileage & Time:
4. Incident Order #:
5. Request #:
6. Rendezvous Point or Fire (Division) Location:
7. Strike Team Leader and STL #:
8. Radio Frequency:

Staging:

1. Company Officer/Acting Company Officer will report to STL or the Assistant STL-
2. Assigned apparatus will be rechecked & refueled-
3. Crew & apparatus must be able to respond within three (3) minutes-
4. ST personnel stay with assigned crew at all times, unless STL is otherwise instructed-
5. Strike Team Conduct: YOUR ACTIONS ARE A REFLECTION OF OUR ORGANIZATION!

Company Officer/Acting Company Officer Duties:

1. Document all pertinent information on: ICS Form 214-
2. Report needs to STL-
3. Know your assigned tactical radio channels-
4. Brief crew on pertinent information received at all briefings and ALWAYS THINK SAFETY!!!
5. Check in with Fire District when possible @ (530) 620-4444
6. Re-supply crew/apparatus with needs and fuel-
7. Crew Integrity a must, stay together-
8. YOUR ACTIONS ARE A REFLECTION OF YOUR ORGANIZATION!

Camp: Remember Strike Teams/Crews are either (Assigned, Staged or Out of Service)

1. Your Company Officer/Acting Company Officer must know your location at all times-
2. First priority is apparatus needs/apparatus inspection (Update ICS Form 214)-
3. Second priority is crew needs-
4. Replace lost, damaged equipment & safety gear, also service tools if needed-

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 37

DRIVERS/PUMP OPERATORS:

Drivers and Pump Operators of department motor vehicles or apparatus shall perform their duties under the direction of the senior fire officer or acting senior fire officer and as specified in the standard operating guidelines.

Drivers and Pump Operators shall possess a valid firefighters Class B license, as specified by the California State Department of Motor Vehicles.

All Drivers and Pump Operators, to be eligible to drive the districts fire apparatus, shall be at least 21 years of age and be insurable by the District's insurance.

All Drivers must be familiar with locations of streets, addresses, hydrants, remote water storage tanks and water mains.

They shall be held responsible for the care and maintenance of the apparatus and see that it is left clean, in good safe order and ready for service at all times.

They shall be responsible for getting the apparatus to the scene safely and operate the unit in accordance with district standard operating guidelines.

They shall, when working the apparatus at incidents and drills, exercise proper judgment and safe operating procedures.

A complete record shall be kept for each piece of fire apparatus and entries made of all operations, warm-ups, maintenance, and so forth.

Operators and drivers shall, at all times, be under the supervision and direction of a fire officer or acting fire officer and shall inform their superiors of all necessary repairs needed on their apparatus and shall do or cause to be done without further delay all such necessary repairs.

All Firefighters shall be trained to handle any and all of the fire apparatus maintained by the district.

Drivers and Pump Operators shall become thoroughly acquainted with the operation of all district apparatus, and be able to fully utilize said apparatus at any emergency situation that may arise.

They shall, for the safety of all personnel, ensure that all safety devices on the apparatus are in perfect working condition.

When apparatus or vehicles to which they are assigned become involved in traffic or other accident, Drivers shall comply with Drivers Accident Reporting Kit on each piece of district fire apparatus and report information to a superior fire officer or his or her designate.

Drivers and Pump Operators shall assure that fuel, oil, water, and foam levels are kept filled at all times.

They shall perform such other duties as their superior or acting superior officers may require.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 38

MAINTENANCE OF APPARATUS, VEHICLES AND EQUIPMENT:

The apparatus and motor vehicles of the district shall be inspected, maintained, serviced and operated as required by the rules in the Policies and Procedures Manual. It shall be the responsibility of those personnel assigned to such apparatus and vehicles to see that they are maintained in a manner, which will insure their promptness of response and reliability of their operation.

All apparatus and vehicles must be inspected once a week and following each response. The drivers of responding apparatus shall perform a "post response" vehicle check to ensure it is ready for the next dispatch call.

All drivers of district apparatus or motor vehicles shall promptly report any deficiency in such apparatus or vehicles to their superior officer or acting superior officer. The latter shall promptly forward such information to the district's Mechanic/Repairman.

Personnel charged with the care of equipment and apparatus shall see the regular safety inspections are made of such equipment and apparatus and shall make a monthly report to the chief of District.

Engines shall be tested annually and after major repairs. If they develop less than 90% of their reasonable capacity an immediate investigation shall be made to discover the trouble, which shall be remedied as soon as possible.

All fuel (At least $\frac{3}{4}$ tank), oil and water levels of all apparatus and support apparatus shall be kept at the proper levels at all times.

All district fire apparatus that are kept at fire personnel homes for response shall adhere to all the above requirements.

Operational procedures can be found in the Standard Operating Guidelines manual for the prescribed apparatus.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 39

ACCIDENTS TO APPARATUS AND MOTOR VEHICLES:

- Whenever district units are required to report out of service due to failure to complete an assignment to an incident, the officer, acting officer, or member in charge of such unit shall forward a report through normal channels to the Chief of District giving the reason thereof.
- In case of a vehicular accident, an accident report shall be made out and forwarded through normal channels to the Chief of District.
- Actions taken when a district vehicle is involved in an accident shall be as stated in the Driver's Accident Reporting Kit and noted. Then in turn up channeled to the Chief of the District.
- In all cases, the Cal-Fire ECC Camino shall be contacted in order to insure that all assistance is obtained and that an additional apparatus and crew is dispatched to the initial emergency incident. The ECC's business telephone number is: (530) 647-5222
- All district fire apparatus mishaps shall be investigated IAW districts Policies and Procedure Manual.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 40

DRIVER TRAINING:

- The Chief of District will assign the responsibility for the Driver Training program for new drivers, as well as continuing training for certified drivers, to a district Company Officer.
- The training shall meet or exceed Department of Motor Vehicles mandates. All drivers shall meet all district requirements.
- Driver training requirements, both Department of Motor Vehicles and Fire District, can be found in the Standard Operating Guidelines.
- All drivers must keep abreast of any mandated changes, and be fully versed in state regulations concerning the operation of commercial vehicles.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 41

HOSE AND APPLIANCES:

- All hose and other equipment shall at all times be regularly inspected, maintained in good condition and ready for immediate service.
- All hose and equipment shall be carried in its proper position on the apparatus and shall be adequately secured by the straps, keepers, or other means provided for them.
- No hose or other equipment shall be destroyed or given away, nor shall a loan of such equipment be made without permission from the Chief of District, approved by the Board of Directors.
- Before leaving the scene of an alarm, drill, or test, and after the return to quarters, the hose and other equipment shall be properly checked and inspected, and any damaged or lost equipment shall be reported in writing to the Fire Chief or his designate.
- Hose in a damp and wet condition shall not be allowed to remain on the apparatus more than twenty-four hours, unless unavoidable, or the hose is so designed as to be loaded wet.
- After hose is used at a fire, it shall be thoroughly washed and dried in accordance with the instructions of manufacturer.
- All hose shall be tested at specified intervals in accordance with the instructions contained (Annually).
- A complete and accurate record of all hose and other equipment issued to or exchanged by any company or unit shall be kept, in the manner provided designated personnel.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 42

EMERGENCY /NON –EMERGENCY VEHICLE OPERATION:

Purpose: To establish guidelines for all emergency/non emergency vehicle operations to be followed by all personnel.

Procedures:

Emergency/Non-Emergency Response Operations:

1. Prior to operation, the apparatus operator shall inspect the vehicle to determine that it is in safe condition, equipped as required by all provisions of law, and all equipment is in good working order.
2. Whether discovered by or reported to the apparatus operator, all vehicle defects and deficiencies likely to affect safe operation or cause mechanical breakdown of the vehicle shall be annotated and reported to superior officer for appropriate action.
3. No person shall operate fire-fighting apparatus unless that person has in his/her immediate possession a valid California state driver's license for the appropriate class of vehicle operated.
4. Persons driving or operating fire district apparatus or equipment shall at all times utilize due caution and safe practices. Exemption from certain sections of the vehicle code is not a license for negligent operation.
5. On vehicles equipped with engine/transmission/drive line retarder or manual brake limiting valve, usage will be in accordance with manufacture's recommended practice.
6. It shall be the responsibility of the apparatus operator to secure the apparatus effectively when leaving the apparatus, i.e., brakes set and wheels chocked.
7. During emergency/non-emergency responses, apparatus operators will stop at all unguarded railroad grade crossings and assure it is safe to proceed before crossing. Caution should also be used when approaching and crossing any guarded grade crossing.
8. While operating in narrow access areas or alleyways, the judgment of the operator or the officer or acting officer may dictate the need for a spotter. While maneuvering in tight areas, the assistance of a guide on the ground shall be utilized to insure clearance for safe passage. When backing apparatus, a guide shall be stationed on the ground, to the rear of the apparatus within optical range of the rear view mirrors.
9. If an apparatus becomes stuck in mud or sand and cannot be removed without undue stress on the drive train, the operator shall make no attempt to move the apparatus until proper equipment or assistance is obtained.
10. Apparatus shall not be driven over hose lines except in unavoidable circumstances.
11. Apparatus operators shall not place into motion any fire district apparatus until all personnel on the vehicle are seated or secured with seat belts. Riding on tail steps, sidesteps, tailboard, running boards, or any other exposed position is PROHIBITED.
12. No person shall exit any apparatus until that apparatus has come to a full and complete stop.
13. If an apparatus is equipped with a headset/intercom system, that system will be used at all times.

Emergency Response Operations:

1. When an apparatus is being operated as an emergency vehicle, all warning devices shall be operated as provided by law. When it is necessary to disperse with the siren, apparatus must be operated as a non-emergency vehicle.

Pioneer Fire Protection District Standard Operating Guideline 42 - Continued

Emergency warning lights shall be in operation while apparatus is responding to an emergency alarm and while working at the scene, except at the discretion of the senior fire officer on scene.

2. Due caution to avoid meeting other apparatus shall be used when approaching an intersection while responding. Radios should be used to avoid such an occurrence. Generally the apparatus proceeding straight through the intersection will have the right-of-way. If responding to separate emergencies, the apparatus approaching from the right will have the right-of-way.
3. If an apparatus is unable to reach its destination in response to an alarm, the officer or acting officer or operator shall notify the dispatcher immediately.
4. Due care and attention must be applied when using the air horn to ensure that the sound of the siren is not blocked out.
5. The operator of each responding "Code 3" apparatus shall approach each signal controlled intersection where the signal is red, either steady or blinking, in the direction of travel, or any blind or obscured intersection, in such a manner to allow the operator to easily, quickly, and safely bring the apparatus to an emergency stop. If traffic has not cleared an intersection and all lanes are blocked, the vehicle will be brought to a stop, the siren turned off, and the emergency lights left on. Once traffic begins to clear the intersection and it is safe to do so, the siren will be activated and response continued.
6. Apparatus response routes shall be left up to the apparatus operator and the officer.
7. Any apparatus used in responding to an emergency shall be inspected immediately upon return to quarters.
8. Responding apparatus shall attempt to stay in the left most vehicle lane in the direction of travel to allow ample room for vehicles yielding the right-of-way.
9. Responding apparatus shall not exceed the posted speed limit by more than ten miles per hour. Slower speeds may be necessary due to weather and road conditions.

Non-Emergency Response Operations:

1. During non-emergency travel, apparatus operators shall obey ALL traffic control signals and signs, and all California State motor vehicle laws.
2. Apparatus operators should try to stay in the right most vehicle lane while on non-emergency travel.

Additional Information:

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 43

CRITICAL INCIDENT DEBRIEFING:

Purpose: To establish procedures for the Critical Incident Debriefing (CID) team, whose purpose is to help lessen impacts of the critical incident, put incident into proper perspective, and help personnel maintain a healthy outlook.

Procedures: Firefighters frequently experience trauma, death, and sorrow. Critical incident stress is a normal reaction experienced by normal people following an event that is abnormal. The emotional trauma can be serious. It can break through a person's defenses suddenly or slowly and collectively. So much so, that the person can no longer function effectively. Critical incident stress is the inevitable result of trauma experienced by fire service personnel. It cannot be prevented, but can be relieved. Experiencing emotional aftershocks following a traumatic event is a very normal reaction and should not be perceived as evidence of weakness, mental instability, or other abnormality.

1. Symptoms may appear immediately after the incident, hours later, or sometimes even days or weeks later. The symptoms may last for a few days, weeks, or months. Occasionally a professional counselor may be needed. Knowing the signs and symptoms, and how to respond to them after the occurrence of a critical incident can greatly reduce the chance of more severe and long-term stress. Rapid intervention, talking about the situation, and reassuring personnel that these are normal reactions and feelings can help prevent more serious problems such as family and/or marital problems later on.
2. To provide intervention, the Fire District will provide direction for assistance. Any firefighter should be able to initiate the procedure by contacting his/her supervisor, Cal-Fire **ECC** Camino or Sacramento Area Fire Chaplaincy at (916) 971-3473 or (410)-313-2473 International Critical Incident Stress Management Team Coordination Center.
3. Generally, debriefing should be held at a station within one to three hours after the incident. Debriefings should encourage brief discussions of the event, which in itself help to alleviate a good deal of the stress. Debriefing are strictly **confidential** and are not a critique of the incident. Information should be given on stress reactions and steps that personnel can take to relieve the symptoms so they can continue their normal activities as soon as the debriefing is over.
4. Common signs and symptoms of critical incident stress are fatigue, headaches, the inability to concentrate, anxiety, depression, inappropriate emotional behavior, intense anger, irritability, withdrawal from the crew and/or family, change in appetite, increased alcohol consumption, and change in sleeping patterns.
5. To help alleviate some of the emotional pain, personnel can rest more, contact friends, maintain as normal a schedule as possible, eat well-balanced meals on a regular schedule, keep a reasonable level of activity to fight boredom, express feelings, and talk to loved ones. Studies also indicate that exercise, especially soon after the event, can greatly reduce mental pain.

Reference: NFPA 1500, A-9-1.5.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 44

FIRE STATION:

- The buildings, in which Fire District apparatus and vehicles, together with their assigned personnel are housed, shall be referred to as the fire station. The station shall be safe and secured from the fire personnel who respond from their locations. The Chief of the District shall have final responsibility.
- All areas of the fire station shall be cleaned regularly; minor repairs shall be repaired as soon as possible, while major repairs shall be recorded in the assigned station logbooks and channeled to the fire chief.
- District furnishings and installations shall be properly maintained. Willful damage to such property shall be considered as violation of the Districts Policies and Procedure Manual.
- All district computers, their associated components, and their systems shall be used for **"Official District Business Only"**.
- Temperatures in stations shall be maintained as directed.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 45

GENERAL ORDERS:

- General orders are: orders, instructions, notices, and other information of a temporary operative nature, or a current concern, circulated and properly coded for disposition and filing purposes.
- General orders will be used to add to or amend the Standard Operating Guidelines (**SOG's**). These general orders will be considered as part of the Standard Operating Guidelines and adhered to as such.
- General Orders shall be considered as orders from the Chief of District and are to be followed accordingly.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23^d 2008

Pioneer Fire Protection District Standard Operating Guideline 46

Worker's Compensation Injury/Illness Reporting Guidelines:

All workers compensation claims shall be routed through:

1. Pioneer Fire Protection District Headquarters/Administration, P.O. Box 128, Somerset, California 95684-0128
2. FDAC-FASIS, 1020 19th Street, Suite 200, Sacramento, Ca 95814, PIO Fire's Employer **Acct #: 49903941**

Note: It is important that ALL injuries be handled as quickly as possible to assist our fire district and FDAC-FASIS Administrator/Examiners in processing claims. When the employee reports his/her injury /illness or the employer has knowledge:

Supervisors:

1. Direct injured employee to medical care if necessary-
2. Provide the employee with the following forms (within one (1) working day of the injury/illness or knowledge of injury/illness-

Mandatory Forms to be filled out and submitted within first 24-hrs of incident or (1-working day) by employer:

1. DWC Form-1, Employee's Claim for Worker's Compensation Benefits-
2. FDAC-FASIS Form-5020, Employee's Report of Injury Form- **FDAC-FASIS Representative can assist!

The employer and the employee for future reference "shall maintain copies of ALL completed documentation":

Note: If the employee is not available to receive the forms personally, they should be sent to the employee by "registered mail".

If a supervisor has knowledge of an injury/illness even though the employee has not reported it, the supervisor is required by law to give the employee the Worker's Compensation Packet within one (1) working day of learning of the injury/illness. If appropriate, the employee may prepare a written statement indicating they do not wish to file a claim. This documentation is forwarded to fire district administration, to be filed for future reference.

Incident Only Claims- may be submitted if a minor injury occurs. If the employee does not see a doctor and does not lose any time from work, the employee may choose to file an Incident Only Claim. The supervisor still needs to follow the timelines above in providing the Worker's Compensation Packet to the employee. These documents shall be kept on file with the fire district for future documentation in the event the employee needs to see a doctor at a later date for treatment as a result of this injury/illness. If the employee does not see a doctor at a later date, the fire district needs to notify FDAC-FASIS's Administrator and the claim will be processed at the time of notification.

Injury/Illness Notifications: Pioneer Fire Protection District Administration & FDAC-FASIS Administrator by in-person, telephone, fax or email: FDAC-FASIS @ (800) 541-4591 Fax: (916) 491-1436 Ms Kristil Ehrlich or FDAC-FASIS Administrator/Examiner Ms Mindy Aiello @ (925) 798-3334, Ext: 1348

1. An accident or injury/illness occurs.
2. Employee has missed more than one day of work due to injury/illness.
3. Employee's physician is taking them off work for a period of time (doctors' note required).
4. Employee is released to "Return to Work" and a physician's note has been received by fire district administration and a copy forwarded to FDAC-FASIS.
5. Returns to work, and is off again due to the same injury/illness.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 47

Elderly/Child Abuse:

Definition: Harmful or potentially harmful physical, emotional, sexual, or neglectful treatment.

Priority: 1, 2, 3 (Determined by Severity)

Signs & Symptoms:

1. Visible old & new injuries, fractures-
2. Bruises (new, blue; old, yellow); on ears, back, ribs, abdomen, buttocks-
3. Scars, bites-
4. Burns (distinct shapes such as iron, cigarette)-
5. Scalds, strap marks, welts-
6. Malnourished, poor health, hygiene, toilet, grooming care
7. Apathetic, fearful, withdrawn
8. Doesn't cry or seek parental/guardian comfort-
9. History of numerous ambulance calls, hospital visits-
10. Parents or guardian vague, evasive, hostile, unconcerned and strange about injury or condition-
11. Injury or condition unexplained by history and observations-

Elderly Patients (Senile Dementia):

Memory loss, impaired judgment, reasoning, confusion; confabulation (substitution of fiction for reality), irritable, unpleasant (hostile, antisocial)

Treatment:

- Focus attention and concern on patient-
- Explain what & why you are treating or doing-
- Treat for injury or condition as required-
- Comfort and reassure patient-
- Stay with patient-
- Transport **ALL** suspected cases of abuse-

Transport:

Determined by injury or condition; do not let parent or guardian transport; keep patient with you.

Note: Do not accuse anyone; do not question patient in front of parent/guardian; do not leave scene without reporting injury or condition to a physician or law enforcement representative if transport permission is refused.

Remember: The abuser is psychologically disturbed. Parents/guardians may use various hospitals for treatment for patients. Child/ Elderly abuse has no social or economic boundaries. **Follow local laws & protocols; keep accurate records.**

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 48

Mutual-Aid Assistance/Response:

To establish guidelines for request of mutual-aid assistance and to provide mutual-aid assistance to neighboring fire districts when request for such assistance is received.

Written mutual-aid agreements with neighboring districts are on file in the districts office and are used as basis for this operating guideline.

Request for mutual-aid assistance from Pioneer Fire Protection District to local fire districts will be handled in the following order:

All fires requiring Engines- (Type-I (Structural), Type-II or Type-III (Wildland), Water Tenders, Rescue Squads, assistance call Cal-Fire ECC Camino. The ECC will request dispatch for the mutual-aid assignment for the Pioneer Fire Protection District.

Request for mutual-aid assistance from neighboring fire districts for Pioneer Fire District response will be immediately reported to the districts duty officer. Pioneer Fire District response will be based on available firefighting apparatus and staffing. **At NO TIME will fire protection capability for Pioneer Fire Protection District be jeopardized.** Request for mutual-aid will be honored whenever possible.

Engine Response order: Cal-Fire's E2774, Station-30 (Pine Lodge), *staffed all year!
El Dorado County Fire's E23, Station-23
Cal-Fire's E2763, Station-10, Dew Drop Station, Hwy-88, *staffed all year!
Diamond Springs Fire's E49, Station-49 (*Heavy Rescue Unit)
El Dorado County Fire's Medic -19, Station-19
USFS E63, Grizzly Flats, during designated **fire season** only!

Pioneer Fire's E38 **first** out, if unavailable then E31, then if both E38 & E31 unavailable, then E32 moves up!

Note: Pioneer Fire Unit responding, when fire dispatch checks back, make sure that ECC Camino acknowledges **your** units response and staffing number 2/0 or 3/0. If not sure, confirm your response to fire dispatch, (E-38, E31 or E32 responding with 2 or 3 personnel on board etc. and make sure they confirm your response back via fire dispatch)

Note: All Pioneer Fire apparatus have a maximum of 3-SCBA & 3-Spare SCBA Bottles on each apparatus assigned!
District Water Tender will be specially requested on a **need** basis via Cal-Fire ECC Camino Only or at the discretion of the fire chief or his/her designate.

Only Pioneer Fire District **units that are requested shall respond unless designated** by the District Fire Chief.

All Pioneer Fire Protection District units responding mutual-aid on Structural Fires **MUST** have a minimum of two **(2)** trained fire personnel on responding apparatus before responding.

Whenever it becomes necessary to dispatch Pioneer Fire apparatus to any request for mutual-aid, the Fire Chief shall be notified or his designate ASAP. In the event the Fire Chief or his designate is unable to be reached the next person in the chain of command within the organization will be notified of all actions taken.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 49

Procedures for Cleaning, Sanitizing & Inspecting Respiratory Protective Equipment Part-I:

Follow manufacturer's specifications and recommendations on the procedures for cleaning, inspecting & sanitizing respiratory protection.

A tracking log sheet is assigned to each SCBA. Accurate record keeping will help identify possible problems or potential failures.

Inspection procedures shall include the following:

1. Backpack/Harness Assembly.

- Check for physical damage on straps and buckles-
- Check cylinder strap & toggle link/lock mechanism-

2. Air supply Cylinder.

- Check hydrostatic test date-
- **Steel/aluminum cylinders due every 5 years-
- **Composite cylinders due every 3 years-
- Leak test cylinders monthly-
- Check for evidence of exposure to high heat daily and after each use-
- **Discoloration-
- **Distorted rubber parts-
- (If anything found take cylinder out of service)

3. Regulator Assembly-

- Inspect hose for wear & tear-
- Inspect pressure gauge for noticeable damage and pressure reading after air is turned on-
- Inspect quick coupling and breathing hose connection-
- Check low-pressure warning whistle/bell/alarm -
- **Operates when cylinder pressure has dropped to 25% capacity of cylinder-

4. Face piece Assembly-

- Inspect for wear and tear-
- Discoloration-
- Check for proper seal-
- (Fit tested IAW-NFPA-1500 & ANSI-Z88.5)
- Check breathing valve for proper operation-
- Check bypass for proper operation-

**Respiratory inspections shall be accomplished everyday & prior to each use.
Cleaning and sanitizing shall be accomplished after each use.**

Pioneer Fire Protection District Standard Operating Guideline 49 - Continued

Procedures for Donning, Working-In, and Doffing Positive Pressure Self-Contained Breathing Apparatus Part-II:

Manufacturer's operating instructions shall be followed when using respiratory protection.
Positive pressure self-contained breathing apparatus vary in normal and emergency use procedures.

Donning, Working-in, and Doffing Procedures:

1. Donning:

- Don (put on) the backplate harness assembly-
- ** (Coat, Seat, Rear Mount, Over-the-head methods)
- Turn on cylinder-
- Check regulator gauge-
- Don (put on) face piece-
- **Adjust head harness-
- **Check seal-
- Attach mask to regulator-
- **Breathing hose-
- **Face piece mounted regulator-
- Check positive pressure-
- Check emergency by-pass-

2. Working-In:

- Know limitations-
- Working times 15 to 20 minutes-
- Know emergency operating procedures-
- (Per manufacturer's operating instructions)

3. Doffing:

- Disconnect air supply-
- **Breathing tube, positive pressure lever, donning switch-
- Doff mask-
- Doff back plate/harness assembly-
- Turn "OFF" cylinder-
- Clean, reservice and inspect SCBA unit-

Minimum Cylinder pressures for district bottles before reservicing:

- SCBA Bottles: 2216 psi

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 50

Fire District Exposure Control Plan

Purpose: This program is to acknowledge that all field personnel are at risk of occupational exposure to fluids and substances capable of transmitting communicable diseases and therefore, identify and provides steps that can be taken to reduce this risk, yet continue to provide immediate adequate and non-bias patient care. Additionally, the program provides standard procedures that must be followed in the event of a significant exposure.

References: 29CFR1910.1030

Guidelines:

Schedule & Methods of Implementation:

“Universal Precautions” are mandatory. The term “Universal Precautions” refers to an infectious disease control system intended to prevent health care workers from parenteral, mucous membrane and non-intact skin exposures to blood borne pathogens. It is assumed that ALL blood and body fluids are potentially infectious and therefore appropriate barriers must be established between patient’s blood, body fluids and other infectious materials and the health care worker. Under circumstances in which differentiation between body fluid types is difficult or impossible, ALL body fluids **shall** be considered potentially infectious.

Work Practice Controls:

Universal precaution in conjunction with effective work practice controls will be used to minimize or eliminate potential exposure risk to blood borne pathogens.

Disposable medical gloves shall be worn when it can be reasonably anticipated that the employee will have direct contact with blood or other potentially infectious material, mucous membrane, or non-intact skin when handling or touching contaminated items or surfaces. Gloves will be replaced as soon as practical when contaminated, torn, and punctured or when their ability to function as a barrier is compromised.

Masks, eye protection and face shields will be used whenever splashes, spray, spatter or droplets of blood or other potentially infectious material may be generated and contamination of the eye, nose or mouth is a possibility.

Outer protective clothing such as gloves, aprons, lab coats or clinic jackets will be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

Hand washing Facilities: Hand washing facilities are located in the fire station bathrooms.

Hand washing Enforcement: Hand washing is the responsibility of each employee. Enforcement of this responsibility falls upon the employee’s supervisor or acting supervisor on duty. Hands will be washed:

Immediately or soon after removal of gloves or personal protective equipment (PPE).

Employees will wash hands or other skin area with anti-bacterial soap & water, or flush mucous membranes with water immediately or soon after coming in contact with blood or other potentially infectious material.

Pioneer Fire Protection District Standard Operating Guideline 50 - Continued

After in the treatment facility.

Before & after touching wounds, whether surgical, traumatic or associated with an invasive device.

Before and after each patient contact.

After touching inanimate sources that are likely to be contaminated with blood borne pathogens.

After **any** situation which microbial contamination of hands is likely to occur.

Hand washing shall be encouraged when employee is in doubt about the necessity for doing so.

Hand washing **shall not be permitted** in eating areas such as kitchens.

Disposing of Sharps/Contaminated Needles:

Contaminated sharps will be discarded immediately in containers that are closeable, puncture resistant, leak-proof on sides and bottoms, and labeled or color-coded appropriately as "Biohazard".

Moving & Disposal of Sharps and Container: When moving or disposing sharps container, close immediately to prevent spillage or protrusion of contents during handling, storage, or shipping. Sharps container will be placed in biohazard box for disposal. Medical personnel usually perform this function.

Medical Wastes: Contaminated or potentially infectious waste will be placed in Red Biohazard Bags. Care must be taken to prevent leakage. The bags will be sealed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport or shipping. These bags will be taken to hospital for disposal

All fire district personnel are responsible for ensuring work areas are maintained in a clean and sanitary condition.

Decontamination: Contaminated work surfaces will be decontaminated with approved disinfectant after completion of procedures, immediately after any blood spill or other potentially infectious material, and at the end of the workday or shift.

Regulated Waste: Proper disposal of medical waste is essential to minimizing or eliminating the risk to employees and the general community. Disposal will be in accordance with applicable regulations for the United States, State of California and the County of El Dorado.

Hepatitis B Immunization:

Who Receives: All personnel who have potential exposure to blood and bodily fluids will be offered a Hepatitis B immunization. Individuals that have not been previously immunized against Hep-B, will be offered immunization. Personnel who decline vaccine can receive it at a later date if they desire. While we will not compel volunteers to be immunized against Hep-B, they will not be allowed to perform duties, which may involve potential exposure to blood or bodily fluids unless they have been immunized against Hep-B. District employees who do not wish to be immunized against Hep-B "WILL," sign a declination.

When Received: Individuals with potential exposure to blood or body fluids will receive their Hep-B vaccine prior to starting duties which may involve exposure to blood or bodily fluids. They will continue the vaccine series as recommended by the manufacturer and The Centers for Disease Control.

Employee (Firefighter) Exposed: The individual with potential exposure to blood & bodily fluids will have the testing accomplished. District personnel will have this testing done or given the option of having any or all testing accomplished. If the victim declines HIV testing, the blood will be held for 90-days. The victim may request HIV testing on the "held" blood sample at any time during the 90-day period of time.

Notification of Supervisor: Each employee shall notify their supervisor or acting supervisor when they believe they have been potentially exposed to a blood-borne pathogen by splash, puncture wound, or other event. Supervisors or acting supervisors shall ensure employees report to nearest medical facility emergency room. If event occurs after 1700-hrs, the supervisor shall be notified at the earliest possible time.

Evaluation & Treatment: The physician will review the medical record for documentation of: Immunization against Hepatitis B, Anti-HBs titer and HIV testing. If possible the physician will also review the chart of the source of the potential exposure for Hep-B, Hep-C and HIV testing will interview the source for risk factors associated with these diseases (sexual history, drug use, history of hepatitis, HIV, etc). If other than first aid is required, the victim will be given comp forms to complete. The individual will be referred to Public Health with their medical records, after receiving treatment so follow-up testing and treatment can be arranged.

Notification of Evaluation: Public Health will prepare a letter for signature by the physician who treated the victim, informing the victim of the results of their medical evaluations.

Documentation of Testing, Evaluation, Treatment and Notification: District employees with potential exposure to blood-borne pathogens will in-process through Public Health within five (5) work days of arrival for duty. Public Health will maintain a roster of individuals who are victims and will provide reminders for follow-up testing and treatment if necessary.

Training: A formal training program shall be established. Training shall be repeated and documented on an **"annual"** basis. Assistance to employees in providing training will be provided by Public Health. Training records shall be filed in district administration office.

Medical Records: The record keeping requirements outlined in 29CFR1910.1030 shall be implemented.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 51

Care, Maintenance and Tracking of Structural & Wild land Firefighting Protective Ensembles

The fire district shall develop, implement and apply a program for the selection, care and maintenance of structural & wild land firefighting protective ensembles (PPE) IAW-NFPA Standard 1851, dated April 2001 for the selection, care, maintenance, tracking of PPE: Coats, Pants, Coveralls, Helmets, Gloves, Footwear, Interface components like hoods.

PPE Inspections Types:

Routine PPE Inspections: Each individual member shall conduct a routine inspection after each use on his/her PPE, checking for soiling, hazardous materials or biological agents, rips, tears and cuts, damaged or missing hardware, thermal damage, damaged or missing trim.

Advance PPE Inspections: Shall be conducted at a minimum of every twelve (12) months or whenever routine inspections indicate that a problem may exist. A member who has received training in the inspection of PPE shall do such inspections.

Checking for: All items listed for Routine Inspection plus-

1. Physical damage to all layers of the garment including outer shell, moisture barrier and thermal barrier-
2. Evaluation of system fit-
3. Loss of seam integrity-
4. UV Light or chemical degradation-
5. Label integrity & legibility-

PPE Cleaning Types:

Routine Cleaning: Light cleaning of ensembles by the end user without taking the elements out of service, IAW-NFPA Standard 1851.

Performing Routine Cleaning:

1. Initiate at the scene when possible-
2. Brush off dry debris-
3. Gently rinse off debris with water hose-
4. If necessary scrub gently-
5. If necessary spot clean in utility sink-
6. Inspect for soiling and contamination-

Advanced Cleaning: Thorough cleaning of ensembles by working with cleaning agents. It usually requires the ensemble to be temporarily taken out of service and may include contracted cleaning IAW-NFPA Standard 1851. ***Note: Advanced Cleaning shall take place every six (6) months-**

Performing Advanced Cleaning:

1. Brush off any dry debris-
2. Clean—following utility sink cleaning procedures or machine cleaning procedures or utilize a qualified contract cleaner-
3. Inspect for soiling and contamination and repeat procedure if necessary-

Pioneer Fire Protection District Standard Operating Guideline 51 - Continued

Specialized Cleaning: Elements that are contaminated with hazardous materials or biological agents shall receive specialized cleaning IAW-NFPA Standard 1851.

Performing Specialized Cleaning:

1. Isolate & bag at the incident scene-
2. Observe universal precautions-
3. Protective gloves shall be worn-
4. Avoid skin contact-
5. Wash exposed skin-
6. For elements that have been contaminated with body fluids clean following utility sink or machine procedures or utilize a contract cleaner-
7. For elements contaminated with a hazardous material or biological agent try to identify the agent-
8. When contaminant has been identified consult the manufacturer-
9. In the absence of detailed manufacturer's instructions, utilize a contract cleaner-

Performing Decontamination/Cleaning of PPE:

1. Consult manufacturer on instructions and detergent type-
2. Do not use chlorine bleach or chlorinated solvents-
3. Cleaning solutions shall not be over pH 10.5 or under pH 6.0-
4. No heavy scrubbing or high velocity power washers-
5. Ensemble and ensemble elements shall be cleaned and decontaminated separately from non-protective items-
6. Ensemble and ensemble elements shall only be cleaned and decontaminated with like garments-
7. Wash shells with shells and liners with liners-
8. Wash water handled as per Fed/State/Local laws-

Drying PPE:

If Air Drying:

1. Consult with the manufacturer-
2. Place in an area with good ventilation-
3. Do not dry in direct sunlight-

Machine Drying:

1. Consult with the manufacturer-
2. Do not overload the machine-
3. Fasten all closures on garments-
4. Turn garments inside out & place in a laundry bag-
5. If the dryer has a "no-heat" option use it-
6. If heat must be used, basket temp should not be over 105 degrees F

Structural Fire Fighting Protective Ensembles shall meet NFPA Standard 1971, dated year 2000.

Wild land Fire Fighting Protective Clothing/Equipment shall meet NFPA Standard 1977, dated year 1998.

Pioneer Fire Protection District Standard Operating Guideline 51 – Continued

PPE Tracking Information that shall be maintained for each ensemble element IAW-NFPA Standard 1851:

1. Person to whom the element is issued-
2. Date & condition when issued-
3. Manufacturer-
4. Model name, number or design-
5. ID #, lot # or serial number-
6. Month and year of manufactured-
7. Date & findings of advanced inspections-
8. Date of advanced cleaning or decon-
9. Reason for advanced cleaning/decon
10. Who cleaned/ decontaminated-
11. Date of repair-
12. Who performed the repair-
13. Description of the repair-
14. Date of retirement-
15. Date & method of disposal-
16. Bar-coding items-

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 52

First Arrival Size-Up Procedures

Responsible Individual: Operations Officer

In order to initiate the evaluation of any incident, the first-arriving company or fire officer shall transmit a size-up on the fire radio channel as soon as possible after on-scene. This function serves to advise other responding units of the expected situation and to advise command officers and dispatch about the nature of the incident. The size-up parameters of various incident types are listed below and should be reflected in the company's transmitted size-up. If an accurate size-up cannot be given upon initial arrival, or if after several minutes on-scene the situation is significantly different from the initial size-up, an updated size-up shall be given.

Every effort should be made to visualize the scene from at least three (3) sides prior to giving the size-up. The size-up process serves two (2) purposes: 1st, to make a quick initial evaluation of what the nature of the incident (and degree of severity) represents; 2nd, to determine what initial actions are to be taken and what resources will be necessary. Factors to be considered include: rescue needs, evacuation, weather, time of day, occupancy, hazards, exposures, pre-plan knowledge, fire/rescue personnel safety, water supply, topography, access, number of patients, degree of involvement, resources on hand and en route, and the speed of the developing incident.

Size-up Transmission Guidelines

- **Vehicle Fires:** Type and size of vehicle and portion of vehicle involved. Include any exposures noted.
- **Wildland and Trash Fires:** Size and nature of fire and specific location. Include direction of spread (if applicable) and whether or not there are exposures.
- **Vehicle Accidents:** Number of vehicles involved and degree of damage (light, moderate, heavy). Include road blockage and update with number of victims and initial triage after secondary size-up.
- **Structure Fires:** Size and type of structure and note smoke conditions (light, moderate or heavy) and/or fire conditions (small, room and contents, heavily or fully involved). Include any observed evacuation in progress and/or exposure potential. Also note initial action to be taken (investigating, attack or command).
- **Automatic Alarms:** Size and type of structure and any noted fire or smoke conditions. Include any observed evacuation or audible signals or alarms. Also note initial action to be taken (investigation, attack or command).
- **Heavy Rescue:** Describe visual situation and update with number of patients, triage and degree of entrapment.
- **Other:** Describe visual situation.

Any special hazards noted upon arrival (Hazardous Materials, wires down, structural failure, gas leaks, etc.) should be noted in the transmitted size-up. After initial size-up, the first arriving company shall refer to Incident Command SOG for continuing scene procedures.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 53

Structural Collapse Search & Rescue Procedures

Purpose

To provide the Incident Commander with basic information needed to make the control of search and rescue operations at the site of a building collapse more manageable.

Scope

To provide guidance during "Technical Rescue Operations" which require search and rescue to occur in any form or type of collapse structure.

Assessment

The officer assigned to the operations section should determine the following.

A. Is the building-

1. Un-framed: Structure in which the weight of the floor and roof are supported by bearing walls.
2. Framed: Structures that are erected by constructing structural steel or reinforced concrete skeleton made of horizontal beams and vertical columns.

B. Potential for secondary collapse-

1. Walls out of plumb: Walls that have large bows in the middle are leaning or separated from the floor.
2. Smoke or water movement through bricks: At the scene of fireground collapses.
3. Beams pulling away: Be alert for the separation of support beams from the walls to which they are attached.
4. Buckled steel beams: After heavy fire loads, look for beams that sag or are distorted.
5. Large cracks, plaster falling: Large cracks that appear in walls, roofs, or other structural components.
6. No run off or soggy floors: As a result of firefighting operations or a result of weather.
7. Overloading or age: Look for sagging roofs, floors, or spans that creep.
8. Noise: Listen for buildings that creak, moan, snap, crackle or pop.

Void Detection

Voids may be formed for a variety of reasons and in a variety of forms. During the search phase, survivors are most likely going to be found inside voids. These voids may be of different sizes and shapes, and are affected by the nature in which the building collapses.

Be able to spot certain types of collapses and identify the following types of voids.

1. Lean-to-floor Collapse: Occurs when one of the supporting walls fails or when floor joists break at one end. This type of collapse usually creates a large void.
2. Lean-to-Cantilever Collapse: This form occurs when one end of the floor or roof section is still attached to portions of the wall. The other end will hang unsupported.
THIS TYPE OF COLLAPSE IS EXTREMELY DANGEROUS.
3. V-shape Void: This occurs when heavy loads cause the floor to collapse at the center.

Occupants above the trapped floor will usually be found in the bottom end of the collapse. Victims below the collapse floor will be found in voids.

4. Pancake Collapse: Is the result of the total bearing wall or column failure of an upper floor causing the upper floors to pancake down on the floors below. Victims may be found between or in voids created by household or office furniture, which supports the floors.

Search & Rescue Stages

A systematic approach to dealing with building collapse will enable the Incident Commander or rescue operations officer to increase efficiency and reduce injury to both rescue personnel and civilians.

Pioneer Fire Protection District Standard Operating Guideline 53 - Continued

Stage 1 - Reconnaissance

Provide for a general survey of the area and size-up of the damage. Find out the following information.

- A. Building Use
- B. Number of Occupants
- C. Number of victims trapped and the probable location
- D. Are rescue operations currently underway?
- E. Presence of hazards
 - 1. Gas & Utilities-
 - 2. Flammables-
 - 3. Electrical-
 - 4. Flooding from burst mains-
 - 5. Plumbing and sewer disruption-
- F. Structural Stability of adjoining buildings

Immediate Rescue of Surface Casualties

Victims found on top of the debris or lightly buried should be removed first.

All rescue efforts should be directed to the victims who can be seen or heard!

Rescue efforts should also be directed to reach those victims whose location is known even if you cannot see or hear them.

Scene Organization & Management

- A. Working within the incident command system is essential to a successful operation.
- B. The following checklist may assist.
 - 1. Are all utilities shutdown?
 - 2. Is structural integrity assured or evaluated, and a Safety Officer and observer on site?
 - 3. Has an engineer or architect been requested?
 - 4. Are rescue operations being directed?
 - 5. Are team leaders for each rescue team designated?
 - 6. Is the collapse area divided into manageable areas?
 - 7. Is a contingency plan on standby?

Stage 2 - Exploration and Rescue from likely survival places

A. Once the victim location has been identified by

- 1. Rescuers
- 2. Search Dogs
- 3. Victims
- 4. Listening Devices
- 5. Fiber-Optic video
- 6. Infrared Detectors, *refer to district's "**SOG-62, Thermal Imaging Camera Guidelines**".

B. Seek out casualties by looking in places, which could have afforded a reasonable chance for survival.

C. Typical areas that should be searched are

- 1. Spaces under stairways
- 2. Basement and cellar locations
- 3. Locations near chimneys or fireplaces
- 4. Voids under floors, which are not entirely collapsed
- 5. Undemolished rooms whose egress is barred
- 6. Voids created by furniture or heavy, machinery

Pioneer Fire Protection District Standard Operating Guideline 53 - Continued

Locating Casualties using the "Hailing System"

Use this method to determine victim locations.

- A. Place rescuers in "Call" and "Listen" positions.
- B. Have the operations officer call for silence.
- C. Going "around the clock" each rescuer calls out or taps something. A period of silence should follow each call.
- D. All members should attempt to determine a "fix" on any return sound.
- E. After a sound has been picked up, at least one additional "fix" should be attempted from another angle.
- F. Once communications with the victim have been established, they should be constantly maintained.

Breaching & Shoring

A. In some instances, victims may be reached by breaching and shoring.

1. Initially try to avoid the breaching of walls. This may undermine the structural integrity of the rest of the building.
2. It is Safer to cut holes in floors and use the shaft approach.
3. If you must breach a wall or cut a floor, cut a small hole first to assure that you are not entering a hazardous area.

B. Shoring may be used to support weakening walls or floors.

1. Shores should not be used to restore structural elements to their original positions.
2. An Attempt to force beams or walls into place may cause collapse.
3. If you decide to shore, keep the following in mind.

A. Keep timber shores as short as possible.

B. The maximum length of a shore should be no more than 50 times its width.

C. The strength of a shore is dependent on where it is anchored. If anchored to a floor, it will be dependent on the strength of the floor.

D. Shoring should be attempted only by qualified personnel or under the supervision of a practical shoring engineer (Technical Rescue Personnel).

E. Air-shore may be used in the place of timbers and will provide a stronger shoring system.

F. Shoring should NEVER be removed once placed.

Stage 3 - Selected Debris Removal

A. This stage of the rescue process will consist of reducing the size of the rubble.

B. This must be accomplished based on a pre-determined plan.

C. Cranes and heavy equipment may be needed to accomplish this portion of the rescue.

D. Remove debris from the top down.

E. Remove debris from selected areas where information suggests that victims might be.

Stage 4 - General Debris Removal

A. This should be employed after all other methods have been used.

B. This should be used only after the decision has been made by the Incident Commander, which no other victims might be found alive.

C. This basically amounts to the demolition phase.

General

A. It is safer to reach entrapped victims from above.

B. Diagram the building on command board.

C. Assure control of all accesses to the site.

D. Beware of "at will" response by volunteers or citizens.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 54

Response to Weapons of Mass Destruction

Purpose: Operational guidelines for Pioneer Fire Protection District involving Weapons of Mass Destruction (**WMD**) within El Dorado County.

Bomb Threat:

1. Notify Cal-Fire ECC Camino of threat location.
2. Request Cal-Fire ECC Camino to page fire district's Chief/Duty Officer to call Cal-Fire (**ECC**) Camino for information at (530) 647-5222.
3. Cal-Fire ECC notifies fire district's Chief/Duty Officer of threat received in their jurisdiction.
4. District Chief / Duty Officer does not respond to scene until requested by law enforcement agency having jurisdiction. The Chief /Duty Officer may call, via telephone to fire personnel to respond to their stations to await possible activation when requested. If threat is at location which poses the threat of death or injury to civilians, personnel & apparatus maybe staged in a safe location closer to the reported incident site.

Bomb Explosion:

1. Notify Cal-Fire ECC Camino of location of incident.
2. Cal-Fire ECC to dispatch "Full Structural Assignment to a designated Staging Area" to await law enforcement to secure scene. If explosion produces fire, Pioneer Fire District units shall be notified of the blast and allowed to extinguish the fire. Note: Secondary device precautions.

Found Incendiary Device:

1. Cal Fire ECC Camino of "found device" location.
2. Request Cal- Fire ECC to page fire district chief/duty officer to call Cal-Fire ECC for information at (530) 647-5222. The ECC notifies Senior Fire Officer of "found device" located in our jurisdiction.
3. The district's chief/duty officer does not respond to scene until requested by law enforcement agency having jurisdiction. The Senior Fire Officer (SFO) may call fire personnel to respond to stations to await possible activation when requested.

Unknown Substance: (e.g. Powder, Liquid, aerosol, etc.)

Follow the procedures for a Hazardous Materials release with the fire district providing incident command.

Emergency responders, both situations, must consider the possibility of a terrorist threat (or multiple threats) and take the necessary precautions.

Initial response requires a minimum of one Engine Company and a senior fire official to any unknown or suspicious substance or any situation size-up that indicates a possible WMD.

Determine the initial cordon size with law enforcement based on the type and quantity of material involved at the incident.

Evacuation or sheltering in place will be addressed as soon as possible based on information available during initial size-up.

For WMD Terrorist Incident of unknown type, default to **2,500 feet minimum** cordon distance.

Prior to sampling, containment, or confinement of unknown substance, appropriate decontamination, medical, and rehabilitation resources will be in place.

Pioneer Fire Protection District Standard Operating Guideline 54 - Continued

Recognized hazardous materials entry team protocols will be adhered to including recognition, identification, control/containment, and rapid intervention team protocols.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 55

Live Fire Training

Purpose: This procedure applies to the training of firefighters under live fire conditions and focuses on training for coordinated structural interior and exterior fire suppression operations while maintaining a minimum exposure to risk for the participants.

The instructor in charge shall:

Be at least a certified fire officer, and a FSTEP Fire Control-III (Structural Fire Fighting) Instructor.

Be the Incident Commander and utilize the incident command system.

Assign one instructor to each functional crew, not to exceed five students, to include backup lines, safety officer, and ensure there is an EMT on-scene.

The safety officer will:

Have no other responsibilities during the training operations.

Ensure the safety of all personnel involved in the operation to include any visitors and spectators.

Shall have the authority, to stop and control any part of the operation when a potentially dangerous situation exists.

Structure:

The facility shall be visually inspected for:

Damage, including structural integrity.

Serviceability of doors, windows, lighting and standpipes, etc.

Fuel:

Hay bales and wooden pallets shall be the only sources of ignition.

Training temperatures are not to exceed 500 degrees F.

All fire must be constructed a minimum of 12 inches from floor and the walls of the room.

Live Fire Evolution:

IAW-NFPA Standard 1403, *Evolutions In/Outside Structure-

A pre-burn plan shall be prepared and shall be utilized during the pre-burn sessions. All features of the training areas and structure shall be indicated on the plan.

All participants shall have knowledge of and familiarity with the layout of the building in order to facilitate any necessary evacuation of the building.

The Hi-Lo siren on engines will designate immediate withdrawal to safety zones.

A method of fire ground communications shall be established to enable coordination among the Incident commander, the interior and exterior divisions/sectors, the safety officer, and external requests for assistance.

An attack line and one backup line are necessary. Each hose line shall be capable of delivering a minimum of 95 GPM.

After the fire evolution, overhaul and a debrief shall be accomplished and the burn room will be cleaned up.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 56

Smoke Checks/Fireworks Complaint Response

1. Pioneer Fire Protection District shall respond only **one** agency Type-II or Type-III engine (i.e., E38, E31, E-32) or a Quick Attack Unit (i.e., Squad-34 or Squad-35) to investigate smoke checks/fireworks complaints with Cal-Fire, USFS or BLM during "**Designated**" wildland fire season, unless requested otherwise by a senior fire officer.
2. During "**None Designated**" wildland fire season Pioneer Fire Protection District shall respond **two** agency engines (i.e., E-38, E31, E32, Squad-34 or Squad-35) to investigate smoke checks/fireworks complaints, unless requested otherwise by a senior fire officer.
3. If Pioneer Fire Protection District is covering, then the agency's response mode shall be the same as "**None Designated**" wildland fire season response mode. This SOG will minimize radio traffic between Pioneer Fire Protection District and Cal-Fire ECC Camino; and shall provide immediate agency personnel and water at the scene for fire suppression activities if needed, and make personnel/apparatus available for next assignment.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 57

Guidelines for Fire Cause/Determination & Preserving the Fire Scene

1. A request shall be made by the Incident Commander as soon as possible for a Fire Investigator(s) or the local government Fire Investigation Unit (FIU Unit) Representative via Cal-Fire ECC Camino, and their ETA in accordance to adopted El Dorado County Major Fire Response Protocol.
2. Agency firefighters shall take every precaution to limit scene contamination. Once firefighters achieve extinguishment, they shall delay overhaul until a fire investigator can photograph and examine the scene. Early notification & involvement of the fire investigator is key to a successful investigation.
3. Cease overhaul immediately if you locate a fatality or possible evidence of fire cause. Don't move the body or evidence until the investigative team properly documents and collects it.
4. The condition of doors & windows in fire facility is critical in a fire investigation. Agency personnel **shall** document areas of forced entry, and also document areas of forced entry **found, but not caused by agency fire/rescue personnel**.
5. Don't use generators, saws and other gasoline- powered tools in or near the area of origin. Samples taken for accelerant analysis may be inadmissible in court because of possible contamination.
6. Under no circumstances shall fire district personnel remove items from the scene for other than official purposes. Souvenir collecting is tantamount to evidence tampering and theft.

Field Information to Be Gathered:

1. Incident Location Address: _____
2. Occupant (s) Name (s): _____
3. Owner's: Owners Address: _____
4. Incident: Fire: Rescue: False Alarm: Public Service: Other:
5. Structure: Use: Height: Floor Area: Age:
6. Vehicle: Year: Make: Model: Style: Lic.
7. Dispatcher Information: _____
8. Observations on Arrival: _____
9. Fire Discover: Name: Address: _____
10. Comments: _____
11. Witnesses-1: Name: Address: _____
12. Witnesses-2: Name: Address: _____
13. Injuries-1: Type: Name: Address: _____
14. Injuries-2: Type: Name: Address: _____
15. Death (s): Name: Address: _____
16. Area of Origin: Floor: Room: Pt. w/in Room:
17. Source of Ignition: Equipment: Form of Heat:
18. If Equipment: Year: Make: Model: Serial #:
19. Material Ignited: Type: Form:
20. Ignition Factor: _____
21. Factors Contributing to Fire Spread: Non-fire Stopped Walls: Open Stairs:
22. Open Shafts: Interior Finish: Stock Arrangement:
23. Horizontal Openings: _____ Design Deficiencies: _____
24. Method of Extinguishment: _____ No. & Size of Streams: _____
25. Forcible Entry: Doors: Window: Other:
26. Ventilation: Door: Window: Roof: Other:
27. Estimated Value: Bldg: Contents: Equipment:
28. Estimated Fire Loss: Bldg: Contents: Equipment:
29. Insurance: Agent: _____ Address: _____ Amount: _____

** PIO Fire Company Officer to complete and submit "Fire Recovery USA Report" **if billable incident**.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 58

Notification Firefighter Line-Of-Duty Death:

Purpose: This notification process a "Firefighter Line-Of-Duty Death" is defined as a firefighter fatality which occurs while responding to and engaged in fire suppression operations and/or emergency medical rescue activities.

1. Pioneer Fire Protection District's senior fire officer or designate shall notify the OES Fire & Rescue Operational Area Coordinator of the on-duty death of firefighter including the name, rank and age of the fallen firefighter along with a synopsis of the incident and agency's liaison name and contact information. The name of the fallen firefighter & incident synopsis shall be handled and held in confidentiality and only used for notifications to the Governor's Office. Pioneer Fire Protection District shall maintain responsibility for notification of next of kin and media news releases.
2. The OES Fire & Rescue Operational Area Coordinator shall notify directly the Governor's Office of Emergency Fire & Rescue Branch Duty Chief @ (916) 845-8711 and provide the information regarding the firefighter duty death. The OES Fire & Rescue Operational Area Coordinator will notify their OES Fire & Rescue Regional Coordinator.
3. Once notification has been made, the Governor's Office shall establish communications with the liaison of Pioneer Fire Protection District to obtain further information for the Governor's communication to the firefighter's family and for a press release.
4. The Governor's Office will after issuing a press release, instruct that the Capitol State Flags be lowered for 72-hrs.

Name of Decedent:

Age:

Rank:

Firefighter Status: _____ Career: _____ Volunteer: _____

Agency: Pioneer Fire Protection District, P.O. Box 128 (7061 Mt. Aukum Road), Somerset, California 95684

Fire Chief or Contact Person:

Agency Telephone Number: (530) 620-4444

Agency FAX #: (530) 620-4317

Email: srennert@starband.net

Name of Spouse or Other:

Name & Ages of Children:

Brief Synopsis of Circumstances:

OES Fire Duty Chief's Telephone Number: (916) 845-8711

Received by:

Duty Chief:

Date:

Time:

Forwarded to Governor's Office:

Date:

Time:

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 59

Firefighter Hydration Guidelines:

This SOG presents hydration guidelines for district fire/rescue personnel prior to, during and post fire ground evolution requirements in order to maintain proper hydration & prevent dehydration. While hydration is a personal responsibility, it is the responsibility of the on-scene senior fire officer (SFO) to monitor district fire/rescue personnel for the signs and symptoms of dehydration such as muscle weakness, dizziness, disorientation, hypotension, tachycardia and lack of sweating. The presence of these signs & symptoms constitutes a true medical emergency. The SFO shall remove any firefighter/rescuemen exhibiting these signs & symptoms from the fire ground and seek emergency medical support immediately. Additionally, the SFO should be alert to environmental conditions that may exacerbate dehydration, such as extreme weather conditions.

Pre-hydration:

The goal of pre-hydrating is to euhydrate (properly hydrate) with a normal plasma electrolyte level. Pre-hydrating should begin at least several hours prior to shift to enable fluid absorption and allow urine output to maintain normal levels. Firefighters should slowly drink one ounce of water for every ten pounds of body weight at least four hours before a designated shift. If the firefighter does not produce urine, or if the urine is dark or highly concentrated, the firefighter should slowly drink an additional one ounce of water for every 20 pounds of body weight about two hours before the fire ground evolution if possible.

Do not substitute beverages with alcohol or caffeine for water. Caffeine and alcohol act as diuretics and can exacerbate dehydration. Firefighters should not attempt to hyper-hydrate prior to an incident or training evolution as it has been shown to provide no clear physiologic or performance advantage and can increase risk of hyponatremia, a potentially **lethal** condition.

Preventing Dehydration:

The goal of drinking during fire ground operations is to prevent excessive dehydration and excessive changes in electrolyte balance. The specific amount and rate of fluid replacement is highly variable depending on individual sweat rates, fire ground activity and duration, and environmental conditions. Ideally, firefighters should create a customized fluid replacement plan based on **pre** and **post** fire ground firefighter weight with the goal to prevent loss of more than **2%** of baseline body weight during fire ground or training activity.

Firefighters & EMS personnel should drink water slowly and continuously during breaks, or in between assignments. Electrolyte replacement beverages may be beneficial in the most extreme fire ground conditions, but the primary goal should be volume replacement, which is **best** accomplished with **WATER**.

Firefighters & EMS personnel shall continue fluid replacement even if they do not feel thirsty. By the time thirst is detected, response personnel are already dehydrated which results in decreased performance and increased health & safety risk.

Re-hydration:

The goal of re-hydration is to fully replace any fluid and electrolyte deficit. Individuals should drink 20 ounces of fluid for every pound of body weight lost during fire ground activity. If the total body weight lost during fire ground operations is unknown, fire/rescue personnel should drink slowly and continuously until urine is no longer dark or highly concentrated. Consuming beverages and snacks with sodium will help expedite rapid and complete recovery by stimulating thirst and fluid retention.

Robert L. Gill, Fire Chief

Tuesday, July 24th 2007, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 60

Firefighter Response to Electrical Emergencies:

Electrical Hazards at Fires:

I. Overhead Electrical Wires

A.) High Voltage Conductors:

1.) Carry up to 34,500 volts.

A.) High voltage signs on cross arms indicate conductors with more than 750 volts.

2.) **Fuse or Cutoffs:** Act as circuit breaker in high-voltage circuits.

3.) **Service Conductors:** May be high or low voltage. Many commercial and industrial installations have service conductors of 34,500 volts.

A.) Three separate conductors

B.) Three conductors twisted around each other, known as triplex

C.) Three wire-armored cables, used over swimming pools.

Note: The voltage of a conductor cannot be determined by conductor's size. Usually, the conductors at the top of the pole carry the highest voltage. The most effective method of identifying different voltages is:

1.) High voltage signs on cross arms

2.) The size and shape of insulators. Insulators at the top of a pole will appear smaller than they really are.

3.) The distance between conductors or the higher the voltage the greater the distance between conductors.

4.) **Street Lights:** Considered dangerous because it may feed from conductors carrying up to 4,800 volts.

A.) Normally there is no current flowing in daytime; however PG&E workmen consider them to be energized at all times.

B.) The position of these wires on poles is unusual because they are located on lower cross arms.

5.) **Low Voltage Conductors:** Some times called secondaries. They carry 240 or 480 volts.

6.) **Transformers:** Reduce high voltage to lower voltage, usually 120 to 480 volts.

A.) In some cases, the low side of a transformer will be high 4800 volts. When this occurs, there will be high voltage signs on both sides of the transformer.

7.) **High Voltage Insulators:** Used to handle up to 66,000 volts.

A.) Conductors on these insulators must never be cut by firefighters until assurance is received from PG&E that the conductors are de-energized.

8.) **Line Sectioning Switch:** Usually used to isolate defective service area and is to be operated by PG&E patrolmen only.

9.) **Rack Switch:** Controls the voltage to transformers bank below and is operated by PG&E patrolmen.

10.) **High Line Switch Handles** are never to be operated by firefighters! These switches are not designed to drop a high voltage load. Opening them under load may cause conductors carrying 34,500 volts to fall over an extensive area, creating serious life and fire hazards. There are about 2,000 of these switches in Southern California alone, each one numbered and padlocked.

II. Response Guidelines at Emergencies:

A.) Sagging or Downed Wires:

- 1.) Notify **ECC** (Cal-Fire/AEU Fire Dispatch **Camino**) and give the correct address and a brief description of conditions.
 - a.) Wires down pole-to-pole or pole to occupancy.
- 2.) Clear the area!
 - a.) Keep people at least one span away from the broken or sagging wires.

B. Sagging or Downed Wires:

- 1.) Notify ECC and give correct address and a brief description of conditions.
 - a.) Wires down pole-to-pole or pole to occupancy.
- 2.) Clear the area!
 - a.) Keep people at least one span away from broken or sagging conductors. Spans of wire adjacent to the troubled area may have weakened and any movement of wires could cause them to fall.
- 3.) Protect Exposures!
- 4.) Consider all conductors to be energized until their actual condition is determined by PG&E.
 - a.) Falling conductors often create sparking, after which the conductors appear de-energized. **DO NOT BE MISLED!**
 - b.) Circuit breakers in these systems are designed to kick out and then kick back in automatically. The circuit will be energized again unless there is a ground or short circuit.
- 5.) Make certain that the conductors are cleared and safe or that you are properly relieved of your responsibility before you leave the scene.

C. Cutting Wires:

- 1.) The cutting of wires by firefighters must be confined to low voltage wires, 750 volts or less.
- 2.) When there is a need to cut high voltage lines, notify ECC and have them notify PG&E. They will respond to handle the line cutting.
- 3.) All electrical service & transmission lines located within the Pioneer Fire Protection District are PG&E/Pacific Gas & Electric.
- 4.) Wires on poles shall not be cut by Firefighters unless there is an immediate life hazard, and then cutting must be confined to low voltage.

D. When Cutting Wires Attached to a Building, Consider the Following Steps:

- 1.) Use Mechanical Axe and Rubber Gauntlet Gloves. Gloves are tested to 10,000 volts every 60 days by PG&E. They are exchanged on a company basis through the Local PG&E safety coordinator.
- 2.) The PG&E representative shall stand on a dry object. He or She shall lock in when working on a ladder.

- 3.) When possible, the PG&E representative will cut at the loops attached to the service head.
- 4.) They'll cut close to service bracket in order to make all loose ends dead.
- 5.) They'll never reach over charged wires, and they'll usually cut the closest conductor first.
- 6.) When cutting, don't touch another conductor or a ground!
- 7.) After cutters are in place, the PG&E representative shall turn his/her head to protect eyes from flash and sparks.
- 8.) The PG&E representative shall be sure all insulated wires leading to the service head are cut.

E. Cutting Triplex:

- 1.) Triplex is three (3) wires wound around each other.
- 2.) PG&E representative won't cut triplex cables unless they are separated and cut individually.
- 3.) If the PG&E representative cuts triplex wires, it will cause a short circuit, which will destroy the blades of the mechanical axe and may cause personal injury. When possible, the loops should be cut at the service head. If it is necessary to cut at the pole, the PG&E representative will cut one wire at a time before it goes into the triplex. Don't cut the bare wire in triplex unless there is danger of it falling, or if there is a possibility that it has become energized. It is a ground wire, and normally will present no problem. If all three (3) wires in a triplex cable are insulated, consider them all energized.

F. Safety Precautions:

- 1.) The fact that wires on the ground do not spark or sputter **is no indication that they dead**. They may be totally inactive, and yet still be energized and dangerous.
- 2.) When there is a possibility that conductors may be down, care shall be taken when dismounting off fire apparatus. To step on an energized conductor or allow any part of the apparatus to touch it may cause injury. At night, size-up surroundings with light. Jumping off apparatus into a pool of water containing live conductors may be just as dangerous as stepping on the conductors itself.
 - a.) By touching an object that is in contact with a live conductor.
 - b.) By direct contact with a live conductor.

If there is any chance that the apparatus is in contact with a live conductor, and it is necessary to get off, **don't step off!** Get above the running board level, **and jump clear**. If you are on the ground, make no attempt to get on an electrically charged piece of fire apparatus.

Robert L. Gill, Fire Chief

Tuesday, March 18th 2008, *Revised Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 61

Emergency Incident Rehabilitation:

The physical and mental demands associated with firefighting and other emergency operations, coupled with environmental dangers of extreme heat and humidity or extreme cold, create conditions that can have an adverse impact upon the safety and health of the individual emergency responder. Members who are not provided adequate rest and re-hydration during emergency operations or training exercises are at increased risk for illness or injury, and may jeopardize the safety of others on the incident scene. When emergency responders become fatigued, their ability to operate safely is impaired. As a result, their reaction time is reduced and their ability to make critical decisions diminishes. Rehab is an essential element on the incident scene to prevent more serious conditions such as heat exhaustion or heat stroke from occurring.

The need for emergency incident rehab is cited in several standards. Recent studies have conducted that a properly implemented fire ground rehab program will result in fewer accidents and injuries to firefighters and first responders. Moreover, responders who are given prompt and adequate time to rest and re-hydrate may safely reenter the operational scene, which may reduce the requirement for additional staffing at an incident. This SOG in conjunction with our **SOG-59 (*Firefighter Hydration Guidelines)** shall provide adequate guidelines for Incident (Rehab) Rehabilitation at an incident scene.

Purpose:

To ensure that physical and mental condition of members operating at the scene of an emergency or a training exercise doesn't deteriorate to a point that affects the health and safety of each member or that jeopardizes the safety and integrity of the operation.

Scope:

This guideline shall apply to all emergency operations and training exercises where strenuous physical activity or exposure to heat or cold exists.

Responsibilities:

A.) Incident (IC) Commander, the Incident Commander (IC) shall consider the circumstances of each incident and make adequate provisions early in the incident for the rest & rehab for all members operating at the scene. These provisions shall include medical evaluation, treatment and monitoring; food and fluid replenishment; mental rest; and relief from extreme climatic conditions and the other environmental parameters of the incident. The rehab shall include the provision of EMS at the BLS level or higher.

B.) Company Officers or Acting Company Officers, All district company officers shall maintain an awareness of the condition of each district member operating within their span of control and ensure that adequate steps are taken to provide for each member's health & safety. The command structure shall be utilized to request relief and the re-assignment of fatigued crews.

C.) Response Personnel, during periods of hot weather, members shall be encouraged to drink water and activity beverages throughout the work day, i.e. SOG-59, F/F Hydration Guidelines. During any emergency incident or training evolution, all members shall advise their supervisor when they believe that their level of fatigue or exposure to heat or cold is approaching a level that could affect themselves, their crew, or the operation in which they are involved. Members shall also remain aware of the health and safety of other members of their crew.

Establishment of Rehabilitation Group/Division

A.) Responsibility:

The IC shall establish a Rehab Group/Division when conditions indicate that rest and rehab is needed for personnel operating at an incident scene or training evolution. A member will be placed in charge of the group/division and shall be known as the Rehab Officer. The Rehab Officer will typically report to the Logistics Officer in the framework of the incident management system.

B.) Rehab Location:

The location for the Rehab Area will normally be designated by the IC. If a specific location has not been designated, the Rehab Officer shall select an appropriate location based on the site characteristics and designations below.

C.) The Rehab Site:

1. It should be in a location that shall provide physical rest by allowing the body to recuperate from the demands & hazards of the emergency operation or training evolution.
2. It should be far enough away from the scene that firefighters may safely remove their PPE and be afforded mental rest from the stress and pressure of the incident or training evolution.
3. It should provide suitable protection from the prevailing environment conditions. During hot weather, it should be in a cool, shaded area. During cold weather, it should be free of exhaust fumes from apparatus, vehicles, or equipment (including those in the Rehab Group/Division operations).
4. It should be large enough to accommodate multiple crews, based on the size of the incident.
5. It should be easily accessible by EMS units.
6. It should allow prompt re-entry back into the emergency operation upon complete recuperation.

Rehab Site Designations:

1. A nearby fire station, a local park, (i.e., Pioneer Park), a garage, a building lobby, or another structure.
2. Fire apparatus or support vehicle, (i.e., a local Rehab Unit itself), an ambulance, or other emergency vehicles at the scene or called to the scene.
3. A school bus, a county/municipal bus, or even a county or city bookmobile.
4. Several floors below a fire in a high-rise building.
5. An open area in which a rehab Area can be created using tarps, fans, etc.

D.) Resources:

The Rehab Officer shall secure all necessary resources required to adequately staff and supply the Rehab Area. The supplies should include the items listed below.

1. Fluids- water, activity beverages, oral electrolyte solutions and ice.
2. Food-soup, broth, or stew in hot/cold cups, MRE's etc.

3. Medical-blood pressure cuffs, stethoscopes, O2 administration devices, cardiac monitors, IV solutions and thermometers, etc.

4. Other-awnings, fans, tarps, smoke ejectors, heaters, dry clothing, extra equipment, flood lights, blankets and towels, traffic cones and fireline tape (to identify the entrance and exit of the Rehab Area).

Rehab Group/Division Establishment:

Rehab should be considered by officers during the initial planning stages of an emergency response. However, the climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehab Area. Any activity/incident that is large in size, long in duration, and/or labor intensive will rapidly deplete the energy and strength of response personnel and therefore merits consideration for rehabilitation.

Climatic or environmental conditions that indicate the need to establish a Rehab Area are a heat stress index above 90F or wind-chill index below 10F.

Hydration:

****Refer to SOG-59, Firefighter Hydration Guidelines!**

Nourishment:

The district shall provide food at the scene of an extended incident when units are engaged for three or more hours. A cup of soup, broth or stew is highly recommended because it is digested much faster than sandwiches and fast-food products. In addition, foods such as apples, oranges and bananas provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided!

Rest:

The **“two air bottle rule” or 45 minutes of working time, is recommended as an acceptable level** prior to mandatory rehab. Members shall re-hydrate (at least eight ounces) while SCBA cylinders are being changed. Firefighters having worked for two full 30-minute rated bottles, or 45 minutes, shall be immediately placed in the Rehab Area for rest and evaluation. In all cases, the objective evaluation of a member’s fatigue level will be the criteria for rehab time. Rest will not be less than 10 minutes and may exceed an hour as determined by the Rehab Officer. Fresh crews, or crews released from the Rehab Group/Division will be available in the **Staging Area** to ensure that fatigued members are not required to return to duty before they are rested, evaluated, and released by the Rehab Officer.

Recovery:

Firefighters in the Rehab Area should maintain a high level of hydration. Firefighters should not be moved from a hot environment directly into an air conditioned area because the body’s cooling system can shut down in response to the external cooling. An air conditioned environment is acceptable after cool-down period at ambient temperature with sufficient air movement. Certain drugs impair the body’s ability to sweat and extreme caution must be exercised if the firefighter has taken antihistamines, such as Actifed or Benadryl, or has taken diuretics or stimulants.

Medical Evaluation:

EMS should be provided and staffed by the most highly trained and qualified EMS personnel on the scene (at a minimum of BLS level). They shall evaluate vital signs, examine firefighters and make proper disposition (return to duty, continued rehab, or medical treatment and transport to medical facility). Continued rehab should consist of additional monitoring of vital signs, providing rest and providing fluids for re-hydration. Medical treatment for firefighters, whose signs and/or symptoms indicate potential problems, should be provided in accordance with district medical control guidelines, (i.e., SOG-46, Workers Compensation Injury/Illness Reporting Guidelines). EMS personnel shall be assertive in an effort to find potential medical problems early.

Heart Rate & Temperature-The heart rate should be measured for 30 seconds as early as possible in the rest period. If a firefighter's heart rate exceeds 110 beats per-minute, an oral temperature should be taken. If the firefighter's temperature exceeds 100.6 F, he/she should not be permitted to wear PPE. If it is below 100.6F and the heart rate remains above 110 beats per-minute, rehab time should be increased. If the heart rate is less than 110 beats per-minute, **the chance of heat stress is negligible.**

Documentation-all medical evaluations shall be recorded on standard forms along with firefighters name and complaints and must be signed, dated and timed by the Rehab Officer or his/her designee.

Accountability:

Firefighters assigned to the Rehab Group/Division shall enter and exit the Rehab Area as a crew. The crew designation, number of crew members and the times of entry to and exit from the Rehab Area shall be documented by the Rehab Officer or his/her designee on the Company Check-In/Out Sheet. Crews shall not leave the Rehab Area until authorized to do so by the Rehab Officer.

Rehab Officer Forms:

**Rehab Company Check-In/Out Sheet Form Attached-

**Incident Rehab Report Form Attached-

Robert L. Gill, Fire Chief

Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 62

Thermal Imaging Camera

Purpose:

This guideline describes the specifications and best usage of the district's **MSA 5200 Thermal Imaging Camera**. The TIC shall be always assigned to districts first out engine, (i.e., **E38 or E31**). It will be available for use at structure fires, multiple victim motor vehicle accidents, or at any incident where the Incident Commander believes the camera to be of assistance.

Guideline:

The Thermal Imaging Camera (TIC) is an invaluable tool. It gives firefighters the ability to "see" when visibility may be otherwise obstructed, whether at a fire alarm investigation, exterior size-up, search, ventilation, or loss control operation. While the TIC can assist the user in the fire ground decision-making process, it must be regarded as just one element in the process. Firefighters and Fire Officers must not rely completely on the TIC; all fire ground factors must be considered when making such decisions. The TIC should not be regarded as a substitute for practiced and proven techniques used to accomplish fire ground tactics. Use of the TIC doesn't preclude firefighters from using walls, hose lines, or ropes as methods for staying oriented within a structure while conducting search operations. The TIC is simply a piece of equipment that enhances firefighter visual aptitude, and as such, is not a replacement for common sense. Firefighters and Fire Officers must always remember that equipment can malfunction and /or fail when least desired.

Operational Guidance:

I. Thermal Imaging (TIC) Camera Applications

Use of the TIC during Search/Rescue Operations:

A.) The Primary Search, the TIC may be used on the fire ground by rescue crews to assist in searching for victims. Whenever possible the crew assigned to conduct the primary search shall utilize the TIC as an adjunct.

The search shall be conducted using a standard "right" or "left" hand search pattern while maintaining contact with interior walls. Crews assigned to search and rescue activities will do so using the "Buddy System" (**minimum two-person team**).

B.) The Secondary Search, the secondary search group may also utilize the TIC in searches where adequate lighting is not available.

C.) Rapid Intervention (RIT) Teams/Rapid Intervention (RIC) Crews usage, the TIC may be assigned to the company officer of a designated RIT/RIC team to assist in locating lost or trapped firefighters or other victims at an incident.

D.) Use of the TIC in search operations at confine space, collapse and other rescue scenarios, the TIC can assist in locating victims during Heavy Technical Rescue (HTR) operations such as confine space and collapse rescues.

E.) The TIC can be utilized during night-time operations at motor vehicle accidents (**MVA's**) where victims may have been ejected from a vehicle or have wandered off from the immediate accident scene. The officer in charge of these types of incidents may contact the **Camino ECC** to request a TIC.

F.) Use of the TIC in Determining Fire Conditions, the TIC may be used during the initial fire attack to quickly locate the seat of fire and to assess fire conditions.

G.) The **Safety Officer** may use the TIC to monitor changing fire conditions such as rapid fire growth and fire extension, or to evaluate potential for structural collapse, flashover conditions, and backdraft.

H.) Structural conditions may also be monitored by gauging the effects of fire involvement on lightweight trusses, floor joists, and rafters.

I.) Use of the TIC **to observe the thermal balance within a structure** can aid in determining the effectiveness of fire streams.

J.) The TIC can be used **to assess the effectiveness of ventilation efforts**. Example, if high heat conditions are present after vertical ventilation is completed, this may indicate the vent hole is blocked. The TIC can be utilized to locate fire or potential hot spots hidden in void spaces behind walls or ceilings, requiring further overhaul and extinguishment.

K.) Use of the TIC during Fire Alarm Activations, the TIC can be useful on calls such as fire alarms and other investigative responses to determine if a fire actually exists.

L.) Lighting Strikes, the TIC can also be useful in locating fire where lighting strikes or similar conduction on metal duct work and pipes has started a smoldering fire.

M.) Hazardous Materials Incidents, the TIC may be utilized to determine thermal characteristics of liquids at a HazMat incident, e.g., where heat is generated in closed containers due to chemical mixing.

II. TIC Operation:

A.) TIC Technology & Limitations, the MSA 5200 TIC measures the varying amounts of infrared energy (heat) emitted by objects to create a thermal "image" and project that image onto a screen in the camera. Differences in infrared energy (or heat) are displayed in varying shades of gray. The whiter/brighter the image is, the warmer the object. The TIC is capable of reading temperatures within a range of 0 degrees Fahrenheit --- 1100 degrees Fahrenheit. Prolong use of or an extremely hot environment may result in the TIC's internal components overheating. Under these conditions, a **HIGH TEMP** warning will be displayed.

B.) The TIC is waterproof (to one meter) when the battery compartment is properly closed. **The TIC will not provide thermal images underwater.**

C.) While the camera is designed to withstand temperatures up to 700 degrees Fahrenheit without damage, **exposure to high temperatures for prolonged periods of time may result in degradation** or loss of the thermal image. If possible degradation of the thermal image is observed, allow for a **"cool down"** period until the thermal image is restored to normal.

D.) *Never point the camera directly at the sun! Damage to the detector may result.

E.) The camera is not rated as **"Intrinsically Safe"** and can't be used in potentially explosive atmospheres.

F.) Because some surfaces act like mirrors to the system, **the TIC will not provide images through glass, water, or shiny objects.**

III. Thermal Imaging Camera (TIC) Use:

A.) In order to avoid dropping the MSA 5200 TIC unit, the TIC should be always attached to firefighter by the TIC's retractable lanyard.

B.) The TIC is designed to work up to four (4) hours on a completely charged battery. **Note:** An indicator of remaining battery power is displayed on the TIC.

C.) The batteries must be placed should be kept in the TIC case on the apparatus, with a full charge, as much as possible.

D.) **The camera should be used with a slow, deliberate (from left to right, from ceiling to floor, etc.) sweeping motion allowing the viewer to assess and interpret** the thermal images seen through the camera.

E.) The use of the camera **should augment**, but in no way replace, regular search & rescue techniques (i.e. contact with walls, contact with crew members, staying low in high heat and smoke conditions, searching with hands and feet outstretched, communications, etc.)

F.) **After use on the fire ground**, the TIC should be wiped down with a damp cloth soaked in water and mild detergent, then dried with a cloth towel.

G.) Operational Questions and Instructions of the MSA 5200 Thermal Imaging Camera (TIC) system operation should be verified through systems ops/guide manual.

Robert L. Gill, Fire Chief
Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 63

Bomb Response Protocol

Purpose: To establish procedures/guidelines for Pioneer Fire Protection District personnel in support of law enforcement agencies when (A) bomb threats are received, (B) explosives are detonated or (C) incendiary devices are found within the Pioneer Fire Protection District, and it's El Dorado County Operational Area.

Procedures:

A. El Dorado County Sheriff's 911 Dispatch Center receives information regarding a "Bomb Threat"

1. Notify Cal-Fire **ECC** Camino of threat location.
2. Request Cal-Fire **ECC** Camino to page fire department Chief/Duty Officer to call **ECC** for information.
3. Cal-Fire **ECC** notifies Chief/Duty Officer of threat received in their jurisdiction.
4. Chief/Duty Officer does not respond to scene until requested by law enforcement agency having jurisdiction. The Chief/Duty Officer may call, via telephone to fire personnel of his or her department/district to respond to their stations to await possible activation when requested. If threat is at location which poses the threat of death or injury to civilians, personnel & apparatus maybe staged in a safe location closer to the reported incident site.

B. El Dorado County Sheriff's 911 Dispatch Center receives information regarding a "Bomb Explosion"

1. Notify Cal-Fire **ECC** Camino of location of incident.
2. Cal-Fire **ECC** Camino to dispatch full structural assignment to a "Staging Area" to await law enforcement to secure scene. If explosion produces fire, the fire agency having jurisdiction shall be notified of the blast and allowed to extinguish the fire.

C. El Dorado County Sheriff's 911 Dispatch Center receives information regarding a "Found Incendiary Device"

1. Notify Cal-Fire **ECC** Camino of "found device" location.
2. Request Cal-Fire **ECC** Camino to page fire department Chief/Duty Officer to call Cal-Fire **ECC** Camino for information.
3. Cal-Fire **ECC** Camino notifies Chief/Duty Officer of "found device" located in their jurisdiction.
4. The Chief/Duty Officer does not respond to scene until requested by law enforcement agency having jurisdiction. The Chief/Duty Officer may call fire personnel to respond to stations to await possible activation when requested.

Robert L. Gill, Fire Chief

Monday, March 23rd 2008

Pioneer Fire Protection District Standard Operating Guideline 64

SOG-64, Rapid Intervention Crew/Rapid Intervention Team

Purpose:

Provide personnel for the rescue of firefighters by assigning a dedicated crew to monitor fire conditions and perform rescue when required.

Reference:

- PIO Fire's SOG-12, Personnel Accountability System/Field Accountability Tracking (PAS/FATS) System
- PIO Fire's SOG-22, Two-In/Two-Out
- California Code of Regulations, Title-8, Section 5144(g)
- ICS 910 FIREScope, "Fire Incident Safety & Accountability Guidelines"
- NFPA

Definitions:

Rapid Intervention (RIC) Crew/Rapid Intervention (RIT) Team: A properly trained crew/team that is staffed with a minimum of two (2) personnel and performs tasks as defined by the Incident Commander (IC).

Emergency Traffic: Phrase used to alert personnel and the dispatch center (**ECC**) of a significant fire ground event. This terminology shall be used by the IC when a **MAYDAY** occurs.

Immediately Dangerous to Life & Health (IDLH): An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere. Any structural fire beyond the incipient stage is considered to be IDLH atmosphere by Cal-OSHA.

Incident Commander (IC): The individual with overall responsibility for the incident.

"MAYDAY": Terminology used by emergency responders to indicate an entrapment or other emergency requiring rescue. Trapped Firefighter should repeat the **MAYDAY** three (3) times and include the following information if possible; ***Last Name, *Engine Company, *Amount of Air Remaining and *Last Known Location.**

Personnel Accountability Report (PAR): A systematic accounting of fire ground personnel, either via radio or face-to-face.

Guideline:

1. The IC shall be responsible for establishing a RIC/RIT.
2. On incidents where a Two-In/Two-Out Team has been established, the IC or his/her designee shall transition from the Two-In/Two-Out Team to a RIC/RIT as soon as possible and practical.
3. When adequate resources are available and conditions warrant the assignment, a RIC/RIT should be established immediately, and this will satisfy the requirement for Two-In/Two-Out.
4. Additional RIC/RIT companies may be added due to the size of the building or complexity of the incident.
5. The radio designator shall be "RIC/RIT"; the IC shall transmit this over the radio on both command and tactical channels. In addition, the IC shall request a separate tactical channel dedicated for RIC/RIT for initial setup operations.
6. The RIC/RIT designator may also reflect a geographic location or function if multiple RIC's/RIT's are formed. (e.g. "Division-B RIC/RIT", "Division-1 RIC/RIT", "RIC/RIT Group").

7. Once a company has been assigned as the RIC/RIT, the IC shall not assign them to other tasks that restrict their ability to immediately respond to a fire ground emergency.
8. The IC should not transfer the assignment of RIC/RIT from the initially assigned company to other companies. This shall avoid any loss of critical safety information.
9. The RIC/RIT function shall continue until the incident has concluded or the IC determines that a RIC/RIT is no longer needed based on a hazard assessment. Consideration should be given to keeping the RIC/RIT operational in cases where active fire suppression operations have ceased, yet overhaul operations or other activities are being conducted in areas with potential hazards.

Procedures:

Staffing: All RIC/RIT teams shall be staffed per district policy, maintaining the company's integrity, with staffing never to be less than two (2) Firefighters. **All RIC/RIT members shall be equipped** with full personal protective equipment (PPE) and radio communications. On incidents that require more than one RIC/RIT to be deployed, each RIC/RIT leader shall report to their supervisor (i.e., Division/Group Supervisor).

Location at Incident: RIC/RIT shall be located in a place on the fire ground that will facilitate deployment in a rapid and safe fashion.

Responsibilities: The **primary task** of the RIC/RIT is to respond to any report of firefighter distress. Generally, firefighters in distress fall into one of four situations;

1. Unable to move by being trapped in debris, collapse or other entanglements.
2. Disoriented and/or lost in a building.
3. Where air-supply is insufficient to successfully exit the **IDLH** environment.
4. Firefighter missing after a **PAR Check!**

Exact tasks and tool selection will vary from incident-to-incident based on structure type, fire conditions and size of structure. The following minimum tasks shall be completed at every incident where the RIC/RIT has been activated:

1. Report in with the IC.
2. Determine tactical frequency and monitor all radio traffic.
3. Assemble tool cache (refer to the RIC/RIT Equipment Check Check-Off Sheet).
4. Check all sides of the fire structure for conditions and access.
5. Force, but do not open doors remote to interior fire crews as appropriate without disturbing fire suppression efforts and interior fire atmosphere.
6. Consider placing an escape ladder (s) when operations are above the ground floor.
7. Continuously monitor radio traffic, fire-structure conditions, and crew condition.

Deployment: RIC/RIT shall be deployed when either the IC or the RIC/RIT leader receives a radio message, or personally observes a significant fire ground event that entraps or injures firefighters. This includes, but is not limited to the following conditions.

1. Actual or impending structure collapse that entraps firefighters.
2. Firefighters in distress or missing after a PAR Check.
3. Significant changes in fire conditions that causes harm to firefighters.
4. Announcement of a **"MAYDAY"** by a firefighter.

Robert L. Gill, Fire Chief

Thursday, September 11th 2008

FIRE PREVENTION GUIDELINE

SUBJECT:

RESIDENTIAL SPRINKLER INSPECTIONS

Policy Statement

It shall be the responsibility of all members of the Pioneer Fire Protection District to promote the prevention of fire through the regular use of inspections. In general, sprinkler installations will be inspected by the Fire Chief. However, engine company personnel may be called upon to conduct such an inspection in the absence of the Fire Chief. The purpose of these inspections is to verify that the system is installed per NFPA 13D-Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings, and Manufactured Homes (with Pioneer Fire Protection District amendments). There shall be no discrimination or favoritism in the inspection process. Efforts shall be made to insure that there is both ***a reasonable degree of fire safety and compliance with fire safety laws and regulations***, while continuing to foster positive and cooperative relations between the fire district and the community.

Responsibility

The Fire Chief shall be responsible for conducting fire sprinkler system inspections. However, from time to time, engine company personnel may be called upon to conduct such an inspection in the absence of the Fire Marshal. In consequence, the Fire Chief is also responsible for training engine company personnel in inspection procedures, and for following up on technical questions/problems. If called upon to conduct such an inspection, the station Captain shall be responsible for scheduling the inspection for their shift.

Procedure

Preparation: If an inspection is called for, plans and calculations have previously been approved and stamped by the Fire Chief. It is the contractor's responsibility to have the approved plans and calculations on-site for the inspection.

Approach: The contractor will call the district to request an appointment. We require 48 hours advance notice. However, it is up to the inspector's discretion whether or not to waive this requirement. Inspections will normally be conducted during regular business hours. If this is not the case advance arrangement should be made by the sprinkler or general contractor.

Introduction: The sprinkler contractor or his representative must be at the residence, unless it was agreed before the inspection that he or she was not required to be present. If the sprinkler contractor is not present, the general contractor or his/her representative must be present. Under no circumstances will the inspection be conducted if at least one of the two above parties is not present. In addition, a set of approved sprinkler plans, and the job card is required to be on site at all times. If either is not present, the inspection will not be conducted.

Inspection: Personnel shall take a sufficient amount of time to do a thorough job. Use the set of approved plans and calculations (on-site) as a guide. There are three types of inspections conducted on residential properties, the Underground Inspection, the Overhead / Hydrostatic (or Rough-In), and the Final inspection. When making the appointment, the contractor shall request the type of inspection. When making the appointment make sure to advise the contractor that the approved plans need to be on-site for the inspection.

Underground Inspection / Flush

1. Start by reviewing the approved sprinkler system plans to determine the size of the underground fire service line and water meter.
2. Verify the size of the water meter matches the approved plans.
3. Verify that the diameter of the fire service line is at least as large as called for in the approved plans.
4. Determine the depth of burial is at least 48 inches for Poly pipe or 36 inches for Copper.
5. Visualize the entire length of the fire service line to ensure there are no kinks and that all couplings are straight and free of leaks. If the line is buried the inspection has failed.
6. Verify that the water service is dedicated to the fire service line or has a domestic service branch according to the approved plans.
7. The fire service line downstream of the meter shall be constructed of Polyethelene, 200 psi, C-901 class or Copper Type K or L.
8. There shall be a #12 or #14 gauge insulated solid copper wire installed the entire length of all Poly pipe attached to the pipe for purposes of tracing the water line.
9. In general, only water lines may be run in the same trench.
10. The fire service line shall be bedded in clean (rock-free) soft soil or at least four inches of clean sand.
11. The fire service line shall be flushed for at least 30 seconds or longer until water flow is free of all debris.

OH/Hydro Inspection:

1. Start the inspection at the riser. The pressure gage should read 150 p.s.i. (if copper pipe is used), or 200 p.s.i. (if CPVC pipe is used). Usually, CPVC pipe is used, so the gage should read 200 p.s.i. The system is required to hold the appropriate pressure for 2

hours. Take note of the pressure reading and ask the contractor how long he or she has had it “pumped up.” If it has been under pressure for 2 hours or more, conduct the remainder of the inspection and check the pressure gage again before leaving. If the pressure has dropped, there is a leak in the system and the system has failed the hydrostatic portion of the inspection.

2. Methodically inspect every room of the residence. **None of the sprinkler pipe should be covered.** If the pipe is covered, the covering must be removed to properly inspect the pipe supports. In general, there should be at least one sprinkler head in every room, closet, and bathroom. Small closets intended to have full depth and width shelving, such as linen and pantry closets are exempt. The following are some general rules regarding residential sprinkler installations:
 - The sprinkler pipe shall be strapped / supported by a hanger at least every 6 feet. In addition, a strap/hanger is required to be installed within 1 foot of the sprinkler head. Pipe installed through holes drilled in joists/beams is considered to be adequately supported.
 - Sprinkler piping run parallel to TJI type floor or ceiling joists shall be supported by approved hangers secured through the web portion into wooden blocking.
 - Sprinkler heads shall not move when pressure is applied from the bottom of the heads. Push up on a number of heads to ensure positive restraint.
 - The plans will show what the sprinkler coverage area is. In general, each residential sprinkler covers an area 16 feet x 16 feet. Assuming this is what the coverage area is, no head should be within 8 feet of another (without an intervening beam or soffit), or more than 8 feet from a wall. Similarly, if the coverage area is 14 feet x 14 feet, the corresponding distances are 7 feet, respectively. The approved plans should have the sprinkler head's listing, which includes spacing information.
 - Sidewall heads should be within 6 inches of the ceiling. Again, check the approved plans for spacing information.
 - Both sidewall heads and regular pendant heads shall have their deflectors parallel to the ceiling.
 - In areas where there are heat-producing appliances, such as stoves, ovens, and fireplaces, a minimum distance is specified in each type of sprinkler's listing.
 - If there are areas where there may be storage, such as sub-floor areas, etc, sprinkler coverage is required. Attics are not required to have full coverage; however, a pilot head is required above all openings to the attic.
 - CPVC pipe is acceptable if it is to be protected by gypsum wallboard (minimum ½-inch thick). Where sprinkler pipe is to be exposed (under floor areas, or unfinished areas), metal (usually copper) pipe is required.
3. If you are satisfied that the system has been installed properly, and the pressure has remained constant during the inspection, sign off the job card at the appropriate location,

and email the Fire Chief if the system failed the inspection, note the reason for the failure in an email to the Fire Chief.

Final Inspection:

1. Similarly to the OH/Hydro inspection, start the inspection at the riser. Verify that the system is pressurized to street pressure, usually between 50 and 100 p.s.i. Confirm the street pressure matches the information in the calculations.
2. Next, verify that the water meter is the same size as that called for on the sprinkler plans. There should still be a set of approved plans, as well as the job card, on site.
3. Walk through the entire structure. All the sprinkler heads should be exposed; there should be no caps or tape over the heads. All sprinkler head trim and escutcheons should be in place, as well. Sprinkler heads sometimes come painted from the factory to match the décor of the residence. The color should be noted on the sprinkler plans. The sprinklers are not permitted to be painted by anyone other than the factory. Therefore, the sprinkler's fusible link should not be painted. If there is paint on it, the head needs to be replaced, and a final inspection re-scheduled.
4. The final step is to activate the sprinkler alarm bell and interior annunciation. The alarm bell and interior annunciation is activated by the inspector's test valve. This may be located at the riser, or at some other location. If it is combined with the drain, it will be located at the lowest part of the system. Have the sprinkler contractor open the valve to its limit. If the system is connected properly, this will force water past the water flow alarm device, activating the bell and interior annunciators. The bell should ring no more than 30 seconds after the valve is opened. The options for interior annunciation are interior horn / strobes on each floor or activation of all smoke detectors. If the bell does not ring after 30 seconds of flow, or interior annunciation does not activate, the system has failed the inspection. After audibility is confirmed, have the sprinkler contractor close the valve slowly. The bell should stop ringing immediately.
5. If you are satisfied that the system has been installed properly, and the alarm bell and interior annunciation works properly, sign off the job card at the appropriate location and email the Fire Chief. If the system failed the inspection, note the reason for the failure in an email to the Fire Chief.

References

- National Fire Protection Association (NFPA) Fire Codes and Standards
- California Building and Fire Codes
- Pioneer Fire Protection District Code Amendments/Ordinances

Robert L. Gill, Fire Chief

Thursday, September 11th 2008

Pioneer Fire Protection District Standard Operating Guideline 66

EVER FPO – Standard Offense & Defense

Purpose:

EVER FPO provides a sequential reminder of key fire ground decisions and tactics of the standard offense and defense strategies that are:

Common Terminology:

Initial Attack Offense: Standard tactical operations and resource requirements to achieve the goals of an offensive strategy in a specified occupancy type and structure size.

Ventilation: The planned and systematic removal of heat, smoke and toxic products of combustion and their replacement with fresh air. Ventilation shall be provided ahead of or simultaneously with primary search and/or fire attack operations. Ventilation operations shall be conducted to meet the criteria of providing a tenable environment and minimizing fire spread.

Primary Search: Rapid visual and/or tactile inspection of the structure to locate, remove, and/or protect exposed persons. Primary Search **shall be extended** in all offensive operations. Initial primary search shall be extended in the fire area and then in areas immediately threatened by the fire. All areas of the structure must be searched before primary search is complete. The IC then **transmits** an "All Clear," the tactical benchmark indicating that primary search has been completed and that the focus of tactical operations is now on stabilization of the incident (fire control).

Fire Attack: This process incorporates the confinement and extinguishment of the fire and overhaul of the involved (or potentially involved) area. Fire Attack should be extended from the unburned side of the structure to support primary search and establish fire control. The flow rate from fire attack hoselines must be sufficient to achieve rapid control of the fire.

Rapid Response: A crew (or crews) should be pre-positioned near structure's entry point or some other location for **immediate deployment**. Rapid response crews are used to meet changing tactical requirements for relief of operating forces. Rapid response is critical to the safety, relief and reinforcement of operating personnel. Adequate rapid response resources must be available to sustain on-going operations and to meet the demands presented by rapidly changing conditions.

Secondary Search: This thorough visual and tactile inspection of the structure to confirm that the primary search has located, removed and/or protected exposed persons. Secondary search **shall be extended** in all offensive operations. This search shall be performed by different crews than those who were assigned to the primary search and will follow the same priority order for the sequence of search.

Property Conservation: This is a specific action taken to protect property from further fire or fire control damage. In all offensive operations, action shall be taken to protect undamaged property as soon as fire control has been established, or as soon as sufficient resources are available to perform property conservation and effective fire control operations.

EVER FPO

“E” Evaluate Strategy: Can you confine the fire to the structure of origin? Is it safe enough to initiate offensive operations? Is there structural collapse potential? Are flashover or backdraft clues present? Are these adequate resources?

“V” Ventilation: What type of ventilation is required to ensure and provide a tenable environment for firefighting personnel and exposed occupants? What type of ventilation will most effectively support search and fire control?

“E” Egress: What action will be required (ventilation and placement of hoselines) to secure a means of entry for firefighters and egress for exposed occupants and firefighters?

“R” Rescue: What action will be required to accomplish a primary/secondary search? Provide a tenable environment and secure the means of egress (ventilation and placement of hoselines) as part of search tactics.

“F” Fire Control: This is frequently accomplished concurrently with primary search operations. How many hoselines and what flow will be required to affect fire control? **Remember to provide back-up for search hoselines!**

“P” Property Conservation: What action can be taken to minimize loss due to the effects of the fire and fire control operations? Given sufficient resources, property conservation maybe performed concurrently with other tactics.

“O” Overhaul: What action will be required to ensure that the fire is completely extinguished after fire control? Remember that crews will be tired and may need rehabilitation or relief prior to initiating overhaul operations.

Robert L. Gill, Fire Chief
Thursday, October 16th 2008

Pioneer Fire Protection District Standard Operating Guideline 67

Hazardous Materials Decontamination Leader

The Decon Leader is assigned to the HazMat Group (or HazMat Branch, if activated). The Decon Leader reports to the HazMat Group Supervisor, and is responsible for **ALL** activities taking place in the area designated as the Decontamination Corridor. The Decon Leader is responsible for the decontamination of persons and equipment that leave the Exclusion Zone (*i.e., Hot Zone) and the maintenance of records for the unit.

The Decon Leader is responsible for providing the HazMat Group Supervisor with the expertise to ensure the area of contamination does not spread beyond the Contamination Reduction Zone (*i.e., Warm Zone) either from contaminated people or equipment. These responsibilities require that personnel assigned to this position have the minimum equivalent training and expertise as mandated by federal, state and local laws to perform the responsibilities and procedures of this position.

The major activities of the Decon Leader are listed below. Note that some activities are one-time actions while others are on-going or repetitive for the duration of the incident.

1. Check-In and obtain briefing from HazMat Group Supervisor.
2. Establish Decontamination Corridor (s).
3. Identify contaminated people and equipment.
4. Supervise the operations of the decontamination element in the process of decontaminating people and equipment.
5. Maintain control of movement of people and equipment within the Decontamination Corridor.
6. Maintain communications and coordinate operations with the Entry Team Leader.
7. Maintain communications and coordinate operations with the Site Access Control Leader.
8. Coordinate the transfer of contaminated patients requiring medical attention (after decontamination) to the Medical Group.
9. Coordinate handling, storage and transfer of contaminants within the Decontamination Corridor.
10. Maintain Unit Log (*ICS Form 214).

An Incident Management Tool (*the 5-A's)

- "A" Arrive _____
- "A" Assess _____
- "A" Action Plan _____
- "A" Assign _____
- "A" Adjust _____

"Basic Decon Protocol"

In a properly functioning hazmat response, properly suited hazmat team members will decontaminate victims in the decontamination corridor. This will include removal of wet or exposed clothing, flushing affected skin and hair with water and soap or shampoo wash if needed (i.e., for oily or adherent substances). The following basic decontamination protocol should be followed for ALL contaminated victims:

1. Determine the need for decon by consulting the appropriate protocol and calling Regional Poison Control Center @ (800) 222-1222.

2. For advice on selection of specific protective clothing, contact CHEMTREC at (800) 424-9300 or AAR Bureau of Explosives at (202) 835-9500. If the proper protective equipment is not available, or prehospital or hospital staff have not been trained to use it, request assistance from the local hazmat team or the local fire agency.
3. Evaluate ABC's, stabilize spine (if trauma suspected), and establish patient airway and breathing, if indicated. Move victim away from contact with hazardous material to a clean area. Rescuers in Level-A/Level-B (*fully encapsulated suits with self-contained breathing apparatus) equipment may not be physically able to do anything more than drag victims on to a backboard and then drag them out of the Exclusion Zone (*i.e., Hot Zone). If not breathing, and if physically possible to quickly accomplish, administer oxygen using bag-valve mask with reservoir device or manually triggered oxygen powered breathing device.
4. If ambulatory, victims should be directed to leave the Exclusion Zone (*i.e., Hot Zone), and assist others with evacuation, and decontaminate themselves following the instructions under the direction of the incidents Decon Leader.
5. If clothing has been contaminated, strip the victim and double-bag clothing, and then flush the entire body with plain water for 3-5 minutes. Clothing contaminated with dust should be removed dry with care taken to minimize any dust/particles becoming airborne. If circumstances, time and practice allow, a dust mask or respirator should be placed over the victim's nose or mouth. Dust should be brushed off of the face prior to fitting the mask or respirator.
6. Flush exposed eyes and other body surfaces with copious plain water for 3-5 minutes. Eye irrigation should continue for at least 10-15 minutes, preferably with saline solution.
7. If contaminant is oily or greasy, mild soap and /or shampoo may be used followed by additional water flushing.
8. Clean under nails with scrub brush or plastic nail cleaner.

"HazMat Decontamination Procedures"

Purpose: Process of removing contamination (from dirty to clean).

Why: To limit spread of contamination IAW-29CFR1910.120 (q) and Title-8, CCR 5192 (q). These procedures are based on the Product, Circumstances, Resources (i.e., *PIO Fire's HazMat Decon Trailer-38) and an Assessment and the use of Level-A or Level-B PPE. District trained decon personnel may be used in support of County hazardous materials operations as needed upon request through fire dispatch. Decon Staffing: Minimum 3 personnel (including: Decon Leader, Greeter/Rinser and Washer/Bagger). Members of the Decon Team report to the Decon Leader. The Decon Leader is responsible for the operations of the decontamination element, providing decontamination as required by the Incident Action Plan (IAP) within the Contamination Reduction (CRC) Corridor/Contamination Reduction (CRZ) Zone. The Decon Leader reports only to the assigned HazMat Group Supervisor who in turn reports to the assigned incident Operations Chief IAW-ICS-HM-222-3.

Methods of Decontaminations:

- Dilution
- Absorption
- Chemical Degradation (Neutralization)
- Isolation & Disposal

"9-Step Decontamination Process"

Step-1: **Establish an Entry Point**

Step-2: **Primary Decontamination (Emergency Decon and Full/Primary Decon)**

Step-3: **SCBA Removal**

Step-4: **Removal & Isolation of Protective Clothing (PPE)**

Step-5: **Removal of Personal Clothing**

Step-6: **Body Decontamination**

Step-7: **Drying Off & Providing Clean Clothing**

Step-8: **Medical Evaluation of Response Personnel**

Step-9: **Transportation & Documentation**

Note: **Pioneer Fire Protection District has a "No Exceptions" Decon Policy, with response personnel's "Safety" in mind!**

Decon Corridor/Site (s) shall be located at the least environmentally sensitive location if possible!

Robert L. Gill, Fire Chief
Thursday, October 16th 2008