

TOWNSHIP FIRE DEPARTMENT
CHAPTER 1: ADMINISTRATIVE OPERATIONS

Part 3: Job Descriptions

Subject: Station Inspector

Page 1 of 1

Effective Date: 01-01-90

Section: 1-3-16

Revised Date:

- 16.01 Purpose. Define duties of Station Inspector.
- 16.02 Goal. To describe the line position of Station Inspector.
- 16.03 Radio designation shall be Township 104, 204, 304, 404, 504, depending which station they are from.
- 16.04 The following duties and responsibilities are to be carried out under the administration of the Chief and in accordance with policies established by the Board of Directors of Township Fire Department, Inc. Additional duties and responsibilities may be assigned as needed.
- A) The Station Inspector shall inspect the various business establishments and public buildings within the respective township for violations of fire codes and ordinances. Any violations shall be noted and corrections recommended.
 - B) Continuous violations shall be reported to the Chief Inspector for further action.
 - C) The Station Inspector, during his/her inspections, shall dress and perform his/her duties in a professional manner, as he/she is Township Fire Department's representative to the community.
 - D) The Station Inspector may be called upon by the Chief or Chief Inspector for help in situations as may be deemed necessary.

TOWNSHIP FIRE DEPARTMENT CHAPTER 1: ADMINISTRATIVE OPERATIONS	
Part 3: Job Descriptions Subject: Firefighter Page 1 of 2 Effective Date: 01-01-90	Section: 1-3-17 Revised Date:

17.01 Purpose. Define duties of Firefighter.

17.02 Goal. To describe the position of Firefighter.

17.03 The following duties and responsibilities are to be carried out under the administration of the Chief and his officers in accordance with the policies established by the Board of Directors of Township Fire Department, Inc.

17.04 Duties and Responsibilities of the Firefighter:

- A) The firefighter shall make every effort to attend all fires or other emergencies in his/her township and other townships according to S.O.G.s. He/she shall perform duties as directed by the officer in charge at said emergencies.
- B) The firefighter shall report to his/her commanding officer any violations of Wisconsin Statutes, local ordinances or rules and regulations he/she observes in the area served by Township Fire Department, Inc.
- C) The firefighter shall report to his/her commanding officer any suspicion of incendiarism, and assist in preserving all evidence for future use.
- D) After each emergency, drill or training session, the firefighter shall assist in washing and drying all hose used and the replacement of all equipment on the apparatus so it is ready for another emergency. Upon completion of the emergency, drill or training session the roll call sheet shall be signed.
- E) The firefighter shall assist in testing all hose annually.
- F) The firefighter shall assist in annual inspections of ground ladders.
- G) The firefighter shall participate in practice drills at least monthly unless excused by his commanding officer.
- H) The firefighter shall participate in training sessions to learn new skills and to update procedures and concepts.
- I) The firefighter shall assist in the inspection and maintenance of all motor vehicles and related equipment and shall report all defects to his commanding officer.
- J) The firefighter shall report all breathing apparatus defects to his

commanding officer.

Subject: Firefighter

Date: 01-01-90

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- K) The firefighter shall attend all meetings in his station unless excused by his commanding officer. The firefighter shall make every effort to attend the Central Meeting of Township Fire Department, Inc.
- L) The firefighter shall assist in keeping his station and apparatus clean and in usable condition at all times.
- M) The Battalion Chief may assign any of the above duties or other duties he deems necessary to the firefighters at his discretion.
- N) The new firefighter shall serve a probationary period of one year. During this year the firefighter will successfully complete, if offered, Entry Level Firefighter Parts I and II, Agility Test, and In-Station Drivers Training.
- O) All firefighters, regardless of length of service, must successfully complete classes in Entry Level Firefighter - Parts I and II, Agility Test, and In-Station Drivers Training, within five years of January 1, 1991, or five years from date of acceptance to Department, whichever is longest.
- P) Any firefighter who responds to a call will conduct himself in a professional manner. He is the Department's representative to the public. This includes scene and patient confidentiality along with the restriction of non-members from the scene.
- Q) The firefighter shall perform any other duties that may be assigned by the Chief.
- R) Maintain all turnout gear and communication equipment in good, clean working order.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 1: ADMINISTRATIVE OPERATIONS

Part 3: Job Descriptions

Subject: Reserve Firefighter

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Section: 1-3-18

Effective Date: 03-01-94

Revised Date:

- 18.01 Purpose. To allow firefighters an opportunity to maintain their active status with the Department while not being involved with structural firefighting.
- 18.02 Goal. To supplement the current roster of firefighters with additional manpower to staff fire department vehicles and other fire department activities.
- 18.03 A reserve firefighter will not be involved with any portion of interior structural firefighting.
- 18.04 When at all possible, a reserve firefighter shall obtain a written doctors release form from his/her physician stating his limitations as to duties with the Fire Department.
- 18.05 All reserve firefighters shall be trained in the operation of the vehicles located at his/her station.
- 18.06 When at all possible, the reserve firefighter shall attend and complete the Emergency Vehicle Operations Course offered by the Technical College and the Department.
- 18.07 During firefighting activities, the reserve firefighter shall report his/her presence to the incident commander and wait for assignment.

TOWNSHIP FIRE DEPARTMENT CHAPTER 1: ADMINISTRATIVE OPERATIONS	
Part 3: Job Descriptions Subject: Dispatcher Page 1 of 2 Effective Date: 09-01-95	Section: 1-3-19 Revised Date:

Part 3: Job Descriptions

Subject: Dispatcher

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Effective Date: 09-01-95

Section: 1-3-19

Revised Date:

19.01 Purpose. Define the duties of Dispatcher.

19.02 Goal. To describe the position of Dispatcher.

19.03 The Dispatcher reports to the Board of Directors of Township Fire Department.

19.04 The Dispatcher's status is salaried/exempt.

19.05 Basic Functions of Job:

Dispatcher answers telephone and provides dispatch services to Township Fire Department Personnel.

19.06 Typical Duties and Responsibilities:

- A) Answers incoming telephone calls and provides appropriate service/information to caller.
- B) Provides dispatch service to TFD personnel and contracted agencies in the event of an emergency - fire, rescue, etc. (Not Emergicare)
- C) Issues burning permits to township residents upon request according to TFD regulations.
- D) Dresses appropriately for business hours and conducts him/herself in a professional manner.
- E) Greets visitors to the office and provides appropriate information/documents as necessary.
- F) Enters information into the computer system as required by TFD procedures.
- G) Records, by electronic recorder, all calls coming into the dispatch center telephone lines.
- H) Receives reports and radio transmission requests from TFD personnel.
- I) Maintains the dispatch facilities for cleanliness, reports need for repairs at facility and prepares the meeting area for various functions. (Not

- responsible for cutting grass or snow removal.)
- J) Makes daily announcements regarding departmental issues.
- K) Assigns Purchase Orders for all requests including radio repairs.
- L) Distributes mail to the proper people or Officer Manager.
- M) Maintains the records for tapes, videos, books and other loaned items.

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Date: 09-01-95

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- N) Takes care of routine scheduled situations, e.g., testing of the generator system.
- O) Provides access to various areas at dispatch, such as records room, etc., to those that are authorized for such access.
- P) Complete reports and/or forms as required by Officer Manager.
- Q) Provides telephone answering service for Critical Incident Stress Management Teams.
- R) Catalogs and stores recorder tapes according to TFD policy.
- S) Receives reports and radio transmission requests from TFD personnel.
- T) Receives radios for repair from TFD personnel.
- U) Distributes repaired radios to TFD personnel.
- V) Trianalyzes radio batteries for TFD personnel as necessary.
- W) Other duties as assigned.

TOWNSHIP FIRE DEPARTMENT CHAPTER 1: ADMINISTRATIVE OPERATIONS
Part 3: Job Descriptions Subject: Part-Time Officer Manager Page 1 of 2 Section: 1-3-20 Effective Date: 12-01-95 Revised Date:

20.01 Purpose. Define the duties of the Part-Time Officer Manager.

20.02 Goal. To describe the position of the Part-Time Officer Manager.

20.03 Typical Duties and Responsibilities:

- A) The Officer Manager shall report to the President of the Board of Directors.
- B) The Officer Manager shall take work direction from the Board of Directors, from the President of the Board, the Chief, and the Assistant Chiefs.
- C) This is not a policy making position. The policy as set by the Board of Directors and initiated by the Officers of TFD is to be effectively fulfilled.
- D) This position involves interaction with the public and the Officer Manager or substitutes must exhibit a professional and courteous presence in all contacts. This person must have a basic understanding of how the Fire Department operates.
- E) This position includes several assignments involving the following: computer literacy; data entering; financial ability - budget work and analysis to effectively work with the public; the Board of Directors, Officers and members of TFD.
- F) Computer capabilities are expected in the areas of: wordprocessing, databases, spreadsheets, graphics, multimedia, on line communications and various fire department related programs.
- G) Computer data entry from various sources including but not limited to: fire runs, information as submitted by Inspectors, Training, EMS, Haz-Mat, and Investigation personnel in the event the staff officer prefers not to do it.
- H) Obtain supplies as needed - this may be a directive to the Dispatcher.
- I) Maintain records and submit bills in a timely fashion for such events as highway fires, railroad fires, hazardous materials events and other

services performed by Township Fire Department.

- J) Inspect invoices, match to PO's and verify account codes.
- K) Obtain information on routine questions such as insurance contracts or claims, discrepancies in bills received, or general questions from the Board of Directors.
- L) Assist with preparation for budget work. This would include obtaining

Subject: Part-Time Officer Manager

Date: 12-01-95

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valuations of the Towns, making comparisons to previous budgets and compiling data from all these sources for the Board to consider.

- M) Provide the bookkeeper with all financial records essential for the monthly billings, deposits and payments.
- N) Prepare major budget items for submission to bid with various vendors if requested by staff officers.
- O) Discuss computer applications, needs, comments received with the computer consultant, so that they can be addressed with issues brought up by other members, officers and outside agencies such as the Communications Center.
- P) Generally relieve the Board of Directors from being involved in routine daily operations of the business part of the organization.
- Q) Prepare Board meeting agenda after consulting with the Chief, Assistant Chiefs and Board President and mail agendas and pertinent information to the Board and designated TFD officers.
- R) Attend all Board of Directors meetings.
- S) Be responsible for advising the Board on changes in Government Regulations.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Apparatus Response Guidelines

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Section: 2-1-1

Effective Date: 02-26-90

Revised Date:

- 1.01 Purpose. To provide a systematic response of Department Units to fire and other emergency incidents.
- 1.02 Goal. This guideline lists the initial response orders for various types of incidents.
- 1.03 Engine 11 - Seymour fires only unless requested.
- 1.04 Brush 13 - All Seymour grass fires and all railroad fires.
- 1.05 Rescue 15 - All major alarms (Code 3) unless otherwise specified.
- 1.06 Tanker 16 - All Seymour fires. All structure fires and large grass fires in other townships.
- 1.07 Engine 21 - Washington fires only unless requested.
- 1.08 Engine 22 - Back-up engine for all structure fires (Code 3).
- 1.09 Brush 23 - All grass fires in Washington. Back-up for all other townships.
- 1.10 Rescue 25 - All Washington alarms, all structure fires, all Haz-Mat calls, and extrications according to Extrication S.O.G.
- 1.11 Tanker 26 - All Washington fires, all structure fires and large grass fires in other townships. Back-up tanker for chimney and grass fires (Code 1). Second (2nd) tanker to respond if two (2) tankers are requested for mutual aid.
- 1.12 Engine 31 - All Union fires. Structure fires in Brunswick north of Mitchell

Road.

- 1.13 Brush 33 - All grass fires in Union. Back-up for all Washington grass fires on I-94 and north, and Brunswick north of Mitchell Road.

Subject: Apparatus Response Guidelines

Date: 02-26-90

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- 1.14 Rescue 35 - All Union fires, all extrications per Extrication S.O.G. and when requested.
- 1.15 Tanker 36 - All Union fires. All structure fires and large grass fires in other townships. Back-up for Washington north of I-94 and north of CTH I for chimney fires.
- 1.16 Engine 41 - All Pleasant Valley, Clear Creek, Brackett area fires and structure fires south of CTH II in Washington, south of CTH Z in Brunswick and Extrications per Extrication S.O.G.
- 1.17 Brush 43 - All Pleasant Valley and Clear Creek grass fires. Back-up for Washington south of I-94 and Brunswick south of CTH II and Z.
- 1.18 Rescue 45 - All Pleasant Valley alarms and all structure fires.
- 1.19 Tanker 46 - All Pleasant Valley and Clear Creek fires. All structure fires and large grass fires in other townships. Back-up for chimney fires south of I-94 and CTH II (Code I).
- 1.20 P-400 - All structure fires and when requested (Code 2).
- 1.21 Engine 51 - All Brunswick fires. Back-up for Menards and Washington structure fires west of CTH F and Union fires west of Town Hall Road.
- 1.22 Brush 53 - All Brunswick grass fires. All Washington and Pleasant Valley grass fires west of CTH F and Union fires west of Town Hall Road..
- 1.23 Rescue 55 - All Brunswick alarms and all structure fires. Extrication according to Extrication S.O.G.
- 1.24 Tanker 56 - All Brunswick alarms. All structure fires and large grass fires in

other townships.

1.25 P-500 - All structure fires and when requested (Code 2).

1.26 Units shall respond Code-3 to primary response area.

1.27 Units shall respond Code-2 to back-up coverage areas.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Vehicle Operation

Page 1 of 2

Effective Date: 02-26-90

Section: 2-1-2

Revised Date:

2.01 Purpose. These S.O.G.'s are intended to provide a uniform understanding of Departmental rules and regulations concerning the driving and operation of both Fire Department and personal vehicles when on Departmental business.

2.02 Goal. These procedures will be in effect for all members of Township Fire Department.

2.03 Definition. To gain compliance with N.F.P.A. 1500 Standard, Section 4-1, we should be aware of the following recitals.

A) N.F.P.A. paragraph #4-2.4. Drivers of fire department vehicles shall be directly responsible for safe and prudent operation under all conditions. When the driver is under the direct supervision of an officer, that officer shall also assume responsibility for the actions of the driver.

B) N.F.P.A. paragraph #4-2.4. Drivers shall not move fire department vehicles until all persons on the vehicle are seated and secured with seat belts or safety harnesses in approved riding positions.

C) N.F.P.A. paragraph #4-3.1. All persons riding on fire apparatus shall be seated and secured to the vehicle by seat belts or safety harnesses at any time the vehicle is in motion. Riding on tailsteps or in any other exposed position shall be specifically prohibited. Standing while riding shall be specifically prohibited.

2.04 In addition, the responses by our Department are broken down into 3 specific codes, which are defined as follows.

A) Code 1 - Vehicles will respond to the scene without red lights or siren at

normal road speed, obeying all posted traffic signs.

- B) Code 2 - Vehicles will respond to the scene with both red lights and siren, with speed not to exceed the posted speed limit.
- C) Code 3 - Vehicles will respond to the scene with both red lights and siren with speed not to exceed more than 10 mph over the posted speed limit.

Subject: Vehicle Operation

Date: 02-26-90

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2.05 Applications.

- A) Only those firefighters that have successfully completed either the EVOC class offered by Chippewa Valley Technical College or the road test established by this Department will be allowed to drive vehicles owned by Township Fire Department, Inc.
- B) Unless responding with red lights and siren, all traffic laws will be obeyed while enroute to a fire, in fire units or personal vehicles. If responding with red lights and siren, do not exceed the speed limit by more than 10 mph.
- C) Head lights will be on and seat belts will be worn at all times while driving Departmental vehicles.
- D) Wait for directions from Dispatchers, especially if responding from a distant Township, do not tie up the radio with excessive traffic.
- E) If mutual aid is used, the tanker operations will be on Fire Comm radio frequency.
- F) Remember that you are asking for the right of way when responding with red light and siren but are not guaranteed to get it. Drive defensively and maintain control of your vehicle.
- G) When responding in Township Fire Department vehicles, the number of riders allowed in the cab will be limited to the number of seat belts.
- H) Use plain language for radio traffic.
- I) Upon returning to Station, a Vehicle Check List sheet will be completed on each responding vehicle.
- J) Truck routing procedures will be found on the preceding pages and will

be used unless directed otherwise by the incident commander.

K) Do not back-up unless you have a guide.

L) All Department vehicles shall be used for official business only.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Private Vehicles as Emergency Vehicles

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Section: 2-1-3

Effective Date: 01-01-96

Revised Date:

3.01 Purpose. To provide the minimum standard to the Wisconsin Authorized Emergency Vehicle Act 142.

3.02 Goal. To pertain to all privately owned vehicles authorized by the Department as Emergency Vehicles for Township Fire Department, Inc.

3.03 Definition.

A) 340.01(3)(d) Authorized Emergency Vehicle.

1. "Privately owned motor vehicles being used by deputy state fire marshals or by personnel of a full-time or part-time fire department or by members of a volunteer fire department while enroute to a fire or on an emergency call pursuant to orders of their chief or other commanding officer."

B) 340.01(3)(dm)(1) Authorized Emergency Vehicle.

1. "Designated or authorized by an ambulance service or rescue squad chief in writing annually."

3.04 Rules of the Road.

A) 346.02(1) Rules of the Road for Emergency Vehicles.

1. The operator of an authorized emergency vehicle, when responding to an emergency callor when responding to but not upon returning from a fire alarm, may exercise the

privileges set forth in this section, but subject to the conditions stated in subs (2) to (5).

B) 346.03 (2) Rules of the Road for Emergency Vehicles.

1. The operator of an authorized emergency vehicle may:

a) Stop, stand or park, irrespective of the provisions of this chapter;

Subject: Private Vehicles As Emergency Vehicles

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Date: 01-01-96

b) Proceed past a red or stop signal or stop sign, but only after slowing down as may be necessary for safe operation;

c) Exceed the speed limit;

d) Disregard regulations governing direction of movement or turning in specified directions.

C) 346.03(3) Rules of the Road for Emergency Vehicles.

1. The exemption granted the operator of an authorized emergency vehicle by sub (2) (a) applies only when the operator of the vehicle is giving visual signal by means of at least one flashing, oscillating or rotating red light..... The exemptions granted by sub (2) (b), (c) and (d) apply only when the operator of the emergency vehicle is giving both such visual signals and also an audible signal by means of a siren or exhaust whistle,

D) 346.03(5) Rules of the Road for Emergency Vehicles.

1. The exemptions granted the operator of an authorized emergency vehicle by this section do not relieve such operator from the duty to drive with due regard under the circumstances for the safety of all persons nor do they protect such operator from the consequences of his or her reckless disregard for the safety of others.

E) 346.57(2) Speed Restrictions.

1. Reasonable and prudent limit. No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard for the actual and potential hazards then existing. The speed of a vehicle shall be so controlled as may be necessary to avoid colliding with any object, person, vehicle or other conveyance on or entering the highway in

compliance with legal requirements and using due care.

F) 346.57 (3) Speed Restrictions.

1. Conditions requiring reduced speed. The operator of every vehicle shall, consistent with the requirements of sub. (2), drive at an appropriate reduced speed when approaching and crossing an intersection or railway grade crossing, when approaching and going around a curve, when approaching a hillcrest, when

Subject: Private Vehicles As Emergency Vehicles

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traveling upon any narrow or winding roadway, when passing school children, highway construction or maintenance workers or other pedestrians, and when special hazard exists with regard to other traffic or by reason of weather or highway conditions.

G) 347.25 (1) Warning Lamps on Emergency Vehicles.

1. Except as provided in subs.(1m)(a), (1r) and (1s), an authorized emergency vehicle may be equipped with one or more flashing, oscillating or rotating red lights, except that ambulances and fire department equipment may be equipped with red or red and white lights, and shall be so equipped when the operator thereof is exercising the privileges granted by s.346.03. *The lights shall be so designed and mounted as to be plainly visible and understandable from a distance of 500 feet both during normal sunlight and during hours of darkness. No operator of an authorized emergency vehicle may use the warning lights except when responding to an emergency call, when responding to but not returning from a fire alarm or when necessarily parked on a highway in a position which is likely to be hazardous to traffic using the highway.

H) 347.25(1r)(b) Warning Lamps on Emergency Vehicles.

1. A vehicle of a fire department under s. 340.01(3)(c) may be equipped so that the high beams of its headlamps pulsate or flash alternately at a rate of 70 to 90 pulses or flashes per minute. The pulsating or flashing headlamps may be used only when the warning lamps authorized under sub (1) are in use.

I) 347.38(4) Horns and Warning Devices.

1. An authorized emergency vehicle shall be equipped with a siren, but such siren shall not be used except when such vehicle is operated in response to an emergency call....

3.05 Non-Fire Department Personnel as Passengers.

- A) When an officer is responding to an emergency with non fire department personnel in care (i.e. family members, friends, etc.) the response shall be Code I.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: STANDARD OPERATING GUIDELINES	
Part 1: Response Guidelines	
Subject: General Practices	
Page 1 of 3	Section: 2-1-4
Effective Date: 02-26-90	Revised Date:

- 4.01 Purpose. These policies will be implemented to assure both safety at the emergency scene and continuity of practices.
- 4.02 Goal. These procedures will be in effect for all members of Township Fire Department operating at or near the emergency scene.
- 4.03 Definition. These procedures are meant to act as reminders to those who work at the emergency scene. In many cases, they will have to be supplemented by common sense as the many variables found at a response area can not always be predicted.
- 4.04 Application.
 - A) If responding to a major incident, Emergicare will be notified to standby at the scene. Responding Emergicare members will report to Command Post upon their arrival for assignments.
 - B) The need for ventilation should be assessed prior to entering a structure.
 - C) If a hydrant is used, the hydrant number and amount of water used shall be recorded on the Hydrant Use Form and given to the Incident Commander.
 - D) First in firefighters will make a report (statement) to the Incident Commander giving their initial findings and assessments, also indicating any property damage they did to gain entry.

- E) Always observe fellow firefighters for excessive heat, danger, and frostbite. Report all accidents no matter how minor to the Incident Commander. Injury Report Forms must be filled out within 24 hours of the incident.
- F) Ladder crews shall always have a firefighter to heel the ladder while in use.
- G) When unusually stressful incidents occur, all personnel involved may discuss the incident within 24 to 72 hours of that incident with properly

trained

Subject: General Practices

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personnel.

- H) The Incident Command System will be followed at all incidents.
- I) Actions to follow when dealing with questions concerning your firefighting activities:
 - 1) DO NOT make any comments regarding your firefighting activities or other emergency activities to anyone who is not a member of your department.
 - 2) DO NOT make any comments regarding your actions to news media.
 - 3) DO NOT make any comments regarding your actions to the property owner or neighbors.
 - 4) DO NOT make any comments regarding your actions to any insurance representative without first contacting your agent for approval.
 - 5) When a reporter or other news media, neighbor, or any nonmember person, asks you questions regarding any emergency situation, say - "No comment. We make no comments during an emergency situation and we make no comments during the investigation period after an emergency situation."

Reason: A fire department member made the following comment after the fire to a property owner: "We could have done it better. We could have done it differently."

Result: A lawsuit against the fire department for improperly fighting a fire.

- 6) REMEMBER - refer all questions to your information officer. Critique your actions among your own members at fire drill meetings. Be strong - Be firm! Refer all questions to the information officer.
- 7) To the Fire Chief or Public Information Officer - If anyone asks a question:

Subject: General Practices

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- a) Ask yourself - who is this person?
- b) Ask yourself - why is this person asking?
- c) Ask yourself - does this person have the need to know?
- d) Then check with your insurance representative to see if it is OK.
- e) Tell all unauthorized people: "You must leave the emergency premises area at once! Leave the premises at once or we will call the police." If they don't leave, call the police and have them removed. This includes the property owner or neighbors. You are in the business of saving lives first, property second, not in giving interviews or talking to unauthorized people.

Contact your insurance representative before making any comments to anyone.

- J) Only Department approved accessories will be worn on turn out gear.
- K) When near the water or on the water of any Departmental water incident, approved flotation devices will be worn at all times.
- L) Injured personnel will be transported by ambulance to the hospital, not in private vehicles, unless approved by the Incident Commander.
- M) All personnel shall wear rubber gloves during an extrication, body removal, or any other incident that may give that firefighter contact with another person's body fluids. If necessary (not in the case of firefighting) the rubber gloves will be worn under your normal issued protective gloves. If contact has been made with body fluids while wearing your protective gloves, those gloves will be considered contaminated and will be destroyed.

- N) A weather report will be given for grass fires and Haz-Mat incidents. In extreme cold, temperatures and wind chills should be given. The weather report should include temperature, wind direction, and dew point. Long range forecasts will be given if possible.
- O) If a problem is found with the operation of any support equipment, an Equipment Defect Report will be made out and given to the Battalion Chief of the involved station.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Protective Clothing

Page 1 of 1

Section: 2-1-5

Effective Date: 02-26-90

Revised Date:

- 5.01 Purpose. These policies will be implemented to assure the safety of all firefighters working in or near a response area.
- 5.02 Goal. These procedures will be in effect for all members of Township Fire Department operating at or near the emergency scene.
- 5.03 Definition. All members of Township Fire Department shall be issued a set of protective gear which will include; helmet with liner, face shield, nomex hood, bunker coat, bunker pants and suspenders, fire boots and fire gloves.
- 5.04 Application.
 - A) All firefighters will be issued protective gear as soon as possible after joining the Department. This gear will be given out by Chiefs 1, 2 or 3 and a record will be kept of all equipment issued to each firefighter. It is the responsibility of each firefighter to maintain this gear in good operating condition and to report any problems or loss to the Battalion Chief of his/her station. This gear shall be kept ready for use in the event of a response.
 - B) Full protective gear will be worn when involved in structural firefighting, vehicle fires, extrication or other forcible entry, salvage, overhaul, and hazardous material incidents.
 - C) When involved in a hazardous materials incident, specialized clothing

may have to be worn depending on the material found at the scene.

- D) Face shields or other approved eye protection will be worn by all personnel in the area while doing forcible entry or using power or hydraulic extrication equipment.
- E) A helmet with face shield or approved hard hat, leather work boots 6" high or fire department boots, gloves, cotton or wool clothing or light weight flame resistant clothing or coveralls will be worn at grass and wildland fires. No synthetic or polyester clothing, shorts, cut offs, swim suits, sandals, or tennis shoes will be worn on any fire suppression response for grass or wildland fires.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Self-Contained Breathing Apparatus

Page 1 of 4

Section: 2-1-6

Effective Date: 10-28-92

Revised Date:

- 6.01 Purpose. To provide a guideline for the use and care of Self-Contained Breathing Apparatus.
- 6.02 Goal. To provide a guideline which will provide the following:
Permit members to use "SCBA" as a protection from toxic and oxygen deficient atmospheres.
Promote skill retention by providing a department standard.
Promote safety by following manufactures' directions and field tested methods of operation.
- 6.03 Reference. "Mine Safety Appliance Company"(MSA) Pittsburgh, Pennsylvania, USA 15230. "Essentials of Fire Fighting" (IFSTA 200), International Fire Service Training Association, Stillwater, OK.
- 6.04 Equipment Description. The Department uses the MSA Ultralite II with the Quick-Fill adaptor. This unit consists of an Ultravue^R Facepiece complete with breathing tube, regulator and high pressure hose assembly, audible low pressure warning device, FHR (flame and heat resistant) harness, carrier assembly, and 30 minute air cylinder.
- 6.05 Service Life. The apparatus is rated and approved by NIOSH/MSHA as a 30 minute duration unit when properly donned, used and maintained by trained personnel. An alarm actuates when approximately 20% of the full rated air pressure remains in the cylinder. The alarm will continue to operate until the cylinder is nearly depleted. The user should not expect to obtain exactly

30 minutes service life from this apparatus on each use. Where work is more strenuous, the duration will be shorter, possibly as short as one half the rated service time. The duration of the apparatus will depend on such factors as:

- A) The degree of physical activity of the user.
- B) The physical condition of the user.
- C) The degree to which the user's breathing is affected by excitement, fear or other emotional factors.
- D) The degree of training or experience which the user has had with this or similar equipment.
- E) Whether or not the cylinder is fully charged at the start of the activity.
- F) The possible presence, in the compressed air, of carbon dioxide

Subject: Self-Contained Breathing Apparatus

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Date: 10-28-92

- concentrations greater than .04% normally found in atmospheric air.
- G) A loose or improperly fitting face piece.
- H) The condition of the apparatus.

6.06 Routine Inspection. The following steps shall be followed during SCBA inspection by department members:

- A) Check cylinder pressure gauge for full indication. If indicated cylinder pressure is below full, replace with fully charged cylinder.
- B) Check the latest cylinder hydrostatic test date to ensure it is current. (Within three (3) years for composite lightweight cylinders.)

Warning

Cylinders which show evidence of exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, or gauge lens melted or damaged, shall be removed from service and retested prior to recharging.

6.07 Donning Procedures.

- A) Check the cylinder gauge for full indication and ensure that the cylinder is firmly locked into position by the cylinder lock strap. Stand at the top end of apparatus (with cylinder valve pointing away from you). Position and spread out the shoulder straps. Grasp the back-frame with both hands --one on each side of the cylinder.
- B) Swing the apparatus straight up and over the head, keeping your elbows close to your body. Rest the apparatus on your back while still slightly

bent over. Fasten chest strap to position shoulder straps.

- C) While standing upright, pull shoulder strap tabs out and straight up. Hike until up on your back.
- D) Fasten waist belt and pull tight for snug fit. Position regulators to reach controls.
- E) Don the face piece. Place neck strap over head and hold facepiece by the straps or bottom of mask and put chin into facepiece first.
- F) Pull harness back over head. To tighten straps, pull straight back--not

Subject: Self-Contained Breathing Apparatus

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out to the side.

- G) Block breathing tube and inhale gently. Hold breath at least ten (10) seconds---facepiece should collapse and stay collapsed against face.
- H) To test exhalation valve, block breathing tube and gently exhale. If valve is stuck you will feel a heavy rush of air around facepiece. You may need a sharp exhalation at first to crack valve.
- I) Open cylinder valve fully --- at least three (3) turns. Connect breathing tube to regulator and open main-line valve about one quarter turn, until it clicks and locks open. To test by-pass valve, crack it open, then close quickly.

6.08 To Remove Apparatus.

- A) Close main line valve and disconnect breathing tube. Close cylinder valve and remaining air in high-pressure hose is released if main-line valve is opened. Cover regulator outlet and close main-line valve by pushing in on locking bar and turning clockwise. .
- B) To remove facepiece, put thumbs under buckles to loosen headbands. Fully extend headbands. Hold facepiece by speaking diaphragm assembly and pull up and away from face.

6.09 Cylinder Replacement Procedure.

- A) Push in and rotate the cylinder knob clockwise to close the valve.
- B) Open main line valve to bleed down residual pressure.

- C) Uncouple the high-pressure hose coupling for the cylinder valve by rotating counter clockwise.
- D) Loosen the cylinder band lock strap and release the cylinder.
- E) Remove cylinder by sliding upward and replace with fully charged cylinder.
- F) Fasten in place with valve opening facing left and replace high pressure hose to tank (be sure to check O-ring) and hand tighten only.

Subject: Self-Contained Breathing Apparatus

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Caution

Do not leave the cylinder valve open when the apparatus is not in use!

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Personal Distress Device - Pass

Page 1 of 2

Section: 2-1-7

Effective Date: 10-29-92

Revised Date:

- 7.01 Purpose. To provide for operating the PAL 5.
- 7.02 Goal. The PASS Personal Distress Device shall be tested, inspected and maintained according to this guideline before and after each use, and at scheduled inspections for this equipment.
- 7.03 How to Use PAL 5--In Auto Position. To arm for automatic distress signaling, switch to the "Auto" position. Tone will beep 3 times to indicate arming. If the unit remains motionless for approximately 25 to 30 seconds in the "Auto" position, the horn will sound a series of short beeps. These pre-alert beeps warn the wearer that the "PAL" is about to go into full alarm due to lack of motion. (This unit can be reset during pre-alert with slight movement.) After the 5 seconds (9 beeps) of pre-alert, the unit will go into full alarm. The PAL 5 will emit a 95 dB+ level alarm for over one hour and then emit an intermittent alarm until the battery is depleted (4 to 8 hours, depending on battery condition). Push and turn knob to "off" position to cancel alarm. When the PAL 5 is in the "Auto" position, the light on the front of the unit will flash. This permits easy identification to the wearer or any other person in close proximity that the unit is armed prior to entering a potentially hazardous area.
- 7.04 How to Use in Manual Position. To use this unit manually in a distress situation, switch to "on" position. Pulsating distress tone will sound until unit is turned to "off" position. When not in use, be sure to switch to "off" position.

7.05 Temperature Alarm. The PAL 5 also has heat sensors designed to sound a warning alarm when the unit reaches a predetermined temperature. The unit is designed with two built-in heat sensors, one which senses outer surface temperature and another that determines temperatures inside the device. A chirping sound will indicate high temperature. PAL 5 should be worn on top of all protective gear facing the primary source of heat. Also be advised, PAL 5 does not replace the judgement and specialized training of firefighters in determining when to vacate the area.

7.06 Battery Replacement. Remove the small cover on the back side of the unit secured by two (2) screws. Lift the old battery from its compartment. Carefully remove the old battery from the connector. Connect same to top of the new Duracell or equivalent battery and place it in the battery compartment. Replace

Subject: Personal Distress Device - PASS

Page 2 of 2

Date: 10-29-92

the small cover making sure that the gasket seal is in place and has not been damaged.

7.07 Repair Information. Other than the battery, there are no serviceable parts inside this unit. Should it malfunction and require servicing, turn it in for a loaner unit and it will be sent in for repairs.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Identification Tags

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Section: 2-1-8

Effective Date: 02-26-90

Revised Date: 01-01-96

- 8.01 Purpose. This policy is established to ensure accountability of all firefighters at the scene of an emergency.
- 8.02 Goal. These procedures will be in effect for all members of Township Fire Department operating at the emergency scene.
- 8.03 Definition. All members of Township Fire Department shall be issued a set of identification tags to be worn on his/her turnout coat.
- 8.04 Application.
- A) All firefighters and officers will be issued two (2) I.D. tags.
 - B) I. D. tags will be carried on turnout coat.
 - C) Upon arrival at the incident scene, one (1) tag will be placed on the ring carried on the first responding engine. If the firefighter arrives before the engine, he/she will place his/her tag on the ring as soon as possible after the engine arrives. **THE TAG MUST BE PLACE ON THE RING AS SOON AS POSSIBLE!!!**
 - D) Prior to entering a burning structure, or any other hazardous location as designated by the Incident Commander, the second tag will be left with

the Entrance Officer and picked up immediately upon leaving the hazardous location.

- E) The tag that was originally placed on the ring will be picked up just prior to leaving the incident scene. Each firefighter will pick up the tag issued only to him/her.
- F) When the Command Post becomes operational, the ring will be transferred from the primary engine and kept in the Command Post until the C.P. is released. At that time the ring will go back to the primary engine.
- G) At the end of each run, the Battalion Chief from the Township of the incident will inventory the ring and account for each firefighter whose tag is still on the ring.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
--

Part 1: Response Guidelines

Subject: Command Post

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Section: 2-1-9

Effective Date: 02-26-90

Revised Date:

9.01 Purpose. These policies will be implemented to assure the continuity of command and information resources at all major responses. This will be used in conjunction with Incident Command procedures.

9.02 Goal. These procedures will be used by the Incident Commander of the emergency as found in the following explanation of emergency levels.

9.03 Definition: Emergency Levels.

A) Level I:

Example of Level I - small grass fire, small structure fire (unattached garage or out building), or chimney fire.

1. The Incident Commander may also fill the roles of Operations Officer, Communications, Water Supply, Safety Staging, Medical and Public Information Officers.

B) Level II:

Example of Level II - large grass fires, structure fire, drowning.

1. The following personnel will be used on a Level II emergency.

- a) Incident Commander
- b) Safety Officer
- c) Operation Officer
- d) Water Supply Officer
- e) Staging Officer

2. Other Command Post Officers or Representatives may be implemented at discretion of the Incident Commander.

C) Level III:

Example of Level III emergency - multiple structure fire, Haz-Mat incident, large structure fire (barn).

Subject: Command Post

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1. The following personnel will be used in a Level III Emergency.
 - a) Incident Commander
 - b) Safety Officer
 - c) Operations Officer
 - d) Communications Officer
 - e) Water Supply Officer
 - f) Staging Officer
 - g) Medical Officer
 - h) Public Information Officer
2. Other Command Post Representatives may be implemented at discretion of the Incident Commander.
3. At any Hazardous Material incident, the Haz-Mat Coordinator or his assistant will automatically become the Operations Officer.

9.04 Application.

A) Command Post.

1. Rescue 15 shall be used as the Command Post.
2. In its absence or until the arrival of Rescue 15, the Primary Engine or an officer's vehicle may be used as the Command Post.

B) Command Post Location.

1. At a Level I or II emergency, the Command Post will be established in the immediate area, if possible.
 2. At a Level III emergency, the Command Post can be established in the immediate area or at a remote location if the hazards of the incident warrant.
- C) Command Post Communications.
1. All radio traffic directed to a Command Post Officer/Officers from Sector Officers will be routed through the Operations Officer.
 2. Routine fire ground communications (ex. crew instructions for ladder placement, hose line attack, etc.) between Sector Officers

Subject: Command Post

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should be direct without going through Command Post.

3. Extra portable radios will be given to the Command Post or Engine at the scene. Use low band portable radios for fireground operations, if contact with Dispatch is necessary, the Command Post or Primary Engine (in absence of C.P.) will relay the message.

9.05 Job Descriptions of the Command Post.

A) Incident Commander

The Incident Commander will be the Fire Chief or the ranking officer of Township Fire Department.

B) Operations Officer

The Operations Officer is the second most important person at the scene. The Operations Officer will be in charge of all fire operations.

He/She will answer directly to the Incident Commander. This position shall be filled by the Battalion Chief or other officer from the township the incident is in.

C) Safety Officer

The Safety Officer shall oversee the safety of firefighters at emergency calls and shall correct any action he/she feels unsafe. The safety officer has overall authority to carry out this function.

D) Communications Officer

The Communications Officer will be used on a Level II or Level III emergency. The Communications Officer will be in charge of all incoming and outgoing communications. He/She will decide the importance of each call and route all messages to the proper people in the Command Post. He/She will keep logs of all incoming and outgoing messages. He/She will also work in conjunction with the Ham Radio Operators. He/She will report directly to the Incident Commander.

E) Water Supply Officer

The Water Supply Officer will be in charge of locating a suitable water

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Date: 02-26-90

source and all truck routing at the fire scene. He/She will report directly to the Incident Commander.

F. Staging and Equipment Officer.

The Staging and Equipment Officer will be responsible for the staging of all incoming vehicles. He/She must find a place to stage all equipment, keep logs of equipment in the staging area and keep logs of where equipment has been sent. He/She will report directly to the Incident Commander.

G. Medical Officer.

The Medical Officer makes sure there is enough medical help and supplies available. He/She keeps a list of all injured people, time found, time sent to the hospital, who transported by, and what hospital transported to. He/She keeps a list of all deaths, locations and time bodies were found, if possible. In Level I, this person will work in the Command Post, but may have to leave briefly. In Level II and III this person will go into the field and take charge of the field operations. If possible, this position will be filled by an Associate Emergicare Member. It can be a firefighter/Emergicare member or medical personnel from another department.

H) Public Information Officer.

The Public Information Officer will handle all News Media (T.V., Newspaper, and Radio). He/She will make sure that there is a place for

the News Media to be briefed. He/She must keep all News Media out of the Command Post. He/She makes sure that the Incident Commander keeps the News Media briefed.

I) Resource Officer.

The Resource Officer will be in charge of procuring any equipment or supplies that are necessary during the emergency. He/She must keep logs of where equipment came from and where it is positioned.

J) Law Enforcement Representative.

This person is responsible for all Law Enforcement operations (setting up of roadblocks and traffic control). He/She is also responsible for

Subject: Command Post

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incoming law enforcement agencies. This person is a member of the primary agency and will report directly to the Incident Commander.

K) Civilian Operations.

This person is in charge of all civilian operations. He/She must keep a list of civilians that are used and where they are used. He/She will also act as a liaison with all civilian agencies and the Incident Commander.

L) Local Government Representative.

This person must be able to make decisions that involve the Local Government, authorize the spending of emergency funds and keep records of all spending. He/she will generally assist the Incident Commander.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Menard's Complex Response

Page 1 of 3

Section: 2-1-10

Effective Date: 08-01-95

Revised Date:

10.01 Purpose. This guideline will be implemented to assure a preplanned response to this particular target.

10.02 Goal. These guidelines will be used so that the Officer in Charge will know what the preplanned call up equipment will be.

10.03 Responding Units.

A) The following units will respond to the scene of an active fire alarm at Menards.

1. Engines 11, 21, 31, 51.
2. Tankers 16, 26, 36, 46, 56.
3. Rescue 15, 35, 45, 55.
4. Brush 33.

B) The following units will respond to the fill site.

1. P-400.

2. P-500.
 3. Engine 22.
 4. Mutual Aid Portable Pumps.
- C) The following Mutual Aid Units will be requested.
1. Altoona tanker and air unit.
 2. Full commercial box alarm from Chippewa Fire District.
 3. Elk Mound tanker.

Subject: Menard's Complex Response

Page 2 of 3

Date: 08-01-95

4. Rock Creek tanker.
 5. Eau Claire Fire quint.
- D) The following unit will respond to Station 2 for standby.
1. Engine 41.
- E) The following Departments will handle any additional calls in Township's Area.
1. Eau Claire Fire.
 2. Altoona Fire.
- F) The following Departments shall be notified to standby.
1. Osseo.
 2. Mondovi.
 3. Strum.
 4. Eleva.
 5. DNR.

10.04 Due to the variety of products in the area, all personnel in the immediate vicinity of the fire will be in full turn out gear and will be wearing and using breathing apparatus unless otherwise designated by the Incident Commander or Safety Officer.

10.05 Wind direction, speed, humidity and weather conditions shall be constantly monitored during the entire incident.

10.06 Level III Incident Command will be established as per Command Post S.O.G.

10.07 Radio Frequencies.

A) Operations will use T.F.D. (Low Band) frequency.

B) Safety will use T.F.D. (High Band) frequency.

Subject: Menard's Complex Response

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Date: 08-01-95

C) Staging, tanker and fill site operations will use Fire Comm frequency.

D) Air Operations will use Marc frequency.

E) Emergicare and EMS will use Local Government.

F) Second Fire will be dispatched on primary T.F.D. frequency and then switch to Local Government.

10.08 All available breathing apparatus and bottles shall be taken to the resource area.

10.09 Additional help shall be provided for Dispatcher if at all possible.

10.10 The fill site for all tankers will be the pond in front of the complex unless otherwise directed, with a one way traffic pattern established.

10.11 Refer to map in Department vehicles for building and hydrant location.

10.12 Base shall call Comm Center and have them dispatch Emergicare and Gold Cross Ambulance to staging for standby. Also notify appropriate law enforcement agencies for traffic and crowd control.

10.13 All Battalion Chiefs shall report to Command Post for Sector Assignments. Other officers when available to report to staging for assignment.

10.14 Fatigue --- If it appears that many hours will be spent at the scene, some personnel should be released, if possible, for the purpose of relief later in the fire.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Waste Research Response and Reclamation
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Page 1 of 2

Section: 2-1-11

Effective Date: 02-26-90

Revised Date:

11.01 Purpose. This policy will be implemented to assure a preplanned response to this particular target.

11.02 Goal. These procedures will be used, so that the officer in charge will know what the preplanned call up of equipment will be. Any of this procedure may be changed at the discretion of the Officer in Charge.

11.03 Responding Units.

A) The following units will repond to the scene of an active alarm at Waste Research.

1. Engines 21, 22, 31, 41, 51.
2. Tankers 16, 26, 36, 46, 56.
3. Rescue 15, 25, 35, 45, 55.
4. Brush 23.

- B) The following units will report to the fill site.
 - 1. P-400.
 - 2. P-500.
 - a) The fill site can be Lorch Ave., or the hydrant at Golf and Highway 93. 300,000 gal. on site holding tank.
- C) The following Mutual Aid Units will be requested.
 - 1. Regional Haz-Mat Response Team.
 - 2. Eau Claire Fire Quint.
 - 3. Altoona Tanker and Air Unit.

Subject: Waste Research Response and Reclamation

Page 2 of 2

Date: 02-26-90

- 4. Two tankers and air unit from Chippewa Fire District.
- 5. Fall Creek Tanker.
- 6. Advise all incoming units to bring any spare AFFF.
- D) The following Departments will handle any additional calls in Township's area.
 - 1. Eau Claire Fire.
 - 2. Altoona Fire.

11.04 Level III Incident Command will be established as per Command Post S.O.G.

11.05 Dispatch will obtain weather conditions after initial dispatch of vehicles and as soon as possible, give units pertinent information as to wind directions, velocity, wind shift, humidity, cloud ceiling, visibility and any other information requested by responding apparatus. All responding units and firefighters should stay upwind of the spill area and wear breathing apparatus and full turn-out gear for initial protection.

11.06 Tanker 46 will lay L.D.H. to attack engine and then position at hydrant at south gate or west side of property of Waste Research. (Which hydrant will depend upon prevailing winds.)

- 11.07 Spare S.C.B.A. bottles will be requested from our individual stations and mutual aid departments responding.
- 11.08 Additional help will be provided for dispatcher.
- 11.09 All incoming equipment will go to the staging area (Northwest Enterprises parking lot depending on wind conditions) and report to staging officer.
- 11.10 Incident Command will advise base if law enforcement is needed to secure the area from entry by unauthorized personnel or to evacuate specific areas.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: STANDARD OPERATING GUIDELINES	
Part 1: Response Guidelines	
Subject: Petroleum Spills	
Page 1 of 4	Section: 2-1-12
Effective Date: 02-26-90	Revised Date:

- 12.01 Purpose. The intent of this section is to provide a guideline for actions taken at an incident involving hazardous materials, in particular petroleum product leak or spill.
- 12.02 Goal. The legislative authority for compliance rests in Chapter 144.76 of the Wisconsin State Statutes regarding the Hazardous Substance Spill Law.
- 12.03 The Incident Commander is responsible for initial compliance and for keeping the Chief/Battalion Chief informed on the incident so appropriate command decisions can be made. The Chief/Battalion Chief will be held accountable for overall compliance with this policy, while the Incident Commander bears the ultimate responsibility for enforcement.
- 12.04 Guideline.
 - A) The spiller has the responsibility for notifying the Department of Natural Resources (DNR) for any spill amount. The Township Fire Department, when dispatched to such an incident or when specifically requested, will assist the spiller in notifying the DNR in the following cases:

1. Gasoline spill of
 - a) 10 gallons or more when spill occurs on paved streets, drives, parking lots or cement slab.
 - b) 10 gallons or more on gravel, sand or soil, and any amount in rivers, streams, lakes or wetlands.

1. Fuel oil spills of
 - a) 20 gallons or more on paved streets, drives, parking lots or cement slab.
 - b) 20 gallons or more on gravel, sand or soil, and any amount in rivers, streams, lakes or wetlands.

12.05 The Incident Commander, or Base if requested, will notify appropriate agency personnel when required.

Subject: Petroleum Spills

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Date: 02-26-90

12.06 For spill incidents that do not require immediate DNR notification, a copy of the incident report will be sent to the DNR officer. (Note: If in doubt, contact the DNR.)

12.07 When filling out the incident report, indicate that it is a hazardous material incident.

12.08 Any disposal and cleanup needs created by the incident will be referred to a contractor of the spillers choice.

12.09 Incident Response Guidelines

- A) Avoid driving into or near the liquid or vapor.
- B) Remain upwind and upgrade if possible.
- C) Size-up as per SOG's, determine product, advise Chief/Battalion Chief of situation.
- D) Eliminate ignition sources.
- E) Lay preconnect with light water capabilities if appropriate.
(Note: Use water only when life safety requires it.)
- F) Life rescue as required.
- G) If an unknown encounter of a hazardous material, act accordingly, as if there is an acute hazard.
- H) SIMPLY WASHING DOWN PETROLEUM SPILLS IS NOT ACCEPTABLE.
- I) All spill incidents will be reported to the DNR 1-800-943-0003.

12.10 Containment/Absorption Guidelines (by preference)

A) Ground Corncobs (SLIK WIK)/Sawdust -

1. DO NOT use this material for spills of corrosive material. It will generate heat and could ignite. This can be used on petroleum spills. When used, have RESCO dispose of the material. Have Base call their twenty-four (24) hour phone number.

B) Sand/Gravel -

1. Transportation should follow DNR guidelines. Spiller will bear the transportation and disposal costs.

Subject: Petroleum Spills

Page 3 of 4

Date: 02-26-90

C) Absorbent Pads -

1. When a pad is saturated, place it in container so no product or vapor can escape; preferably a proper DOT container.

D) Wash Down -

1. Only acceptable for required life safety measures.

12.11 Captured Liquids

A) Secure scene from ignition sources.

B) Spiller may capture fuel for his/her own use, if placed into proper DOT approved container for transport.

C) Fire Department personnel are not to remove the liquid from the scene.

12.12 Unattended Vehicle

A) Stop or control leak.

B) Treat spill.

C) If needed, have vehicle towed - contact local law enforcement for proper

tags and reports.

D) Notify DNR.

12.13 Contact Personnel

A) Department of Natural Resources -

1. Emergency Phone Number 1-800-943-0003.
2. District DNR Office (7:45 - 4:30) 839-3700.
3. Eau Claire Area DNR Officer 839-3777.

Subject: Petroleum Spills

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Date: 02-26-90

4. All reports sent attention of John Grump - District Spill Coordinator.
5. Eau Claire Emergency Government 839-4736.
6. Emergency Government/WisconsinDNR
 - a) 24 hour number (Madison) 1-800-943-0003.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines
Subject: Hazardous Materials
Page 1 of 2
Effective Date: 02-26-90

Section: 2-1-13
Revised Date:

- 13.01 Purpose. These guides are to enhance a safe response and command at a hazardous materials emergency.
- 13.02 Goal. These procedures will be in effect for all members of Township Fire Department operating at the scene of a Hazardous Materials Incident.
- 13.03 Definition. A hazardous materials incident is one in which a harmful substance has breached it's container and threatens the safety of the general population or the environment.
- 13.04 Application.
- A) Base will obtain weather conditions after intitial dispatch of vehicles and as soon as possible, give units pertinent information as to wind directions, velocity, wind shift, humidity, cloud ceiling, visibility, and any other information requested by responding apparatus. All responding units and firefighters should stay upwind of the spill area and wear breathing apparatus and full turn-out gear for intitial protection.

- B) First units to arrive at the scene will advise Base as to the nature of the problem and check placards, shipping papers, bills of lading, identification markings on tanks or trailers, license numbers on vehicles, airbills, waybills, consist (wheel report) to determine the identity of the material involved. The name of the substance will be spelled out, with verification spelling returned from Base. The use of binoculars and Emergency Response Guidebook are also recommended. All tankers responding from outside the Township in which the incident occurred will respond Code 1 unless directed otherwise by an Officer at the scene.
- C) The Incident Commander and/or Hazardous Materials Coordinator will advise Base if evacuation is required and if Mutual Aid is needed.
- D) The responding units will advise Base if Law Enforcement is needed to secure the area from entry by unauthorized personnel or to evacuate specific area.
- E) A staging area should be set up as soon as possible so responding

Subject: Hazardous Materials

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Date: 02-26-90

apparatus and firefighters can safely wait for a call to respond to the actual spill area and to relieve congestion at the scene.

- F) All additional responding units and firefighters should respond to the staging area and not the scene until requested by the Incident Commander and/or the Hazardous Materials Coordinator. Someone should be designated as the Staging Officer and he/she should maintain an inventory of apparatus and manpower available at the staging area and have a portable radio to maintain open communication with the Incident Commander and/or Hazardous Materials Coordinator.
- G) If available, a member of Emergicare should be made accessible with their trauma gear near the Command Post to render aid to anyone requiring assistance. Depending on the nature of the material involved in the spill, the local hospital should be informed of our response in the event that they are needed for the decontamination of effected personnel or in the treatment of trauma caused by the materials involved. Also, upon the judgement of the Incident Commander and/or the Hazardous Materials Coordinator an ambulance may be asked to respond, on a standby basis, as a safety measure.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: County Level B Incidents

Page 1 of 6

Section: 2-1-14

Effective Date: 02-22-94

Revised Date:

- 14.01 Purpose. This guide is intended to establish response authorization and procedures for a Level B hazardous materials incident. This procedure will be applicable for either a city or county response.
- 14.02 Goal. This guide covers all members of the Eau Claire Fire Department involved in a response to a Level B hazardous materials incident. The objective of this operating guideline is to provide a method by which the Eau Claire Fire Department can quickly assemble the necessary resources to efficiently and effectively respond to a Level B hazardous materials incident in either the City of Eau Claire or in Eau Claire County. Although this guideline was written for the City of Eau Claire, it outlines what is expected of the requesting agency.
- 14.03 Guideline.
- A) Definitions.
1. Level A. A level A hazardous materials response is an emergency involving the release or potential release of a material that is harmful to life and the environment. A level A hazardous materials incident requires that the emergency

responder be completely encapsulated in a protective package, to include maximum respiratory and skin protection.

2. Level B. A level B hazardous materials release is the release or potential release of a material that requires maximum respiratory protection of the responders. Limited skin protection may be required.

14.04 The following guidelines are intended to establish procedures for daily staffing assignments and for notification of and response to Level B hazardous materials incidents.

- A) Authorization to respond. Requests for a Level B hazardous materials response shall be authorized and requested by the incident commander in the jurisdiction where the incident is taking place. The request must be processed through the Eau Claire Communications Center who will

Subject: County Level B Incidents

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Date: 02-22-94

cause the dispatch of the Level B team. The jurisdictional incident commander shall confirm with the communications center that notification or attempted notification of the Eau Claire County Department of Emergency Government has taken place. Shortly after dispatch, the Incident Commander or his representative will be contacted by a member of the Eau Claire Fire Department for incident-specific information.

Response personnel and equipment will be assembled as the information is gathered. The requested information will serve as preliminary size up information for the responding personnel. (See Hazardous Materials Information Form.)

1. Staffing.
 - a) Available personnel. Eau Claire Fire Department Personnel trained to the Technician or Specialist level are considered to be Level B hazardous materials response personnel. The Eau Claire Fire Department Shift Roster identifies personnel trained at the above-mentioned levels.
 - b) Daily assignments. The Battalion Chief will, on a daily basis, assign four on-duty personnel as the hazardous materials incident first responders. Persons so assigned will be notified of the assignment by 0800 hrs. The names of all notified hazardous materials first responders will be circled on the daily duty roster. One of the four assigned personnel should be an officer, if possible. It is understood that occasionally there will not be four hazardous materials

- trained persons available. If that is the case, the Battalion Chief will assign to the extent of availability.
- c) Call back. If the hazardous materials response is a County response or if an incident in the City strains the department's resource availability, the call-back procedure will be utilized to both subsidize the initial response if necessary and to restaff the on-duty fire fighting force. When calling in personnel under these circumstances, consideration must be given to the skill levels needed by the department at the time of the recall, ie: hazardous materials technicians, EMT-I personnel or fire combat personnel. Call-in assignments will be made in accordance with skill levels and department need.
 - d) Mutual Aid. In the case of a County Level B incident, the requesting department will be in a position to provide for some of the staffing necessary to mitigate the incident.

Subject: County Level B Incidents

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- Functions which do not require technician or above skills should be reserved for the Department calling for the Level B response.
- e) Notification. All requests for a Level B hazardous material response will be processed through the Eau Claire County Communications Center. If the Eau Claire Fire Department responds to an incident which is or escalates into a reportable Level C or a Level B incident, the Communications Center must be notified of such and the appropriate contacts shall be made. This is necessary to insure proper liability coverage for a Level B incident is in place.

14.05 Response to Eau Claire County. When requested to respond into Eau Claire County for a Level B hazardous materials incident, the following procedures are recommended. The Communications Center will alert the Fire Department utilizing the fire tones. Upon being alerted of the incident, the following actions will commence.

- A) Engine companies with the hazardous materials first responders for the day (previously assigned in accordance with staffing daily assignments above) will immediately respond to No. 2 station and prepare for the response.
- B) A person will be assigned to make phone or radio contact with the

requesting department and begin the information gathering process. The HAZARDOUS MATERIALS INFORMATION SHEET will be used in the process.

- C) As soon as possible, C-9 will depart for the scene of the incident, with the on duty battalion chief, a branch director, a safety officer, and a monitor person. Their mission is to secure the scene and gather information.
- D) A call back of at least eight (8) personnel shall be conducted in accordance with the call back procedure. This call back will be considered emergency duty and would therefore allow specific skill levels to be recalled.
- E) The hazardous materials response vehicle will not depart for the scene of the incident until a minimum of seven (7) trained personnel are prepared to respond.

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- F) Prior to responding, a hazardous materials branch director will be appointed. The hazardous materials branch director will assign a person to research, decon and entry group supervisor positions. It is believed the requesting department will be able to assist with work-related tasks in the cold zone assuming proper supervision is established both by requesting department and the responding team.
- G) The hazardous materials branch director will receive and review the HAZARDOUS MATERIALS INFORMATION SHEET and discuss the response with the shift commander prior to departing for the incident.
- H) If additional information indicates a greater response is required, the shift commander may expand the call back as necessary.
- I) The hazardous materials branch director will be responsible to give progress reports to the Eau Claire liaison officer at 30-minute intervals when requested by the Eau Claire liaison officer or at significant points in the incident.

14.06 Response within the City of Eau Claire. Basically, the same procedures as outlined for the County response will be followed, with the exception that the team may be gathered at the scene of the incident rather than at No. 2 Station and the level of recall will be determined by the incident commander.

14.07 Command and Control. Eau Claire County Fire Departments have agreed to utilize the incident command system for command and control at hazardous materials and other incidents. The county department into whose jurisdiction the team responds will assume the responsibility for command. Command shall recognize the hazardous materials response team as a branch of the incident command structure. The hazardous materials branch director will report to command upon arrival at the scene to receive a briefing, a radio channel assignment and review the position the team is to assume in the organizational structure. The research, decon and entry group supervisors may be carrying out necessary tasks as the branch director is being briefed.

The requesting department will organize and make available to the hazardous materials branch director a minimum of five (5) work teams (two firefighters constitute a work team). The hazardous materials branch director will assign the work teams in accordance with the strategic and tactical needs of the branch. Major incidents may require additional work teams. Requests for additional resources must be processed through command.

Subject: County Level B Incidents

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Under no circumstances will the hazardous materials branch engage in any strategy or activity not authorized by command nor will the team be ordered to carry out a strategy which, in the opinion of the branch director, places team members or the environment at unnecessary or unreasonable risk. The action at a hazardous materials incident must be planned for and taken with full cooperation between command and the hazardous materials branch director. If, for any reason, conflict should develop between command and the hazardous materials team leader, the Eau Claire liaison officer shall intercede on behalf of the hazardous materials team.

14.08 Command Liaison. The on-duty Battalion Chief or the Eau Claire Fire Department Duty Chief shall respond to all hazardous materials incidents. Car 9 will be used for the response because of the availability of on-board command resources. The responding chief officer will report to command and act as a liaison for the Eau Claire Fire Department Hazardous Materials Team.

Subject: County Level B Incidents
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Hazardous Materials Information Form

Date _____ **Time** _____

Person Taking This Information _____

Information Taken From? _____

Incident Location? _____

Command Post Location? _____

Who is the Incident Commander? _____

Command Post Phone Number or Radio Frequency _____

Staging Location _____

Recommended Route Into the Scene _____

Wind Direction and Speed at the Scene _____

When did the Incident Occur (Date/Time) _____

Is This a Transportation Incident? _____ **Truck/Car** **Train** **Airplane** **Other**

open the doors and windows and dispatch is to inform TFD responders of the situation. Rescue 25 is to respond with meter to Washington, Seymour, and Union responses. Rescue 45 is to respond with meter to Pleasant Valley, Brunswick and Clear Creek responses.

1. All firefighters will be trained and capable of testing for the presence of carbon monoxide (C) and determine the appropriate action to be taken if found.
2. The first responder on the scene is to size up the situation and inform Base of the situation.
3. Entrance into the structure shall be the same as for a structure fire using the buddy system. Initial CO test is to be completed at the front door. If test results indicate a CO level greater than 35 ppm firefighters are to leave the house and come back with SCBA on. Two relief firefighters are to be on standby ready to assist the two initial responders. (The back-up crew will be equipped with S.C.B.A.)

Subject: Carbon Monoxide Testing

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4. Be careful of the homeowners property when doing an inspection. Keep traffic into the home to a minimum.
 - a) At the scene of a carbon monoxide investigation, test to determine whether carbon monoxide (CO) is present and record the results*.
 - b) If the level is found to be at or above 35 ppm, the occupants shall be informed of the high carbon monoxide levels found and that one or more of the following actions need to be taken.
 - 1) Immediate corrective action by heating contractor or qualified personnel to appliance(s) responsible for emitting the high CO levels.
 - 2) Shut off appliance(s) until corrective action can be taken.
 - 3) Evacuation of building until corrective action is taken.
 - 4) Ventilation of building.
 - c) If the level is found to be between 0 and 34 ppm, the occupants shall be informed of the level of carbon monoxide found and that one or more of the following actions need to be taken.

- 1) Corrective action by heating contractor or qualified personnel to appliance(s) responsible for emitting the carbon monoxide.
 - 2) Shut off appliance(s) until corrective action can be taken.
 - 3) Ventilation of building.
- d) A copy of the State of Wisconsin "Carbon Monoxide" Information Sheet is to be given to the occupant of the home of each CO response.

*Record the results of all tests taken, including but not limited to:

- what time the test was taken.
- who performed the test.
- what instrument/meter was used to perform the test.
- the specific location from which the test results were obtained.

Subject: Carbon Monoxide Testing

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Date: 02-24-95

5. At the scene of a structure fire: Testing for the presence of carbon monoxide (CO) shall be made to determine that the level of carbon monoxide is at or below 50 ppm before firefighters working on salvage, overhaul, and fire scene investigation shall be allowed to remove their SCBA. This is only when no other toxic gases are present. An individual's total time shall be limited to 30 minutes without a SCBA being used. Record the results of all tests taken*.

Subject: Carbon Monoxide Testing
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TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Ropes

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Section: 2-1-16

Effective Date: 02-26-90

Revised Date:

- 16.01 Purpose. This policy will be implemented to assure the safety of all firefighters working with ropes during a response.
- 16.02 Goal. These procedures will be in effect for all ropes used in a rescue situation.
- 16.03 Definition of Harness Types.
- A) Class I harness - harness that fastens around the waist to secure to a ladder.
 - B) Class II harness - harness that fastens around waist and around thighs or under buttocks, designed for rescue.

- C) Class III harness - harness that fastens around waist, around thighs or under buttocks, and over shoulders, designed for rescue and where inverting may occur.

16.04 Application.

- A) All life safety ropes, harnesses, and hardware used by fire departments shall meet the requirements of N.F.P.A. 1983.90 Standard on Fire Service Life Safety Rope, Harnesses and Hardware.
- B) Class I life safety harnesses shall be used for firefighter attachment to ladders and aerial devices.
- C) Class II and Class III life safety harnesses shall be utilized for fall arrest and rappeling operations.
- D) Rope used to support the weight of members or other persons during rescue, firefighting, other emergency operations, or during training evolutions shall be life safety rope. Life safety rope used for any other purpose shall be removed from service and destroyed.
- E) Life safety ropes used for training evolutions may be reused if inspected before and after each such use in accordance with the manufacturers

Subject: Ropes

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instructions. Training ropes shall be destroyed if subject to impact loading, or if signs of weakness or wear are detected. Records shall be maintained to record the use of each life safety rope used for training.

**TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES**

Part 1: Response Guidelines

Subject: Mutual Aid Radio Frequencies

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Section: 2-1-17

Effective Date: 03-22-95

Revised Date:

17.01 Purpose. The purpose of this guideline is to establish a radio frequency guideline for Eau Claire County emergency fire personnel responding to, and operating under a mutual-aid request for service.

Radio frequencies utilized in this guideline are:

	TX	RX	TONE
*Local Government	153.905	155.880	162.2
*State Firenet (FIRECOM)	154.295	154.295	
*Mutual Aid Radio Channel (MARC)	151.280	151.280	136.5
*Emergency Medical Service	155.340	155.340	110.9
*Point-to-Point	155.370	155.370	

The primary objectives of this procedure is to:

1. Pre-establish a "RESPONSE" radio frequency for Eau Claire County emergency fire personnel responding to and operating at incidents involving multi-agency fire operations.
2. Pre-establish a "LAW ENFORCEMENT" radio frequency for Eau Claire County emergency fire personnel to communicate with law enforcement personnel assisting at a multi-agency fire operation.
3. Pre-establish an "EMERGENCY MEDICAL" radio frequency for Eau Claire emergency fire personnel assigned to the medical branch of an incident involving multi-agency operation.
4. Pre-establish a "WATER SUPPLY" radio frequency for Eau Claire County emergency fire personnel assigned to the water supply function at incidents involving multi-agency operation.
5. Pre-establish a "TACTICAL" radio frequency for Eau Claire County emergency fire personnel performing a specific function at incidents involving multi-agency operations.

Subject: Mutual Aid Radio Frequencies

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Date: 03-22-95

17.02 Scope. This procedure shall be implemented on all multi-company fire, medical, special rescue and/or hazardous material operations. It is the responsibility of the Command Officers to initiate this procedure; however, it will be the responsibility of the members of all Eau Claire County emergency agencies to understand in the basic operating principles and assure it is followed properly.

17.03 Guideline.

As Eau Claire County emergency fire units respond and operate outside their normal response jurisdiction, radio communications will take place under the following guidelines.

- A) Response - While responding to a request for mutual aid, the responding units will communicate directly with the Incident Commander on the "Local Government" radio frequency. Command will advise the responding mutual aid company on the urgency of the response, the

designated staging area or give the agency a specific assignment along with an operational radio channel.

- B) Command - Communication between the Incident Command and an incident's appointed divisions or sectors continues on the requesting jurisdiction's normal operation frequency.
- C) Law Enforcement - The Incident Commander of an incident involving multi-agencies communicates directly with the law enforcement agency assigned to the incident on the "Point-toPoint" radio frequency.
- D) Emergency Medical Service - Personnel assigned to the emergency medical branch of a multi-agency incident will communicate under the State Emergency Medical frequency. Communication between the Medical Officer and the Incident Commander is restricted to the "Command" frequency.
- E) Water Supply - Personnel assigned to the specific tactical operation of water supply will communicate on the "State Firenet (FIRECOM)" frequency. Communication between the Water Supply officer and the Incident Commander is restricted to the designated "Command" frequency.
- F) Tactical Operations - Personnel assigned to a specific tactical operation will communicate on the "MARC" frequency. Communication between

Subject: Mutual Aid Radio Frequencies

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Date: 03-22-95

this specific Tactical Officer and the Incident Commander is restricted to the "Command" frequency.

1. Example: A Fire Department tanker and pumper respond to a request for mutual aid. While in route, the units communicate with the Incident Commander on Eau Claire County Local Government frequency. The units are instructed to respond Code 1 (normal driving speed, no emergency lights or siren) and advised of the incident staging area. As the units are assigned the task of supplying water for the incident, they are directed to communicate with the water supply officer on the State Firenet Frequency (FIRECOM). The Water Supply Officer communicates directly with the I.C. on the jurisdiction normal operational frequency.

Subject: Mutual Aid Radio Frequencies
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Date: 03-22-95

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Manpower Assignments

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Section: 2-1-18

Effective Date: 07-01-95

Revised Date:

- 18.01 Purpose. To provide for the efficient use of personnel in response to emergencies.
- 18.02 Goal. To provide an initial response which will reflect anticipated manpower needs of various emergencies.
- 18.03 Response to Alarms. Upon receiving an alarm, members shall:
- A) Make a mental note of the nature and location of the incident.

- B) Respond to quarters or to the scene depending upon local practices.
- C) Take a position as part of a Responding Company, a Standby Company or a Manpower Squad.
 - 1. Responding Company - an apparatus or unit assigned to respond to the incident.
 - 2. Standby Company - an apparatus or unit not assigned to respond to the incident. These units are held in reserve to reinforce those units already at the scene, or to respond to another incident.
 - 3. Manpower Crew - a group of members without apparatus, who are organized to work as a unit at an emergency. If a Manpower Squad is directed to respond to the scene of an incident, they will use available department or personal vehicles for transportation. The Manpower Crew will report for assignment to the Incident Commander.

18.04 Manning Levels. To provide effective working units, the following manning levels are established if possible.

- A) Responding or Standby Company.

Subject: Manpower Assignments

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Date: 07-01-95

- 1. Engine Company.
 - a) Attack engine: two (2) members.
 - b) Water supply engine: two (2) members.
- 2. Rescue: two (2) members.
- 3. Tanker: one (1) member.
- 4. Brush Unit: two (2) members.

18.05 Unit Supervision.

- A) Whenever possible, a crew shall include an appointed officer. Unless absolutely necessary, two officers should not be part of the same unit.

When no officer is available, the highest trained firefighter will supervise the unit, as an acting officer.

- B) The unit supervisor will be responsible for directing the operations of the unit according to the Department guidelines, and the orders of the Incident Commander.
- C) The supervisor of a Standby Crew is responsible to ensure that the unit is ready for response. This includes assigning members to the riding positions on the apparatus. (i.e. driver, nozzle men/women, etc.)

18.06 Personal Protective Equipment. All members are responsible for their assigned gear and its readiness.

TOWNSHIP FIRE DEPARTMENT	
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Effective Date: 05-01-96	Revised Date:

19.01 Goal. To provide guidelines for radio communications.

19.02 Dispatch Designation. The term Base will be used when referring to the dispatch center operated by Township Fire Department.

19.03 Eau Claire Communications Center. The term Comm Center will be used when referring to the dispatch center operated by Eau Claire County.

-
19.04 Unit Identification. Units will use plain language identification when conducting radio communications.

- A) Plain language identification will include:
 - 1. Unit Type.
 - 2. Unit Number.

- B) Unit Type. The following have been adopted as plain language terms for fire/EMS vehicles or staff.
 - 1. Fire Department Unit Types.
 - a) Engine.
 - b) Tanker.
 - c) Brush.
 - d) Rescue.
 - e) Chief (FD staff person: Chief, Battalion Chief, etc.).
 - f) Township (Line officer).

19.05 Responsibility.

- A) The provisions of this guideline have a direct bearing on the safety of department members and the efficiency of department operations.

- B) Each member is responsible for operating within these guidelines.

- C) The officer-in-charge of an incident is responsible for enforcing this policy.

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- D) Any deviation from this guidelines must be made with due regard for the safety of department personnel and operational efficiency.

19.06 Alert Messages.

- A) Alert messages directed to fire units will follow a standard format. These messages will include the following information.
 - 1. Identification of Township.

 - 2. Location of Incident.

3. Type of Incident.

Example: "Attention Town of Union. Report of smoke in the hallways at 1234 Townhall Road."

- B) BASE will transmit alert messages over Township Fire Department frequency (46.420).

19.07 Response Message. Each unit assigned to an incident will begin its responses by broadcasting a response message. This message will include the following:

- A) Identification of Unit.
B) Indication of Enroute Status.

Example: "Engine 21, responding."

19.08 On Location Reports.

A) First Unit to Arrive on Scene.

1. The first arriving unit shall report "ON SCENE" along with a brief description of the situation found.
2. The time at which all units report "ON SCENE" will be acknowledged and recorded by BASE.

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3. The "ON SCENE" report will include the following:
- a) Identification of Unit.
 - b) Indication of "ON SCENE" status.
 - c) Description of Scene.
 - d) Description of Conditions.
 - e) Action Taken.

Example: "Engine 21 on scene with a medium sized, two-story structure with smoke showing. Side 2 Second Floor. Engine 21

will be Command."

B) 2nd, 3rd, etc Units to Arrive on Scene.

1. Units which arrive after the first-due unit will broadcast an "ON SCENE" report which includes the following:
 - a) Unit Identification.
 - b) On Scene.

Example: "Tanker 26, On Scene."

19.09 Command.

- A) When COMMAND has been established, all routine communications between the incident scene and the Base will be directed through COMMAND.
- B) The radio designation "COMMAND" will be used with a brief description of the incident location. This designation will not change through the duration of the incident.

Example: "Townline Road Command."

19.10 Command Messages.

- A) BASE will acknowledge and record messages as directed from COMMAND.

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- B) Command messages may include the following:
 1. ALL CLEAR³.
 2. UNDER CONTROL⁴.
 3. LOSS STOPPED⁵.
 4. PROGRESS REPORTS⁶.

19.11 Returning Units.

- A) Only COMMAND can release units from an incident.

- B) COMMAND will indicate the units to "HOLD" at the scene (or continue response) and release the remainder of the assignment.
- C) BASE will retransmit this report from COMMAND and the balance of the assignment will return to available status.

19.12 Normal Operations. "Normal operations" refers to the normal mode of operation for BASE. Under these conditions, non-emergency communications of an official nature are permitted on all frequencies. Incident related communications will always take priority over other traffic.

³"ALL CLEAR" is a message which indicates that activities required to protect occupants, and to remove those who are threatened, have been accomplished. The actions taken to reach this point are described as the Primary Search.

⁴"UNDER CONTROL" --The fire has been controlled; the incident has been stabilized.

⁵"LOSS STOPPED" -- The activities required to stop or reduce additional loss to property have been accomplished.

⁶"PROGRESS REPORTS" -- During active firefighting/rescue operations, Command may provide progress reports when significant tactical plans are changed or unusual situations are encountered. The first progress report should be given after initial action has been implemented and should include the correct address and an improved description of the building and fire (emergency) conditions if the arrival report was incomplete. The first report should include the declaration of a working fire when appropriate and give an indication of the time units will be held at the scene. BASE will repeat the significant facts from progress reports for the information of monitoring units.

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19.13 Heavy Traffic.

- A) During periods of extremely heavy traffic, it becomes impossible for BASE to carry on all normal functions. It is necessary in such circumstances to restrict non-essential communications.
- B) BASE Supervisor will make the determination when it becomes necessary to restrict communications and when "normal" communications can be resumed.

- C) The announcement "BASE IS IN HEAVY TRAFFIC MODE" will be made over all radio channels.
- D) While BASE is in the HEAVY TRAFFIC MODE:
 - 1. All non-incident related radio traffic will be restricted and units will transmit only essential communications.
 - 2. Units will avoid calling BASE unless necessary.
- E) At the end of the HEAVY TRAFFIC situation, BASE will announce "BASE IS ON NORMAL OPERATIONS".

19.14 Emergency Traffic. The term "EMERGENCY TRAFFIC" will be used by any unit encountering an immediately perilous situation and will receive the highest communications priority from BASE, COMMAND and all other units. Units may initiate EMERGENCY TRAFFIC by contacting BASE.

Example: "Engine 21 with emergency traffic." The unit will transmit their message, BASE will repeat message one time.

If BASE does not acknowledge, unit will then establish contact with COMMAND to transmit the emergency message. COMMAND will then re-initiate emergency traffic sequence with BASE.

19.15 Radio Code.

- A) Plain language will be used during radio communications.

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- B) Commonly used plain language terms.
 - 1. "Copy".
 - 2. "Enroute".
 - 3. "On Scene".
 - 4. "All Clear".

5. "Under Control."
6. "Loss Stopped".
7. "Returning to Quarters".
8. "Available".

19.16 Radio Procedure.

- A) Short-Specific. Before transmitting know what you are going to say; don't make it up as you go along. Choose precise terms to communicate the desired message as clearly and briefly as possible without wasting air time.
- B) Task Oriented. Orders received by firefighters should indicate a specific task which is assigned to them. It should be of a magnitude reasonably performed by those assigned the task alone or in concert with other crews.
- C) Indicate Objective. In addition to being task and crew oriented, assignments should indicate an objective to the action. The crew should know exactly where to go, to whom to report, what the task is, and the objective of the task. Orders should tell what to do -- not how to do it.
- D) Clear Tone -- Self Control -- Effective Rate. Speak clearly at a practiced rate.....not too fast or too slow. Control your emotions and excitement deliberately. If you do not consciously control your voice, it will become garbled under stress.

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- E) Well Timed/Spaced.
 1. Prioritize your messages. Do not use up valuable air time with unimportant messages and insignificant details. Let critical messages go first. Maintain an awareness of the overall situation and how you fit into it.
 2. Do not interrupt conversations unless you have EMERGENCY

TRAFFIC. Listen before transmitting and wait until a message transaction has been completed.

3. Pause between consecutive messages. This will make it clear when one has been completed and another message started. It will give other units a chance to get on the air with important messages.

<p style="text-align: center;">TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES</p>
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<p>Effective Date: 05-01-96</p>

<p>Section: 2-1-20</p>

<p>Revised Date:</p>

20.01 Goal. To maintain the highest degree of safety for all personnel.

20.02 Guideline.

A) Incident Perimeter. The area inside an imaginary boundary that contains the foreseeable hazards of the incident.

1. The boundary is flexible, and is altered by various factors.
 - a) Areas of falling debris (a basic perimeter of 200 feet in all directions should be maintained around high-rise buildings).
 - b) Areas of potential explosion.
 - c) Areas of smoke drift.
 - d) Areas subject to structural collapse.
 - e) Location of fire in relation to the center of the street and clear areas available around the building.
2. All personnel entering the fireground perimeter shall:
 - a) Wear personal protective equipment and SCBA.
 - b) Have crew intact.
 - c) Be assigned to a sector.
3. Yellow fire line tape is used to keep civilians out of an area where a hazard exists. This tape can also be used as a warning device for members authorized to operate within the perimeter.
4. Special hazards, such as hazardous materials incidents will require specific perimeter restrictions. All members working at these incidents must be informed of the hazard areas.

B) Tactical positioning.

1. Positioning will affect the safety/survival of personnel. Members must use caution when placed in the following positions.

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- a) Above the fire (floors/roof).
- b) Where fire can move in behind them.
- c) Where sector officers cannot control position/retreat.
- d) When involved with opposing fire streams.
- e) Combining interior and exterior attack.
- f) With limited access -- one way in or out.

- g) Operating under involved roof structures.
 - h) In areas containing hazardous materials.
 - i) Below grade fires (basement, etc.).
 - j) Above or below grade rescues.
2. Personnel safety is the primary reason for an effective and well-timed offensive/defensive decision.

Is the risk to personnel worth the property we will save?

3. When operating in a defensive mode, members should position as far from the involved area as possible while remaining effective. The intent is to use safe positions where possible to safeguard against sudden hazards; backdraft, structural collapse, etc.
4. When operating in an offensive mode, be aggressively offensive. A coordinated interior attack, directed at knocking down the fire eliminates most safety problems.
5. Command must limit the number of personnel within the perimeter to those assigned to a necessary function. All personnel will be:
- a) Positioned in staging.
 - b) Assigned to a task or working within a sector.
 - c) Assigned to a Resource or Rehabilitation area.

Individuals or crews must be restricted from wandering about the emergency scene. If personnel are not assigned to an area, or do not have a staff function to perform, they shall remain outside the fireground perimeter.

C) Laddering.

1. When laddering a roof, extend the top of the ladder 2 - 3 feet

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above the roof line. This will provide a visible means of egress.

2. When laddering buildings under fire conditions, place ladders near building corners or fire walls. These positions are generally more stable if the structure fails.

3. When working above or below grade, try to provide at least two separate escape routes. Stairways, ladders, exits, etc., at opposite ends or diagonal corners of the building is preferred.
- D) Sectors. Personnel safety is a primary reason for organizing the scene. Dividing the scene into work areas, with designated supervision, will provide a way to control both the position and function of crews.
1. Sector officers must account for the position and welfare of crew members.
 2. Crews must not leave assigned positions unless directed by the sector officer.
- E) Rehabilitation.
1. Sector officers must frequently check the physical condition of their crew. When firefighters show signs of serious physical or mental fatigue, they should be reassigned to Rehabilitation.
 2. Firefighters may request reassignment to Rehabilitation from their sector officers.
- F) Safety Officer.
1. Command shall activate a Safety Officer at incidents involving danger to personnel. Command should activate this position at any situation where it will be advantageous to the overall safety of operations.
 2. Activation of a Safety Officer in no way reduces the responsibility of all sector officers for the safety of their crews. Each member must use common sense and work within the intent of safety procedures.

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- G) Structural Collapse.
1. Structural collapse is always a possibility when a building is subject to intense fire.

2. Signs of potential collapse.
 - a) Cracks in exterior walls.
 - b) Bulges in exterior walls.
 - c) Sounds of structural movement - creaking, groaning, etc.
 - d) Smoke or water leaking through walls.
 - e) Flexible movement of a floor or roof where firefighters walk.
 - f) Interior or exterior bearing walls or columns leaning, twisting or flexing.
 - g) Sagging or distorted rooflines.

3. These construction features or conditions have been known to fail prematurely, or contribute to early structural failure.
 - a) Parapet walls.
 - b) Large open (unsupported) areas -- supermarkets, warehouses, etc.
 - c) Large signs or marquees which may pull away from weakened walls.
 - d) Ornamental or secondary front or sidewalls which may pull away and collapse.
 - e) Light weight truss, bar joist, or bow string truss roofs.
 - f) Unprotected metal beams and columns.

4. It is Command's responsibility to monitor collapse potential.

H) Evacuation.

1. When the extent of fire prohibits control, or when the structure becomes unsafe, interior operations should be abandoned.

2. When conditions in the building become untenable:
 - a) Evacuate.
 - b) Regroup.
 - c) Get head count of personnel.
 - d) Redeploy.

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3. The method of evacuation selected will depend on the following circumstances.

- a) Severity of hazard.
 - b) Type and extent of hazard.
 - c) Area affected by the hazard.
4. When an imminent hazard prompts an evacuation, notify all personnel using an EMERGENCY TRAFFIC announcement.
 - a) Firefighters will assemble and promptly exit to a safe location.
 - b) Sector officers will again account for crew members.
 - c) Sound evacuation signal.
 5. Evacuation is complete when all crews members are accounted for.
 6. When the evacuation is complete, a more specific evaluation of the hazard can be made.
 7. Evacuation generally involves a shift from offensive to defensive operations. MAKE SURE EVERYONE GETS THE WORD THAT THE STRATEGY HAS CHANGED.
 8. Crews retreating from interior positions often need hose line protection. These situations represent a major function of back-up lines.
- I) Search and Rescue.
1. Before entering the search area, all search members should be familiar with a specific search plan including the overall objective, the search area, individual assignments, etc. This may require a brief conference by the crew before entering the search area.
 2. Searches shall be conducted by two or more members.
 3. Operations and sector officers must be aware of the location and function of crew members during search operations.

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4. Whenever a search exposes the crew to fire conditions (especially above the fire floor), the search team should be protected with

charged hose lines as soon as possible.

5. If search crews operate without a hose line, life lines should be used when working in conditions of severely limited visibility.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
--

Part 1: Response Guidelines

21.01 Purpose. To provide a basic format for tactical operations.

21.02 Goal. To provide a guideline which emphasizes proven tactical principles, and the safety of department personnel.

21.03 Definitions.

- A) Rescue. (1st priority) Action taken to protect occupants of involved structures or fire areas. To remove threatened persons from danger. To treat the injured.
- B) Fire Control. (Incident Stabilization). (2nd priority) Actions taken to stop the forward progress of a fire and bring it under control.
- C) Property Conservation. (3rd priority) Action taken to stop or reduce the loss of property.

21.04 Policy.

- A) Tactical priorities are separate, yet interrelated, activities.
- B) Tactical priorities are addressed in the following order:
 - 1. Rescue.
 - 2. Fire Control.
 - 3. Property Conservation.
- C) While Command must complete each priority in its order, Command may overlap the "activities" of each to reach the current goal.

EXAMPLE: Need to reduce heat in a room (by applying water) before completing a primary search of the room.

21.05 Guideline.

A) Rescue.

1. Primary Search. All initial actions will concentrate on the quick, thorough completion of a primary search. Actions are based on the size-up of conditions. Three available options include:
 - a) "Nothing Showing on Arrival". Command must order a rapid thorough interior search.
 - b) "Working Fire". Command may direct fire control operations in support of rescue activities, to gain entry and control interior access. However, the priority remains RESCUE.
 - c) "Fully Involved". The extent and location of the fire may rule out a primary search. If conditions prohibit a primary search, Command will broadcast (through the dispatcher) that "there will not be an ALL CLEAR".
2. Safety of Personnel.
 - a) Command retains responsibility for the safety of operating personnel.
 - b) Firefighters conducting a primary search shall wear full protective clothing and functioning SELF-CONTAINED BREATHING APPARATUS.
 - c) Whenever possible, search teams are to be supported by charged hose lines.
 - d) Firefighters assigned to rescue must note the path they followed during entry. Provide alternate escape routes.
3. Communications Required.
 - a) Search Teams.
 - 1) will report the discovery of fire victims, their location, and help that is needed to carry out the rescue.
 - 2) will report fire location and direction of fire travel.
 - 3) will report, the completion of the search in their assigned area. (Example: "First floor, search completed.")

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b) Command.

- 1) All Clear. When search teams have completed the primary search, Command will transmit the "all clear" message. This message is a signal to all members that operations will then concentrate on FIRE

CONTROL .

- 2) Fully Involved. When a primary search is not completed (size, location of the fire, etc.) Command will transmit there "will not be an ALL CLEAR given for this fire".

4. Secondary Search. Command must order a "secondary search" when FIRE CONTROL is achieved.

B) Fire Control.

1. Strategy Selection. Command will select a strategy based upon factors considered during size-up. Size-up will include the use of the three sources of fireground information: visual factors, reconnaissance, and pre-fire planning. Factors considered during size-up include:

- a) Fire Extent and Locations.
- b) Fire Effect.
- c) Life Hazard.
- d) Saveable Property.
- e) Entry and Tenability.
- f) Ventilation.
- g) Resources.

2. Fire Control Strategies.

- a) Offensive Strategy. An Interior attack, with related support, directed toward quickly bringing the fire under control.
- b) Defensive Strategy. An Exterior attack directed to first reduce fire extension and then bring the fire under control.

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3. Basic Strategic Plans:

a) Offensive Plan:

- 1) Take command.
- 2) First line - (minimum 1 1/2 inch) aggressive, well-placed, interior attack from unburned side.
- 3) Provide support activities.
- 4) Conduct primary search.
- 5) Second line - back up first or cover secondary point of egress.
- 6) Pump water - provide adequate water for attack crews.
- 7) Quickly check results -- react as necessary.

b) Defensive Plan.

- 1) Take command.
- 2) Evaluate fire spread (write off lost property).
- 3) Identify key tactical positions (where is the fire going?)
- 4) Prioritize fire streams.
- 5) Provide BIG, well-placed streams.
- 6) Pump water (provide adequate supply for critical positions).
- 7) Determine need for additional resources.
- 8) Surround and extinguish fire.

4. Fire Streams.

- a) Interior Streams-(Offensive Strategy). Handlines used for interior fire control or to support search efforts shall be at least 1 1/2 inch.
- b) Exterior Streams-(Defensive Strategy). Use appropriate fire streams. Solid stream tips provide better penetration for heavy streams.

5. Fire Control Considerations.

- a) FIRE CONTROL actions must support any RESCUE effort.
- b) Situations can change and demand a change of strategy.
- c) DO NOT direct exterior fire streams into a structure while

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people are in the building or area.

- d) An interior (offensive) attack starts from the unburned side.
- e) Command must provide support (including forcible entry and ventilation) to carry out FIRE CONTROL.

6. Safety of Personnel.

- a) Command must monitor changing conditions which affect the safety of personnel.
- b) Command must enforce the proper use of personal protective equipment.

7. Communications Required. When the fire's forward progress is stopped, Command will transmit the message, "the fire is under control".

Note: "Under Control" does not necessarily mean that all fires have been extinguished.

C) Property Conservation.

1. Fireground Considerations.

- a) The earlier salvage operations begin, the less damage there will be.
- b) Property conservation actions are based upon the resources (particularly manpower) that are available to carry them out.
- c) Command should request additional manpower if salvage operations require assistance.
- d) If the fire is out, shut down fire streams to stop further water damage.
- e) Command must remember the trade-off between damage caused by the attack, and the damage caused by the fire.

2. Safety of Personnel.

- a) Property conservation actions move with more caution, compared to RESCUE or FIRE CONTROL. Personnel hazards are identified (i.e. structural hazards, hazardous

Subject: Tactical Priorities

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atmospheres) and explained to assigned crews.

3. Communications Required. Command will transmit the message "property loss has been stopped" when:
 - a) Actions to stop or reduce property damage are completed, and
 - b) Actions to prevent unauthorized entry or damage from the weather are completed.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Silo Fires

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Effective Date: 05-01-96

Section: 2-1-22

Revised Date:

22.01 Purpose. To provide a written guideline for handling silo fires.

22.02 Goal. To provide a safe method for firefighters to fight silo fires.

22.03 Equipment Response. A single station response, Code 1, unless a structure fire is indicated.

22.04 Rationale.

- A) Plant material continues to "breathe" for a short time after cutting. This respiration produces some heat in storage. Then organisms, in the process of producing acids necessary to ensile the material in a silo, produce heat as well. Due to this process and the right moisture content, spontaneous combustion occurs in a corn filled silo.

- B) A hay crop that is placed too dry (below 40% moisture) into a silo will rapidly heat. If the silo is so large that heat loss is restricted, the internal temperature will rise. As the temperature rises above 130 degrees, a chemical reaction called the Maillard Reaction occurs and may sustain itself. The heat kills the micro-organisms at 250 to 400 degrees and begins to break down the hay crop by chemical reaction called pyrolysis. The Maillard Reaction does not require oxygen, but the flammable gases produced by pyrolysis are at a temperature above their ignition point. These gases will ignite when they come in contact with oxygen.

- C) Fire usually occurs approximately 10 - 20 feet below the surface of the stored material.

22.05 Size-Up.

- A) Locate silo.

- B) Determine type.

Subject: Silo Fires

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- C) Determine silo location in relation to other buildings.
- D) Firefighters in full turnout gear and functioning SCBA should attempt to locate fire.
- E) Be aware of the possible presence of silo gas.
- F) If the fire is not on top of the filled material DO NOT put water in the silo.
- G) If the fire is not visible, the location must be obtained before attempting extinguishment.
- H) Observe cracks along unloading doors to see if fire is visible.
- I) Whether a fire is known to exist or just suspected, do not step directly onto silage. Instead lay a ladder across the silage with one end on the unloading door frame. The ladder will distribute weight over a larger area and minimize the risk of falling into a cavity the fire may have created.
- J) Tie any person entering the silo to a rope or harness with the life line attached to the beam or structure above. Also station a person on the silo blower platform or chute to observe the silo interior.
- K) Find the exact fire location with a probe and thermometer. Mark off the surface in one (1) foot squares. Insert the probe and thermometer in each square. When hot spots are found inject a small amount of water.
- L) If temperature readings are near 180 degrees or higher, the material will eventually burn. Temperature readings of 140 to 170 degrees may indicate that the silage is heating or it may indicate residual heat from a hot spot that is conducting through the silage.

22.06 Extinguishing the Fire.

- A) When hot spots are found, a small amount of water is injected through the hay probe, one or two quarts at a time.
- B) Wait until the rumbling quits and then inject another one or two quarts of water.

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- C) If there is no rumbling, move the probe to another square and repeat the process.
- D) This process is continued until the entire surface of the material has been probed.

- 1. Water expands 1700 times as it converts to steam.
- 2. Too much water and heat in a confined space will cause a BLEVE.

Example: One (1) gallon of water converted to steam will produce 1700 gallons of steam.

- 3. Convert this to cubic feet:
 - a) Seven and one-half gallons of water equals one cubic foot.
 - b) One cubic foot of water equals 1700 cubic feet of steam or a volume equal to 10' x 10' x 17'.
 - c) Two quarts of water converted to steam will fill a space equal to 113.33 cubic feet.
 - d) Two quarts of water times 1700 equals 850 gallons of steam.
 - e) 850 gallons of steam equals 133.33 cubic feet or a container approximately 2 feet by 10 feet by 5.5 feet in size.
 - f) A 16 foot by 60 foot silo has a capacity of 12,063.74 cubic feet.
 - g) If 2000 gallons of water were pumped into a silo in an attempt to extinguish the fire, it would create 453,333.32 cubic feet of steam or 37 times the silo capacity.
 - h) The dangers of explosion are obvious, therefore extreme caution must be exercised in fighting this type of fire.

22.07 Oxygen Limiting Silos.

- A) A fire in a oxygen-limiting silo is potentially very hazardous. If improper extinguishing techniques are attempted, a devastating explosion could result. In this type of silo fire there is containment of explosive gases, and there may be sufficient heat or flame to ignite the gas. In all likelihood, the only thing preventing an explosion is insufficient oxygen.

Subject: Silo Fires

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- B) Nothing should be done that might increase the level of oxygen inside the silo. Opening the top hatch cover to dump water or foam might allow enough oxygen to be pulled in to put the gases into their explosive range. Even air entrained within water droplets and foam particles can increase the danger.

- C) Liquid nitrogen or carbon dioxide may be injected to displace oxygen and cool the fire. A small hole drilled in the silo wall and a tube or probe hooked to the gas line will allow the nitrogen or carbon dioxide to enter the silo. Be careful that additional oxygen is not pulled into the silo by this process. Some silos have valves specifically designed to inject gases for fire control. If a fire should occur in an oxygen-limiting silo, call the dealer immediately for assistance.

- D) Leave and open roof hatch alone if there is any smoke or steam coming out of the top or if the silo is shaking or rumbling. If the silo is quiet and there has been no visible smoke for several hours, it should be safe to close the top hatch cover. Do not tie the cover down though. If gas pressure subsequently builds beyond the relief capacity of the breather valve, the cover can lift to relieve the pressure.

TOWNSHIP FIRE DEPARTMENT

CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Driver/Operator

Page 1 of 2

Effective Date: 05-01-96

Section: 2-1-23

Revised Date:

- 23.01 Purpose. To provide a guideline for all engine driver/operators.
- 23.02 Goal. To have all Township Fire Department personnel trained to the level of driver/operator.
- 23.03 The driver/operator shall successfully complete the following classes:
- A) Entry level firefighter.
 - B) Department Road Test and/or E.V.O.C.
 - C) Basic fire pump operation.
 - D) How to calculate needed water flow in G.P.M.
 - E) How to calculate friction loss using various size hose and nozzles to produce rated flow gallonage.
- 23.04 Upon completion of the above listed training the firefighter may respond as a Township Fire Department Driver/Operator.
- 23.05 Township Fire Department requires the following:
- A) Turn out gear will be stowed aboard apparatus available for use.
 - B) Seat belt/shoulder harness will be worn.
 - C) Use radio per communications S.O.G.
 - D) Position vehicle to its best advantage.
 - 1. So repositioning is not necessary.
 - 2. Holding tank/s can be positioned unobstructed.

Subject: Driver/Operator

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Date: 05-01-96

3. Hose lines can reach the fire or other emergencies.

23.06 After the engine is positioned the operator will do the following:

- A) All fire pumps will be carried wet at all times, with tank to pump and tank refill valves fully open.
- B) The operator will immediately put pump in gear and start circulating water (winter and summer).
 - 1. This applies to all engines that arrive at the scene, whether primary attack engine or backup engine.
- C) Operator will move to pump panel and bring engine to at least 1000 R.P.M.s.
- D) As hose lines are put in service the operator shall bring pump to operating pressure and maintain proper pressure on all lines.
- E) The pump to tank valve shall be shut down as hoselines are added to maintain pump pressure.
- F) During mop-up operations, follow methods as outlined in Section 23.03(C).

23.07 The operator shall stay with the engine at all times.

23.08 To break down, reverse the steps in Section 23.06.

23.09 This guideline applies to engines only, all other pumps (i.e. portables, brush truck pumps, etc.) will be drained.

<p style="text-align: center;">TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES</p>
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<p>Part 1: Response Guidelines</p>

<p>Subject: Vehicle Extrication</p>

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<p>Section: 2-1-24</p>

<p>Effective Date: 02-26-90</p>

<p>Revised Date:</p>

- 24.01 Purpose. These procedures will establish guidelines to be used at an extrication scene.
- 24.02 Goal. These procedures will be in effect for all members of Township Fire Department operating at the scene of an extrication. This S.O.G. covers the basic steps for milestones to be achieved at vehicle extrication scenes. It should be realized that many different situations can exist at an extrication scene. In some cases, the ingenuity of the rescue crew will be the deciding factor in a successful rescue attempt. At all times, the safety of the rescue crew, patient and bystanders may be foremost in everyone's mind and actions.
- 24.03 Definition. Vehicle extrication is the procedure used to remove accident victims who are entrapped in wreckage by either the nature of their injuries and/or the entanglement of themselves in the vehicle wreckage and metal. Vehicle extrication procedures may involve the movement of metal from around the entrapped victim, the rescuer's access path or the victim's removal path.
- 24.04 Guideline. In all cases of vehicle entrapment, the primary concern is safety to life. Patient condition, his/her situation, hazards (real and potential), and available resources will influence the methods and speed at which the operation will be accomplished.
- 24.05 It is recognized that the traumatized patient's recovery from injuries is directly influenced by the pre-hospital care and time taken to get that patient to a medical facility. That time is measured from the time of the incident to the time of the patient's arrival at a hospital and the care of a physician.
- 24.06 With this in mind, the commander and personnel called to these incidents must use careful, efficient means to accomplish the following in a timely manner:
- A) Establish command.
 - B) Survey the scene and triage patients. (This is best accomplished by

using the inner/outer survey method).

- C) Check for and control hazards.

Subject: Vehicle Extrication

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Date: 02-26-90

- D) As soon as the need for extrication procedures have been established, Command will assure that proper rescue tools are on the scene or enroute. He/she must also determine what additional resources may be needed and notify BASE. When making this resource determination, Command should consider, among other things, medical needs, manpower, special tools, transportation needs, and special hazards at the scene.
- E) Establish a tool staging area and action circle.
- F) Stabilize the vehicle(s).
- G) Gain access to the patient(s).
- H) Perform primary patient survey, establish an airway and simultaneously establish adequate C-spine immobilization and care (normally handled by First Responders and/or Ambulance Personnel).
- I) Perform controlled movement and/or removal of all metal and/or obstructions in order to properly package and remove the patient without further aggravating the patient's injuries.
- J) Prepare the patient for removal.
- K) Carefully remove the patient with due care to the C-spine, airway, fractures and bleeding.
- L) Prepare the patient for transport without delay.
- M) Secure any equipment used and secure the scene.

24.07 Command procedures must include establishment, transfer, sectorization and staging. Sectorization may be assigned, but are not limited to, extrication, triage, hazard control, tool and resource, crowd control, and transportation sector. Command should strictly control access to the action circle to those persons that are working the extrication, assigned to patient care or controlling on scene hazards. All personnel located inside the action circle should be in full protective gear whenever possible.

24.08 On extrication scenes, the overall scene is under control of Command, while patient care is under control of the ranking medical officer. Ultimate responsibility lies with Command, who must use judgement in light of advice

Subject: Vehicle Extrication

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from the ranking medical officer.

24.09 The requirements for this extrication team are as follows:

- A) Vehicle Extrication Class.
- B) Entry Level Firefighter.
- C) Department approved Vehicle Operations Course.

24.10 Equipment is kept in following vehicles:

- A) Station #1 - Rescue 15
- B) Station #2 - Rescue 25
- C) Station #3 - Rescue 35
- D) Station #4 - Engine 41
- E) Station #5 - Rescue 55

24.11 Each unit will be automatically backed up according to the back up schedule.

24.12 Each primary rescue unit shall be accompanied by an engine and tanker whose personnel will stay with their vehicle. A pre-connect line and a second line with foam eductor attachment will be readied for use.

24.13 A minimum of one extrication training session per year will be held.

24.14 All units will respond Code 3 unless told differently by first unit on the scene.

24.15 Back Up Schedule.

second A) Rescue 15 will respond to all extrications as Command Post and back up.

B) Rescue 25 will back up 15, 35, 41, 55.

C) Rescue 35 will back up 15, 25, 55.

D) Engine 41 will back up 25.

E) Rescue 55 will back up 35, 41.

24.16 Incident Command shall make every effort to return unneeded equipment as soon as possible.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: STANDARD OPERATING GUIDELINES
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Part 1: Response Guidelines

Subject: Unified Command

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Effective Date: 05-01-96

Section: 2-1-25

Revised Date:

25.01 Purpose. To properly handle a multi-agency response (Mutual Aid).

25.02 Goal. To provide a guideline to utilize mutual aid units and integrate them into the Incident Command System.

25.03 Unified Command is appropriate when the incident is contained within a single jurisdiction, but more than one department or agency shares responsibility due to the nature or the incident or the kinds of resources required (i.e. large fire, natural disaster, etc.).

25.04 This type of Command can best be accomplished if a ranking (staff) officer from each mutual aid department reports to Township Fire Department's Command Post.

A) The mutual aid department's command post shall be placed in close proximity to Township Fire Department's Command Post.

1. Some mutual aid departments use an officer's car in place of a department vehicle.

B) The mutual aid department staff officer can be stationed in Township Fire Department's Command Post if necessary.

25.05 All communications with the mutual aid department shall be routed through the appropriate department's staff officer.

A) He/she know the capabilities and resources of his/her crew.

B) Incident Command now has another Sector at its disposal hereby increasing his/her efficiency.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: STANDARD OPERATING GUIDELINES

Part 1: Response Guidelines

Subject: Explosives (Bomb) Response

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Section: 2-1-26

Effective Date: 08-01-96

Revised Date:

26.01 Purpose. To provide a policy regarding actual or potential explosives.

26.02 Goal. To provide a guideline for handling emergencies that involve bomb threats or other explosives.

26.03 Response.

Township Fire Department will immediately notify the Eau Claire Sheriffs Department that we have been advised of a possible bomb and/or explosive situation.

26.04 Township Fire Department shall respond only as requested by the Sheriffs Department for the following reasons:

- A) To standby for fire suppression.
- B) An explosion has occurred and fire suppression and/or rescue is needed.
- C) Assistance is requested for organizing a bomb search. Primary responsibility for this search belongs to the property owner.

26.05 Evacuation. The decision to evacuate a building or area will be made by the owner or occupant, unless a device is found on the premises.

26.06 Action. Township Fire Department personnel are NOT to touch, move, disarm or detonate any suspected explosive device. When an explosive device is found, notify Army Explosive Ordnance Disposal (EOD) at Fort McCoy, Wisconsin.

Primary	608-388-3315	24 hr. Emergency Response
Alternate	210-221-1308	Fort Sam Houston, Texas

When contacting the EOD, the following information will be requested:

- A) Situation and location of device.
- B) Description - length, diameter, color, markings, and accessories.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 2: I.C.S. - Incident Command System
--

Subject: Command Procedures

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Section: 2-2-1

Effective Date: 07-01-95

Revised Date:

- 1.01 Purpose: Effective use of personnel and equipment at an emergency requires clear, decisive action on the part of the Incident Commander. This guideline identifies the process to set up Command and operate a Command Post. It fixes responsibility for the command function and its duties on one individual at any time during the operation.
- 1.02 Goal: Provide a Command Procedure to accomplish the following.
- Fix the responsibility for Command on one individual.
 - Provide strong, direct, and visible Command as early as possible in the operation.
 - Provide a framework for the activities and responsibilities assigned to Command.
 - Provide a system for the orderly transfer of Command to later arriving senior officers.
- 1.03 Responsibility: The Incident Commander is responsible for the command functions at all times. As the identity of the Incident Commander changes, this responsibility shifts with the title. The term "Command" in this procedure refers jointly to both the person and the function.
- A) Command is responsible for four basic fireground goals.
 - 1) Provide for the safety and welfare of fire/emergency personnel.
 - 2) Remove endangered occupants and treat the injured.

- 3) Stop the fire (or terminate the emergency).
 - 4) Conserve property after fire control is achieved.
- B) Command is responsible for the following functions as required by the circumstances of the situation.
- 1) Assume and confirm Command and take an effective position.

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- 2) Rapidly evaluate the situation (size-up).
- 3) Initiate, maintain and control the communications process.
- 4) Identify the overall strategy, develop an attack plan and assign units.
- 5) Develop an effective fireground organization.
- 6) Provide continuing Command within the framework of operating guidelines.
- 7) Coordinate the transfer of Command, as required.
- 8) Request and assign additional resources as required.
- 9) Return companies to service and terminate Command.

All of these functions are the responsibility of Command, whether or not Command is transferred from one individual to another. The first five (5) functions must be addressed immediately from the initial assumption to Command.

1.04 Establishing Command: The first Fire Department unit to arrive at the scene shall assume Command. This unit remains in command until relieved by a ranking officer, or until the incident is terminated.

- A) Initial Report: The person assuming Command shall transmit a brief radio report including.
- 1) Unit on the scene, confirming assumption of Command and location.
 - 2) Building description (occupancy, size, arrangement, construction and address).
 - 3) Obvious fire conditions.
 - 4) Action taken (brief description).
 - 5) Any obvious safety concerns.
- B) Radio Designation: The radio designation "Command" will be used with a brief description of the incident location. This designation will not change through the duration of the incident.

(Example: "Post Road Command" "Dunns March Command")

1.05 Command Options:

- A) When the first arriving officer is a command officer, efforts should automatically be directed towards establishing a Command Post and fulfilling the listed Command functions.

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- B) Establishing a Command Post in a vehicle equipped for this purpose is a priority at all working incidents. The location of Command in a vehicle provides.
- 1) Appropriate work space and lighting.
 - 2) Communications equipment.
 - 3) Map books, reference materials.
 - 4) Limited isolation from distractions.
- C) When Command is initially assumed by a line officer, that officer must decide on the proper commitment for arriving equipment. This assignment will fall into one of three general modes.

Nothing Showing Mode

These situations require investigation by the first arriving units. Normally, the officer will go to check the situation while using a portable radio to command the incident.

Fast Attack Mode

Situations which require immediate action to stabilize the incident. Examples include interior fires in residences, apartments or small commercial occupancies. These situations require that the officer quickly decide how to commit first arriving units. Where a fast interior attack is critical, use of the portable radio will permit involvement in the attack without neglecting Command responsibilities. This mode should not last more than a few moments, and will end with one of the following.

- 1) Situation is stabilized.
- 2) Command is passed to the next arriving line officer.
- 3) A command officer arrives and Command is transferred.
- 4) Situation is not stabilized and the officer must withdraw to the exterior to set up a Command Post.

Command Mode

Situations that require strong, visible command from the outset. Examples include large complex fire or rescue operations, or strong chance of fire extension. In such cases, the officer will initially assume a Command position and maintain that position

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until relieved by a command officer. The tactical worksheet is used to assist in managing these situations.

- D) The officer assuming Command has a choice of modes and degrees of personal involvement in the attack, but continues to be fully responsible for the tasks assigned to the Command function. In all cases, the initiative and judgement of the officer is important. The modes identified are not strict rules, but general guidelines to help the officer in planning appropriate actions.

- 1.06 Passing Command: In certain situations, it may be better for the first arriving line officer to "Pass Command" to the second arriving line officer or to a staff officer. This is indicated when the initial commitment of the first station requires a full crew and the next arriving line or staff officer is on the scene or close behind. (Example: immediate rescue situation)

The first arriving officer will give an initial "on-scene radio report" and advise that Command will be passed. The initial arriving line officer retains responsibility for Command until the next unit arrives and acknowledges the transfer.

- 1.07 Transfer of Command.

- A) The first Fire Department unit to arrive on the scene shall assume and retain command until relieved by a ranking officer within the following guidelines.
- 1) The first arriving firefighter will automatically assume Command.
 - 2) The first arriving line officer assumes Command if the incident has not been declared under control, and after transfer of command procedures have been completed.
 - 3) Assumption of Command is discretionary for the Fire Chief.

The arrival of a ranking officer on the fireground does not mean Command has been transferred to that officer. Command is transferred only when the outlined steps have been completed.

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- B) Transfer of command will be regulated by the following.
 - 1) The officer assuming Command will communicate with the person being relieved by radio or preferably face-to-face on arrival.
 - 2) The person being relieved will brief the officer assuming Command indicating the following.
 - a) General situation status.
 - 1) Fire location, extent, conditions.
 - 2) Effectiveness of control efforts.
 - 3) Safety considerations.
 - b) Deployment and assignments of companies.
 - c) Appraisal of need for additional resources.
 - 3) The person being relieved should review the Tactical Work Sheet with the Command officer. This sheet provides the most effective framework for Command transfer as it outlines the location and status of resources in a standard form that should be well known to all members.
- C) Command officers should eliminate all unnecessary radio traffic while responding unless such communications are required to be sure that Command functions are covered.
- D) When an individual is effectively commanding a tactical situation, it may be desirable for that person to continue in an active command role. This individual is aware of the location and function of units and the general status of the situation. In these cases, the arriving command officer may assume a supportive role in the overall command function. Command will be considered transferred because the command officer is involved in the command process.

1.08 Command Structure: Command has the responsibility to develop an

organizational structure to manage emergency operations. The development of this management structure should begin with initial tactical control measures and may continue through several phases, depending on the size and complexity of the particular situation. The goal must be to develop the command organization at a pace which stays ahead of or even with the tactical assignment of firefighting units.

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To address the varied needs of emergencies, the command structure can be divided into six functional areas. The areas include:

Command

Staging

Operations

Planning

Logistics

Finance

Activate only those parts of the management system which are needed to support the emergency organization.

Command

Planning

Logistics

Operations

Finance

Staging

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- A) Command: The first functional area is Command which has overall responsibility for the incident. Command establishes the goals and objectives that all other resources will work to accomplish. Command will develop, implement, monitor, and modify the action plan which others will follow to control the incident. The remaining four functional areas are under the direction of Command. In addition, Command can create staff positions who report directly to Command.

Command

Staging

Information Officer

Liaison Officer

Safety Officer

- 1) Staging officer is responsible for control of all fire equipment on the scene. He/she will keep track of equipment available to command and dispatch on request/order from Command.
- 2) The Information Officer is responsible for formulation and release of incident information to the media and other appropriate agencies.
- 3) The Liaison Officer is the point of contact for assisting and coordinating outside agency representatives.

4) The Safety Officer is responsible for monitoring and assessing hazards or unsafe situations and developing measures for assuring personnel safety. The Safety Officer can take immediate steps to correct any unsafe act or remove personnel from immediate danger.

B) Operations Operations is the functional area responsible for all tactical operations carried out to meet the goals and objectives

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established by Command. The Operations Officer's role is to command and coordinate the efforts of the crews working directly on the fire or incident.

Command

Information

Liaison

Safety

Operations

1) Operations will supervise working units made up of resources that operate in a defined area or serve a specific function.

Examples: Interior Sector, North Sector, Ventilation Sector.

Command

Operations

Sector

Sector

Sector

- 2) Span of Control: At most incidents, crews are assigned to a sector in numbers that maintain a span of control by the officer. At larger incidents where significant resources are available, task forces consisting of several companies can be assigned to a sector.

If the number of sectors exceeds Operations span of control, branches can be established. A manageable number of sectors can

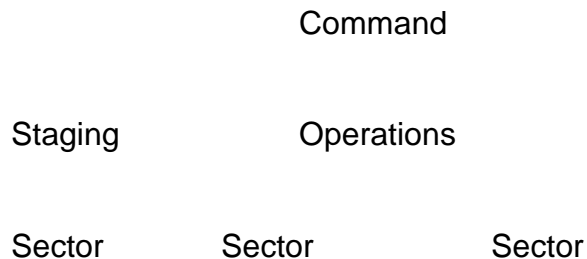
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be assigned to each branch allowing the Operations Officer to regain span of control.

- 3) Staging: Staging is the function of assembling all incoming equipment and manpower. This equipment and manpower list is given to command for his/her deployment.



The Staging Area is located close to the incident, yet far enough away to prevent interference with emergency operations. When a staging area is set up, incoming units report to this area to await assignment until they are needed.

- C) Planning: Planning is responsible for gathering and distributing information. The Planning Function may simply involve the use of the Tactical Worksheet to track situation and resource status.

Command may choose to assign one or more people to activate the Planning function. Structural Engineers, Chemists or other technical advisors may be added to support the function.

Command should consider using Mutual Aid Chief Officers, Department Administrative Staff, or Fire Prevention Personnel to fill positions within

the planning function.

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Situation Status is the gathering of information regarding the incident itself.

Resource Status is the gathering of information on the resources currently at the incident, how they are being used, and how effectively they are being used.

Documentation involves logging the activity which occurs during an

incident. This log can be invaluable when preparing the final report for the incident or in preparing a critique of the operation.

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- D) Logistics: This function is responsible for providing the facilities, services and supplies to support the response to an incident.



1) Logistics can be broken down into two major areas of responsibility.

- a) Service Branch is responsible for REHAB and medical aid for emergency personnel, and for feeding the personnel at the

incident.

- b) Support Branch is responsible for providing supplies, facilities, fuel and maintenance.

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E) Finance: This function is responsible for all financial aspects of the incident. The Finance function oversees personnel costs, costs of contractors or vendors, claims due to injuries and monitoring the legalities regarding to finance.

Command

Information

Liaison

Safety

Staging

Operations

Planning

Logistics

Finance

Time Unit
Procurement Unit
Claims
Cost Tracking

- 1) Finance can be broken down into areas of responsibility.

Time Unit is responsible for personnel time recording.

Procurement Unit is responsible for maintaining contracted equipment time records, and financial matters involving vendors.

Claims is responsible for injury claims associated with the incident.

Cost Tracking is responsible for collecting all cost data related to the incident.

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1.09 Summary: At first glance the management system can appear to be somewhat complex and overpowering. To help simplify the system, we ask that the system be viewed in two ways.

- A) View the functional areas (Command, Operations, etc.) as job descriptions. Command is responsible for all functions unless those jobs area delegated to others. The system provides a framework which Command can use to expand the system to the size of the incident.
- B) We can also view the system as a toolbox filled with tools. Each tool represents a resource which Command has available should the need arise. Command only selects those tools which are needed to complete the job. Positions within the management system are only filled when they will assist Command in meeting incident goals - not just to build a better organizational chart.
- C) The benefits of using a management system include.
 - 1) It works at any type of emergency no matter how large, small or complex.
 - 2) It provides for unity of command - one person in charge with clear line of authority and responsibility.
 - 3) Clear lines of communication are established.
 - 4) Freelance operations are eliminated or minimized.

- 5) Incidents involving multiple agencies or jurisdictions can be dealt with through improved coordination and communication.
- 6) The system can be expanded in a modular fashion as the incident expands or as additional resources become available.
- 7) More effective use of resources.
- 8) Personnel safety can be enhanced.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 3: I.C.S. - Command Function

Subject: Safety Officer

Page 1 of 1

Section: 2-3-1

Effective Date: 07-01-95

Revised Date:

- 1.01 Purpose. To define the basic functions and activity of the Safety Officer position.
- 1.02 Goal. To describe the command staff position for Safety. To provide a method for assigning safety supervision to a person within the command staff.
- 1.03 Responsibility.
 - A) Monitor and assess safety hazards and unsafe situations.
 - B) Suggest measures to reduce risk to personnel.
 - C) Inform Command of safety problems and potential hazards.
- 1.04 When to activate position. The Safety Officer is assigned when the size and complexity of the incident prevents Command from personally supervising the function. This function can be expanded by adding personnel who will report to the Safety Officer.
- 1.05 Authority to Bypass Chain of Command. The Safety Officer can bypass the chain of command when it is necessary to correct unsafe acts. Command must be immediately informed of these corrective actions.

- 1.06 Reference. NFPA Standard 1501 Fire Department Safety Officer, 1987 Edition will be the reference used to guide the actions of the safety staff position.
- 1.07 Radio Designation. The plain-language term, "Safety" will designate the safety staff function.
- 1.08 Chief Training/Safety Officer. Refer to Section 1-3-5 for additional job description information.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 3: I.C.S. - Command Function

Subject: Information Officer

Page 1 of 4

Section: 2-3-2

Effective Date: 07-01-95

Revised Date:

- :
- 2.01 Purpose. To define the basic functions and activity of the Information staff position.
 - 2.02 Goal. To provide public information by establishing and maintaining a positive relationship with the news media.
 - 2.03 Responsibility. Command is responsible for public information at a fire department operation. Command can delegate management of this information to a person who will serve as incident Information Officer.
 - 2.04 When to activate position. The Information Officer is assigned when the size or complexity of the incident prevents Command from personally supervising the function. Assigning an information officer will relieve Command of dealing directly with the media during critical stages of the incident. This function is expanded, when needed, by adding personnel who will report to the Information Officer.
 - 2.05 Guideline.
 - A) The Information Officer will select a position that is visible and accessible to arriving media representatives. This position will serve as the place where the media can meet to receive incident information. The position should provide the Information Officer ready access to the Command Post without disrupting Command Post activity.

B) The person assigned as Information Officer will use a media worksheet to gather basic incident information.

C) If possible, add anything to the basic information that will enhance the story of the situation. This information should include a description of hazards encountered. Another example is an exceptional effort made by an individual or group of members. The goal is to provide a clear, concise story for the public.

D) Do not be afraid to talk to reporters. They will report the facts as you give them. Tell them everything you can, but be sure everything you tell them is correct.

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Date: 07-01-95

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E) If possible, a personal interview with Command is encouraged. Grouping media representatives for a briefing will permit Command to best use the available time.

F) While information is collected, reporters may request information. Give them what is available, but emphasize that this information is tentative. If these requests hinder the gathering of information, consider these alternatives:

- 1) Tell reporters to gather in one place. State that you will return shortly with more information.
- 2) Request additional manpower from Command and stay with the reporters.
- 3) Tell the reporters to get pictures and video footage without interfering with operations while you gather information. Be sure to point out hazardous areas. Arrange to meet them shortly at a designated location for your briefing.
- 4) If reporters have deadlines to meet, get their telephone numbers, and telephone the facts to them as soon as possible.

G) **Names of persons injured or deceased are not released until the next of kin are notified.** Notifications are usually handled by Law Enforcement.

H) The Information Officer or other staff may provide an orientation tour for

media representatives. These tours are approved by Command and coordinated with the Operations Officer. The Information Officer is responsible for requiring media personnel to wear proper protective clothing when in hazardous areas.

- I) If media personnel create a safety problem, or hinder operations, they should be requested to move in a positive manner. AVOID CONFRONTATIONS. The policy of the Department is to cooperate with the media.

2.06 Media Deadlines. It is important to consider media deadlines. Newsrooms should be given information before deadlines whenever possible.

Subject: Information Officer

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2.07 Media Worksheet.

- A) Media worksheets are found in Command Post.
- B) The media is interested in the number of units that respond to the emergency, not the unit designations. They are also interested in total firefighter figures.

Example: 4 Engines + 1 Rescue = 5 units and 20 firefighters.
- C) Tell the media what the first unit found on arrival, and the action taken.

Example: "Engine 21 arrived on the scene and found the house well involved with fire. Engine 21 directed a quick attack to the interior and ordered firefighters to conduct search and rescue."
- D) If there are injuries, compile the full name, age, extent of injuries and where taken for treatment. If there is a fatality, omit the extent of injury.
In all cases -- do not release names until the next of kin have been notified.
- E) Note specific hazards.
- F) Note specific accomplishments, such as rescues, good salvage work, etc.
- G) Note information concerning private protection.

Examples: "Fire was controlled by the sprinkler system." "A smoke detector would have provided earlier warning."

- H) Use word descriptions for damage -- not dollar figures.

Examples: "Minor fire damage." "Moderate smoke damage."

Subject: Information Officer

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MEDIA WORKSHEET

- 1) Time of Alarm.....and.....Total time on scene.
- 2) Location
- 3) Owner/Occupant/Business
- 4) Description of Incident
- 5) Number of Units and Members On-Scene
- 6) Injuries or Casualties
(Name -- Address -- Age -- Disposition)
(Do not release names.)
- 7) Damage Description
(Major/Minor Fire Damage)
(Major/Minor Smoke Damage)
(Major/Minor Fire Control Damage)
(Description of Property Conservation Action Taken)
- 8) Special Circumstances
(Rescue -- Need for Smoke Detector -- etc.)

2.08 Public Information Officer. Refer to Section 1-3-9 for additional job description information.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 3: I.C.S. - Command Function

Subject: Liaison Officer

Page 1 of 1

Section: 2-3-3

Effective Date: 07-01-95

Revised Date:

- 3.01 Purpose. To define the basic functions and activity of the Liaison staff position.
- 3.02 Goal. To describe the command staff position for Liaison Officer. To coordinate the actions of assisting agencies through a person assigned to command staff.
- 3.03 Responsibility.
- A) Provide a point of contact for assisting or coordinating agencies.
 - B) Provide lines of authority, responsibility and communication for assisting or coordinating agencies.
 - C) Provide for the safety of personnel of assisting or coordinating agencies.
- 3.04 When to activate position. The Liaison Officer is assigned when the size or complexity of the incident prevents Command from personally supervising the function. This function can be expanded by the addition of personnel who will report to the Liaison officer.

- 3.05 Agency Representatives. The representatives with whom Liaison interacts need to have decision making authority since delay of "going through channels" may have a negative effect on the needed coordination.
- 3.06 Reporting Point. Liaison must select a place for agencies to report, work, and to communicate with each other.
- 3.07 Radio Designation. The plain-language term, "Liaison" will designate this staff function. Whenever possible, face-to-face communications should be used in place of radios.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 3: I.C.S. - Command Function Subject: Staging Officer Page 1 of 4 Effective Date: 07-01-95	Section: 2-3-4 Revised Date:

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| Part 3: I.C.S. - Command Function
Subject: Staging Officer
Page 1 of 4
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Revised Date: |
|--|---------------------------------|
- 4.01 Purpose. To provide standard initial placement of responding apparatus, personnel and equipment prior to assignment at incidents.
- 4.02 Goals. Effective staging procedures will:
- A) Prevent excessive congestion at the scene.
 - B) Provide time for Command to evaluate conditions prior to assigning units.
 - C) Place apparatus in an uncommitted location close to the immediate scene to permit effective assignment by Command.
 - D) Reduce radio traffic during the critical initial stages of emergency operations.
 - E) Permit Command to formulate and implement a plan without undue confusion and pressure.
- 4.03 Level I - Staging. Level I staging will automatically apply to all multiple unit responses unless otherwise ordered by Command. Level I Staging involves the following:
- A) The first arriving Engine Company will respond directly to the scene and

will operate to best advantage.

- B) The first arriving Tanker Company will respond directly to the scene and will place themselves to best advantage.
- C) The first arriving Rescue/EMS unit will go directly to the scene and place their apparatus in a location that will provide maximum access for medical/rescue support. The location should not impede the movement of other units.
- D) All other units will stage in their direction of travel, approximately one block from the scene, on the incident side of the road, until assigned by Command.
- E) Staged units will, in normal response situations, report company designation, standing by and their direction.

Subject: Staging

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- F) An acknowledgement is necessary from Dispatch. Staged companies will stay off the air until orders are received from Command. If it becomes apparent Command has forgotten the company is in a staged position, the company officer shall contact Command and advise him of their standby status.

Staging procedures attempt to reduce routine radio traffic, but in no way should reduce effective communications or the initiative of officers to communicate. If staged companies observe critical tactical needs, they will advise Command of such conditions and their actions.

4.04 Level II - Staging. Level II Staging is used when an on-scene reserve of companies is required. Companies are placed in a Staging Area at a location designated by Command.

- A) When Command announces "Level II Staging",
 - 1) All companies shall report to and remain in the staging area until assigned.
 - 2) All companies already in Level I staging will remain in position unless instructed otherwise.
 - 3) When going to Level II Staging, Command will give an approximate location for the Staging Area.

- B) The Staging Area should be away from the Command Post and the emergency scene. This area must have adequate space for the assembly and safe movement of apparatus.
- C) When calling for additional resources, Command should consider Level II Staging at the time of the call. This is better than calling for Level II Staging while units are enroute. The additional units will be directed to the Staging Area.
- D) Command may designate a Staging Officer who will be responsible for staging activities listed below. In the absence of this assignment, the first officer to arrive at the Staging Area will automatically become the Staging Officer and will notify command via radio.

STAGING WILL REPORT TO COMMAND.

Subject: Staging

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- E) The radio designation for the Staging Officer will be "Staging". All responding companies will stay off the air, respond directly to the Staging Area, and report in person to the Staging Officer. They will standby their unit with crew intact.
- F) When directed by Command, the Staging Officer will verbally assign companies, telling them where and to whom to report. The responding unit may then communicate directly with operations by radio.
- G) Staging will give Command periodic reports of available companies in Staging. Command will use this information when requesting additional resources.
- H) The Staging Officer is responsible for the following functions:
 - 1) Coordinate with Law Enforcement to block streets, intersections and other access required for the Staging Area.
 - 2) Ensure that all apparatus is parked in an appropriate manner.
 - 3) Maintain a log of companies available in the Staging Area and inventory all specialized equipment that might be required at the scene.
 - 4) Progress reports to Command indicating number and type of units

available.

- 5) Assume a position that is visible and accessible to incoming and staged companies. This will be accomplished by leaving warning lights operating.
 - 6) In some cases, the Staging Officer may have to indicate best direction of response and routing for responding companies into the Staging Area.
- l) At some incidents, such as a major medical emergency, it may be necessary to designate a parking area for used apparatus near to the incident scene. This would be necessary when the Staging Area is too far from the incident to permit hand carrying needed equipment to the incident site. In such cases, the Staging Officer shall designate the parking area and instruct each company of its location before they leave Staging. The parking area should be close enough to the incident

Subject: Staging

Date: 07-01-95

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site to allow easy transfer of needed equipment to the scene. The parking area should in no way impede necessary access for ambulances or other units to the incident area.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 3: I.C.S. - Command Function

Subject: Resource Staging

Page 1 of 1

Section: 2-3-5

Effective Date: 07-01-95

Revised Date:

- 5.01 Goal. To provide a pool of personnel and equipment near an area of operations.
- 5.02 Resource Staging - General.
- A) Command must identify the need to set up a Resource Staging Area. An officer and adequate personnel must be assigned to operate this sector.
 - B) The Resource Staging should be close to the area of operations, but in a safe location. (For High-Rise operations, the Resource Staging is normally set up two floors below the fire floor.)
 - 1) Command may designate the location of the Resource Staging or direct the Resource Officer to find and announce the location.
 - 2) The Resource Staging must be large enough to meet the foreseeable storage needs.

- C) The Resource Officer should identify the types of equipment and supplies needed by operating sectors. These items can include:
 - 1) SCBA cylinders.
 - 2) Hose and nozzles.
 - 3) Forcible entry tools.
 - 4) Lighting equipment.
 - 5) Replacement portable radios.
 - 6) Salvage equipment.

- D) The Resource Officer coordinates the moving of equipment and supplies from Staging to the Resource Staging. (In a High-Rise building this involves working with Entry Control Officer.).

- E) Personnel can be directed to standby in the Resource Staging. Companies reporting to the Resource Staging must stay intact as a unit. Command will call Resource to assign available companies to areas of operation.

<p>TOWNSHIP FIRE DEPARTMENT</p> <p>CHAPTER 2: SUGGESTED OPERATING GUIDELINES</p>
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<p>Part 3: I.C.S. - Command Function</p>	
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<p>Subject: Triage/Treatment</p>	
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	<p>Section: 2-3-6</p>
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<p>Effective Date: 07-01-95</p>	
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	<p>Revised Date:</p>
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- 6.01 Goal. To provide a guideline for Triage/Treatment sector activities.

- 6.02 Description of Function: The triage/treatment sector's responsibility is to triage and begin initial treatment of the victims. Victims should be stabilized and continually monitored until they are transported to a medical facility. Separate areas should be maintained for high, moderate, and low priority cases. The treatment group will advise the Transportation Sector Officer of transportation needs and which victims should be removed first.

- 6.03 Responsibilities: When this function is activated, the Triage/Treatment Sector will be responsible for the following.
 - A) Determine the resources needed to perform triage/treatment and advise Command⁸.

 - B) Identify and establish suitable treatment areas for high, moderate, and low priority victims. Locate these areas near an easily accessible pick-up point for transport. Advise Command of these areas.

- C) Maintain an accurate count of patients and where they were transported.
- D) Assign and coordinate resources to provide suitable treatment for victims.
- E) Triage arriving victims and continually evaluate their condition.
- F) Determine transportation priorities. It may be possible to separate the slightly injured persons who are able to walk and locate them in an area easily accessible to buses or similar forms of transportation.

⁸ These activities will be coordinated with EMS personnel, who are responsible for direct care of the patient. However, conditions can exist (fire/explosion hazards, multi-casualty, etc.) where the department personnel are assigned to complete these tasks.

Subject: Triage/Treatment

Date: 07-01-95

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- G) Report progress to Command.
- H) Coordinate with other groups.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 3: I.C.S. - Command Function

Subject: Transportation

Page 1 of 1

Effective Date: 07-01-95

Section: 2-3-7

Revised Date:

- 7.01 Goal. To provide a guideline for Transportation sector activities.
- 7.02 Description of Function. The transportation sector is responsible for taking stabilized victims to appropriate medical facilities. Coordination with the triage/treatment group is essential for the transportation group to do its job properly.
- 7.03 Responsibilities. When this function is activated, the Transportation Sector will be responsible for the following:
- A) Determine transportation needs and the availability of ambulances and other methods of transportation.⁹
 - B) Report resource needs and progress to Command.
 - C) Identify ambulance staging and loading areas. If applicable, determine helicopter landing zones.

- D) Obtain the patient handling capabilities of the medical facilities that are to receive the patients.
- E) Determine the specific entry and exit locations from the triage/treatment area. Coordinate the order of patient transportation and medical facility allocation with the triage/treatment group.
- F) Establish a method of transporting walking wounded.

⁹ These activities will be coordinated with EMS personnel, who are responsible for direct care of the patient. However, conditions can exist where department personnel are assigned to complete these tasks.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 4: I.C.S. - Operations Function

Subject: Incident Entry Control

Page 1 of 2

Section: 2-4-1

Effective Date: 07-01-95

Revised Date:

- 1.01 Goal. To control access to a building or hazardous area. To account for persons entering and exiting a building or hazardous area.
- 1.02 Incident Entry Control - General.
 - A) Incident Entry Control provides an entrance/exit where personnel will enter the building or hazardous area.
 - B) Incident Entry Control limits entry to those persons authorized by Command.
 - 1) Persons with specific assignments.
 - 2) Persons with required protective clothing.
 - C) Incident Entry Control will collect 1 (one) I.D. Tag from each firefighter as he/she enters area and will return it to each firefighter as he/she exits the building or area.

1.03 Establishing Incident Entry Control.

A) Buildings - General.

- 1) When possible, use the ground floor area outside of building to set up Incident Entry Control.
- 2) At the start of operations, a designated firefighter should be left in the entry area to set up Incident Entry Control.
- 3) A company should be assigned as quickly as possible, with resources added as needed.
- 4) All personnel entering the building must report to Incident Entry Control before reporting to their assignments. All firefighters must leave one I. D. Tag with the Entry Control Officer.
- 5) Civilians entering the building will be accompanied by a firefighter with a portable radio.

Subject: Incident Entry Control

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B) Buildings - High Rise. In addition to the actions listed in A.

- 1) Obtain, identify and distribute keys from Lock Box. (Keys for elevator must remain with Incident Entry Control.)
- 2) Take control of all elevators and return to ground using Emergency Control Feature.
- 3) Control access to stairways.
- 4) Identify stairways to be used by firefighting forces.
- 5) Direct occupants leaving stairways to safe areas. Prevent re-entry of occupants. Control alternate access points to the building.
- 6) Take control of alarm and communications systems.
- 7) Coordinate equipment and manpower movement between Staging and Resource.
- 8) Stockpile equipment at entry for transportation to Resource.

- 9) Establish Stairway Support if needed. Assign personnel to every other floor landing to relay equipment up the stairs. (These personnel should have protective clothing and SCBA available nearby, but work without coat and SCBA when conditions permit.)

C) Hazardous Materials Incident.

- 1) Mark hazard areas with fire line or hazard zone tape.
- 2) Request adequate assistance to maintain the perimeter.
- 3) Select an entrance/exit point and inform Command of the location.
- 4) Record names, the time, and assignment of persons entering and leaving the controlled area.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 4: I.C.S. - Operations Function

Subject: Evacuation (Area)

Page 1 of 5

Section: 2-4-2

Effective Date: 07-01-95

Revised Date:

2.01 Purpose. There will be situations when we must evacuate an area of the jurisdiction. These situations include hazardous material emergencies, potential explosions, floods, major fires or similar incidents. An evacuation of anything more than a single structure requires a coordinated effort between Fire and Law Enforcement. It requires a definite plan and a method of reporting progress.

2.02 Goal. Conduct evacuations without unnecessary duplication of effort.

2.03 Guideline.

A) Identification of Evacuation Area. When an area evacuation is needed because of a fire, explosion, or toxic material hazard, the limits of the evacuation area will be determined by Fire Department Command in consultation with the Law Enforcement Supervisor.

- 1) The action taken will depend upon the available resources, the

degree of risk, and the type of evacuation selected.

- 2) Types of area evacuations.
 - a) Relocation to shelters. Citizens are directed to relocate outside of a designated area. Citizens may use their own vehicles, or transported using buses.
 - b) Protection-in-place. Citizens are directed to close all windows and doors and shut-down heating/air conditioning equipment which draws in outside air. This method of protection may be selected when an air-borne hazard (smoke,vapor) would present a greater risk if citizens were asked to relocate.
- 3) Law Enforcement will be responsible for securing the perimeter of the evacuation area, including traffic and pedestrian control.
- 4) The Fire Department will be responsible for assessing the degree of danger, the need for evacuation and the safety of personnel operating within the evacuation zone.

Subject: Evacuation (Area)

Date: 07-01-95

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- B) Organizing the Evacuation. When the evacuation area and its perimeter is established, prepare a plan to affect the desired evacuation. The plan will depend on the resources available (Fire, Law Enforcement, other agencies), the type of hazard and type of evacuation.
 - 1) Establish a joint Command Post for Fire and Law Enforcement. Use maps and aerial photographs of the area to make assignments, track progress and avoid duplication or omissions. If it is not practical to have the Law Enforcement and Fire Command Posts together, liaison must be established.
 - 2) Assign units or companies to evacuate specific objectives (a building, a block, a street, etc.) and report completion.
 - 3) Activate sector officers to supervise operations.
 - 4) Advise personnel if evacuees are to be directed to particular Evacuation Centers.
 - 5) Provide patrol cars and companies with information to be used within the evacuation message. Use evacuation guidesheets to prepare message . (See 2.04)

- 6) Use P.A. function on Electronic Sirens to alert citizens and door-to-door individual notification. Make noise and attract attention if situation is urgent.
 - 7) Start with areas in most immediate danger first. Assign priorities by degree of risk.
- C) Public Information. Any evacuation will require and benefit from clear, concise public information actions. A Public Information Officer must be assigned to communicate with radio and television stations as quickly as possible to explain exactly what the situation is, and what affected people should do.
- 1) Township Base and the Communications Center must be informed of the situation to answer calls which can be expected from people wanting to verify information.

Subject: Evacuation (Area)

Date: 07-01-95

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- D) Evacuation Centers. Select a location where evacuees can be directed. These centers should be located within a school, church or public facility. This center should be located and identified as quickly as possible.

When a long-term evacuation (more than 2-3 hours) is expected, contact the Red Cross to set-up a temporary shelter.

Command must have direct communications with the Evacuation Centers.

- 2.04 Evacuation Announcements -- Using Law Enforcement or Fire Vehicles. When an evacuation is ordered, Law Enforcement and Fire Vehicles can be used to deliver evacuation messages.

Evacuation procedure:

- 1) Obtain evacuation information from Command.
- 2) Vehicles will operate in teams of two.
- 3) Vehicles will turn air-conditioning to MAXIMUM. (This will reduce exposure to outside air.)

- 4) The first vehicle will cruise the affected area at approximately 10 mph with warning lights and siren operating. Make noise!
- 5) The second vehicle will follow 50 yards behind the first.
- 6) The second vehicle will make the following announcement using vehicle PA system.

Evacuation announcement:

"This is an emergency. All residents are advised to evacuate the area immediately. Evacuation centers are located at _____

If you do not have transportation, buses will stop at the following intersections: _____

Persons needing assistance can call _____.

Subject: Evacuation (Area)

Date: 07-01-95

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A) Format for Relocation Announcement:

Evacuation Announcement - RELOCATION

"This is an emergency. An evacuation in the _____
_____ has been ordered because of
a hazardous condition arising from _____

The area to be evacuated is bounded

on the North by _____

on the South by _____

on the East by _____

on the West by _____

Residents are to leave this area immediately. Residents who can not stay with relatives or friends outside of the affected area are directed

to go to the Evacuation Center at _____
where you will be assisted by the American Red Cross.

Residents who can not provide their own transportation are asked
to walk to the following intersections:

Buses will meet residents at these locations to provide transportation.

Persons needing assistance are directed to call _____
and arrangements will be made to assist you."

Subject: Evacuation (Area)

Date: 07-01-95

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B) Format for Protection-in-Place Announcement

Evacuation Announcement - Protection-in-Place

"This is an emergency. A hazardous condition arising from

now affects _____.

The affected area is bounded

on the North by_____

on the South by_____

- D) Identify safe evacuation routes. An evacuation is intended to remove occupants from a hazard.
- 1) Move occupants to safe areas along identified safe paths.
 - 2) Sectors may be assigned to keep the evacuation path safe (protective handlines, ventilation, etc.).
 - 3) Use normal means of egress first (halls, stairs, etc.).
 - 4) Aerial ladders, ground ladders are secondary means of egress.
- E) Identify evacuation stairs. In multi-story buildings, it may be necessary to designate one stairway for evacuation while another is used for firefighting operations.
- F) Evacuate to a safe location. Move people to a location out of danger, but no further than is practical. (Example: In a high-rise building two or three floors below the fire is usually adequate.) Attempting to move people too far tends to complicate the situation.
- G) Mark rooms or suites after evacuation. When evacuating a building with rooms or suites, mark doors to areas which have been evacuated to avoid duplication of effort.

Subject: Evacuation (Building)

Date: 07-01-95

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- H) Use alarm and communication systems. These systems are designed to warn people of the need to evacuate. Use these in conjunction with evacuation teams when the need to evacuate is urgent. (If the situation is not urgent, face-to-face contact is less distressing than alarm bells.)
- I) Avoid panic. Members must consciously work to reduce anxiety of occupants and avoid panic. Explain what the problem is and what needs to be done as accurately as the situation permits.
- J) Assign sufficient resources to evacuation. Rapid evacuation of a building may require a major commitment of sectors. The commitment may be sufficient to provide for walking evacuees and those needing physical assistance. Never leave evacuated occupants unattended.
- K) Do not evacuate unnecessarily. If conditions do not present a hazard, evacuation may be unnecessary. Send personnel to evaluate conditions and judge the need for evacuation if the need is not obvious.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 4: I.C.S. - Operations Function

Subject: Roof

Page 1 of 3

Effective Date: 1 of 3

Section: 2-4-4

Revised Date:

- 4.01 Purpose. To provide a guideline for Roof sector activity.
- 4.02 Goal. To permit safe and effective roof operations at structure fires.
- 4.03 Description of Function. Roof operations are designed to support interior firefighting. Personnel operate on the roof to ventilate, to check fire conditions and structural safety, and to determine the shape and arrangement of structures. The loss of roof integrity is a primary reason to change from offensive to defensive operations.
- 4.04 Guideline.

- A) A Roof sector should be set up by the first team to reach the roof. The first personnel reaching the roof must quickly check conditions to assure the roof is structurally sound before trying to work on it. The degree and extent of any signs of weakness must be considered before committing personnel above a fire.
- B) The initial Roof Sector Officer shall make a report to Command, as quickly as possible, describing:
- Roof construction (flat, peaked, bowstring, etc.)
 - Structural conditions
 - Visible smoke and fire conditions and extent
 - Presence of a ceiling
 - Locations of firewalls and significant arrangement details
 - Locations of any heavy objects or equipment which could pose a danger of collapse
 - Proposed actions

This information should be updated as conditions develop or as more information is collected.

- C) When conditions show an obvious need for vertical ventilation, Roof Sector shall coordinate the opening of vent holes with Command and Interior Sectors.

Subject: Roof

Date: 07-01-95

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- D) The Roof Sector should try to open vent holes over the fire area.
- E) The Roof Sector will report to Command when ventilation has been accomplished.
- F) Without an obvious need for vertical ventilation, Roof Sector shall coordinate opening inspection holes with Command to determine the need for vent holes.
- G) After ventilation is complete, exit roof as soon as possible.

4.05 Safety.

- A) The Roof Sector Officer is responsible for providing an alternate means of egress from the roof. Anticipate the loss of the safe path to the initial access ladder and the alternate should be at a remote point.

- B) The Roof Sector Officer must monitor the radio. Radio contact must be maintained over the noise of power tools and equipment.
- C) The Roof Sector Officer has the responsibility to provide for protective hose lines where needed. Protective hose lines are for the protection of personnel and to stop fire spread on a roof surface only. Hose lines MUST NOT be directed into vent holes.
- D) Roof ladders shall be used for operations on any roof top where slope presents a safety concern. Further, these ladders shall be used anytime there is a possible weakness in the roof covering. A roof ladder should be used to bridge over suspected weak areas.
- E) All Roof Sector personnel must wear full protective clothing and must use SCBA when operating over a fire area. Face pieces must always be in place when opening vent holes.
- F) Aerial ladders should be used for roof access whenever possible to provide stability and strength in case of structural collapse.
- G) If, at any time structural conditions become questionable, Command must check the safety of both Roof Sector and Interior personnel. Personnel must not work on a roof which is structurally questionable.

Subject: Roof

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- H) Roof Sector personnel shall work within the following safety guidelines.
 - 1) Ladder near corners. Avoid involved fire areas and electrical lines.
 - 2) Test or "sound" the roof before walking on it.
 - 3) Set up a safe path from ladders to operating areas by probing and sounding.
 - 4) Personnel shall not wander on roofs away from safe paths.
 - 5) Additional crews shall not walk onto roof without signal from Roof Sector Officer.

4.06 Completion of Assignment. When the necessary roof operations are completed, personnel should report readiness for reassignment.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 4: I.C.S. - Operations Function

Subject: Extrication

Page 1 of 2

Effective Date: 07-01-95

Section: 2-4-5

Revised Date:

- 5.01 Goal. To provide a guideline for Extrication Sector activities.
- 5.02 Description of Function. The Extrication Sector is used in multi-patient incidents and in situations which require physical extrication of trapped victims. The Extrication Sector is responsible for locating, removing and transporting patients to appropriate treatment areas.
- 5.03 Responsibilities. When this function is activated, the Extrication Sector Officer will be responsible for the following:

- A) Determine the location, number and condition of patients.⁷
- B) Determine whether triage will be conducted "on site" or at a Treatment Area.
- C) Evaluate resources needed for extrication of trapped patients and removal of patients to the Treatment Area.
- D) Communicate resource requirements to Command.
- E) Allocate assigned resources.
- F) Supervise assigned companies.
- G) Establish an Assembly Area for patients with minor injuries (Priority 3) to await delayed transportation.
- H) Report progress to Command and advise when all patients have been removed.
- I) Coordinate with other sectors as required.

⁷ These activities will be coordinated with EMS personnel, who are responsible for direct care of the patient. However, conditions can exist (fire/explosion hazards, multi-casualty, etc.) where the Extrication Officer and crew members may be required to make the initial assessments.

Subject: Extrication
Date: 07-01-95
Page 2 of 2

5.04 Guidelines.

- A) The Extrication Officer should assign personnel to help size-up the situation.
 - 1) Count the number of patients.
 - 2) Determine extrication requirements.
- B) A commitment of one sector per five (5) victims is the guideline when numerous patients are involved.
- C) The Extrication Officer should locate in a readily visible location. This position must be accessible to arriving units with a view of the scene.

- D) Face to Face communications should be used within this group.
- E) Walking patients should be removed from the action circle as soon as possible. Personnel should place these persons in a safe area where they will wait for transportation.
- F) If the patients are spread out over a large area, sectors should be assigned to a specific area or group of patients. Sectors must determine the immediate needs of these persons and request assistance as needed.
- G) The Extrication personnel will assist moving patients under the direction of EMS personnel.
- H) Trapped patients requiring prolonged extrication should be triaged by EMS personnel and treated as needed.
- I) The Extrication Officer is responsible for safety within the action circle.
- J) If the incident site involves a large area, it may be necessary to create more than one Extrication Sector. In such cases, the site will be divided geographically with Extrication Sectors assigned as needed.

<p>TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES</p>
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Part 5: I.C.S. - Planning Function	
Subject: Planning Function Activities	
Page 1 of 2	Section: 2-5-1
Effective Date: 07-01-95	Revised Date:

- 1.01 Goal. Provide a description of the activities which are part of the Planning Function.
- 1.02 Planning Function - General.
 - A) The planning section is responsible for collecting, evaluating and distributing tactical information about an incident.

- B) Information is maintained on the current and forecasted situation, and on the status of resources assigned to the incident.
- C) The section can be assigned to prepare written action plans for large incidents.

1.03 Unit Responsibilities. As an incident increases in size and complexity, the amount of work required of the Planning Function will increase. The function can be divided into units to provide the needed attention to detail. As with all parts of an incident command system, we activate only those units which are required by incident needs.

- A) Resources Unit. The resources unit has the responsibility to maintain current status on all resources (location, condition, assignment).
- B) Situation Unit. The situation unit collects, and organizes current and forecasted information concerning the incident. The unit may be requested to prepare diagrams or maps to show the status of the incident.
- C) Documentation Unit. The documentation unit is responsible for preparing an accurate record of the incident. This record can be used for legal, analytical, and historical purposes.
- D) Demobilization Unit. The demobilization unit prepares a plan for the orderly release of resources from an incident.
 - 1) Make arrangements for C.I.S.M. Team if required.

Subject: Planning Activities

Date: 07-01-95

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- E) Technical Specialists.
 - 1) If the services of a specialist are needed for only a short time period, that person should be assigned to work with the situation unit.
 - 2) If the expertise is required on a long range basis, it is advisable to establish a separate unit in the planning section.
 - 3) The situation may also indicate that the technical specialist be assigned to other parts of the organization. (Example - LP Gas Specialist assigned to Operations.)
 - 4) The incident will dictate the needs for technical specialists.

Examples include:

- a) Fire Behavior Specialist.
- b) Meteorologist.
- c) Environmental Impact Specialist.
- d) Resource Use and Cost Specialist.
- e) Flood Control Specialist.
- f) Water Use Specialist.
- g) Toxic Substance Specialist.
- h) Fuels and Flammables Specialist.
- i) Structural Engineer.
- j) Nuclear Radiation Specialist.
- k) Training Specialist.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 5: I.C.S. - Planning Function

Subject: Tactical Worksheet

Page 1 of 2

Effective Date: 07-01-95

Section: 2-5-2

Revised Date:

2.01 Goal. To provide a method for tracking resources, unit assignments, and organizational development during emergencies.

2.02 Tactical Worksheet.

- A) Tracking assignments and the organization of an incident can be a significant problem for command. The tactical worksheet provides

a system which allows Command to write and record important activities.

- B) The tactical worksheet is used to record the following items:
 - 1) Unit status - responding, staged, assigned.
 - 2) Benchmark of completion and times.
 - 3) Diagram of fire area or occupancy.
 - 4) Activity checklist - assignments, rescue, fire control, etc.
 - 5) Organization structure.

- C) The tactical worksheet is the basic record for incident information.

Subject: Tactical Worksheet

Date: 07-01-95

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TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 5: I.C.S. - Planning Function

Subject: Command Status Board

Page 1 of 3

Section: 2-5-3

Effective Date: 07-01-95

Revised Date:

3.01 Goal. To provide a guideline for using the Command Status Board.

3.02 Command Status Board.

A) The Command Status Board is designed to help the Incident

Commander manage resources in a safe and efficient manner. The status board is used to track resources, situation status and the incident management structure.

B) Applications.

- 1) Incident Management.
 - a) Fire.
 - b) Police.
 - c) Medical.
 - d) Hazardous Materials.
 - e) Natural Hazard Incidents.
- 2) Training.
 - a) Live fire training.
 - b) Pre-incident planning.
 - c) Incident scenarios.
 - d) Apparatus/resource placement.
- 3) Post Incident Critiques.

3.03 Resource Section. This section provides an area for tracking the status of resources. Erasable markers are used to label Engine, Ladders, Squads, EMS Units or any resource which has responded to the incident. This method of resource tracking permits the Incident Commander to determine at a glance:

- 1) What resources are assigned to the operation?
- 2) Where are the resources assigned?
- 3) What resources are available in staging?

Subject: Command Status Board

Date: 07-01-95

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- 4) How many personnel are currently working the incident?
- 5) What resources are available for another incident?

3.04 Situation Status Section. This section provides a drawn layout to diagram a structure fire. Labels 1 - 4 are used to identify building sides and A - D are used to identify locations within the building.

3.05 Strategic Goals/Organization Section.

This section is used to record Strategic Goals assigned and completed such as:

- Primary Search
- Secondary Search
- Exposure Protection
- Fire Control
- Standpipe/Sprinkler
- Ventilation
- Utilities
- Salvage
- Overhaul
- Water Supply
- Rescue

Subject: Command Status Board

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TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 6: I.C.S. - Logistics Function

Subject: Welfare

Page 1 of 1

Effective Date: 07-01-95

Section: 2-6-1

Revised Date:

1.01 Goal. Provide for the welfare of citizens affected by fire or other incidents.

1.02 Welfare - General.

- A) It is common for victims of a fire to need assistance with temporary housing, clothing, food and other necessities.
- B) It is important to provide both physical and emotional support to victims, their relatives and friends. This need is particularly important at incidents involving injury or death.
- C) Department personnel must attempt to provide for these needs in a compassionate and supportive manner.

1.03 Welfare - Action.

- A) At any incident where individuals or families are displaced from their dwelling, Command will determine the need for temporary shelter, clothing and other assistance.
- B) A member should be assigned to serve as Welfare Officer.
- C) Contact the American Red Cross through the Base. This notification should be made as soon as possible. Request an estimated time of arrival for Red Cross representatives.
- D) The American Red Cross will contact Command on arrival at the scene. In most cases, the welfare of the individuals can be assumed by the Red Cross at that time. If needed, the Welfare Officer will continue to assist as long as necessary.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 6: I.C.S. - Logistics Function	
Subject: Rehabilitation	
Page 1 of 3	Section: 2-6-2
Effective Date: 07-01-95	Revised Date:

2.01 Goal. To evaluate and assist personnel who may be suffering from the effects of sustained physical exertion during emergency operations.

2.02 Policy. No member will be required to continue emergency operations beyond

safe levels of physical or mental endurance. This policy does not intend to diminish initial fire attack aggressiveness. The intent is to reduce the risk of injury resulting from extended field operations under adverse conditions.

2.03 Function of Rehab Area. A Rehab Area will provide a designated place where members assemble to receive:

- A) A physical assessment.
- B) Rest and refreshment.
- C) Treatment for injuries.
- D) Continual monitoring of physical condition.
- E) Transportation for those requiring treatment at a hospital.

2.04 Guideline.

- A) A Rehabilitation Area (Rehab) will be set up:
 - 1) When a moderate to long working time is envisioned.
 - 2) When personnel are working under adverse temperature or weather conditions.
 - 3) When a moderate to large work force is indicated.
 - 4) At any incident where Command finds it necessary.
- B) Command should assign a person to supervise the Rehab Area.
 - 1) Senior EMS Responder.
 - 2) EMS Administrator.
 - 3) Support Unit Operator.
 - 4) Department or Mutual Aid Officer.

Subject: Rehabilitation

Date: 07-01-95

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- C) Designate a site for the Rehab Area.
 - 1) Select area outside of fireground perimeter or hazard zone where protective clothing may be safely removed.
 - 2) Area should allow good access for ambulances, support units, canteens, etc.
 - 3) Select areas with shade or shelter.
 - a) Provide shade during periods of excessive heat.

- b) Shelter with heat (buses?) during cold weather.
- D) Rehab Area Resources.
 - 1) Rehab supervisor.
 - 2) Fluids (water, Gatorade), food (as needed).
 - 3) Support Unit (breathing air).
 - 4) EMS Unit.
 - 5) Other resources requested by Rehab supervisor.
- E) Organizing the Rehab Area.
 - 1) Mark area used for Rehab Area. Use fire line tape if necessary.
 - 2) If necessary, divide area to provide a treatment area adjacent to the rest and refreshment area.

2.05 Operation of Rehab Area.

- A) Members reporting to the Rehab Area will report at the entrance/exit point where they will be assessed by EMS personnel.
- B) Members will be assigned to either Rest and Refreshment or the Treatment Area as dictated by their physical condition.
- C) Fluid replacement is a priority for all members.
- D) EMS personnel will examine members directed to the Treatment Area.
 - 1) Determine need for transportation to hospital.
 - 2) Reassign to Rest & Refreshment area or rejoin crew.
- E) Sector officers are responsible to monitor the condition of crew members for signs of stress or fatigue.

Subject: Rehabilitation

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- F) The Rehab supervisor will update Command with information concerning:
 - 1) Firefighters in Rehab Area.
 - 2) Firefighters available for reassignment.
 - 3) Status of injured personnel.
- G) The Rehab supervisor will release firefighters to specific assignments

as directed by Command.

2.06 Heat Stress.

A) A significant change in the vital sign measurements can signify heat stress. Careful monitoring by a qualified person (i.e. EMT, nurse, etc.) will aid in reducing heat stress injuries.

B) Fluid replacement and rest periods are the most effective deterrent of heat stress. Proper fluid replacement cannot be gauged by thirst because the sense of thirst is satisfied before the proper amounts of fluids are ingested.

1) Water is highly recommended. Fruit juices and electrolyte replacement drinks (i. e. Gatorade) should be diluted 3:1. Water replacement is more important than the replacement of electrolytes.

2) Salt tablets are not suggested.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 6: I.C.S. - Logistics Function	
Subject: Support	
Page 1 of 1	Section: 2-6-3
Effective Date: 07-01-95	Revised Date:

3.01 Goal. To provide support services at incidents involving special supply and

maintenance needs.

3.02 Support Group. The responsibilities of the Support Group will depend on the type, size and complexity of the incident. These responsibilities can include.

- A) Initial and continued evaluation of support needs.
- B) Provision and resupply of expendable items, such as breathing air, oxygen, medical supplies, foam concentrate, drinking water, food, etc.
- C) Field refueling of vehicles.
- D) Provide for the ongoing performance of vehicles and equipment.
- E) Delivery of specialized and backup equipment to the scene.
- F) Coordinate provision of specialized equipment or services from other fire departments or outside agencies.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 6: I.C.S. - Logistics Function Subject: Feeding of Personnel Page 1 of 1 Effective Date: 07-01-95	Section: 2-6-4 Revised Date:

- 4.01 Goal. Provide for the nutritional needs of department personnel.
- 4.02 Policy. When emergency operations extend over a period of time which will cause members to miss normally scheduled meals, the provision of food and drink should be considered. The underlying consideration must be the need to maintain the efficiency of members working at the emergency.
- 4.03 Determining Food and Drink Needed:
- Allow at least one (1) hour for preparation and delivery to the scene.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 7: I.C.S. - Finance Function
Subject: Finance Function Activities
Page 1 of 2
Effective Date: 07-01-95

Section: 2-7-1
Revised Date:

- 7.01 Goal. Provide a description of the activities which are part of the ICS - Finance

Function.

7.02 Finance Function - General.

- A) The finance section is activated when the agency(s) who are involved have a specific need for tracking or managing finances.
- B) In some cases where only one specific function is required (like cost analysis) a position could be established as a technical specialist in the plans section.
- C) When a finance section is needed, the following units may be established as the need requires.

7.03 Unit Responsibilities. The function can be divided into units to provide the needed attention to detail. As with all parts of an incident management system, we activate only those units which are required by incident needs. The finance section chief will determine the need for establishing specific finance units.

A) Time Unit.

- 1) Responsible for recording personnel time related to the incident.
- 2) Responsible for recording equipment time related to the incident.

B) Procurement Unit. Responsible for administering all financial matters relating to vendor contracts.

C) Compensation/Claims Unit.

- 1) Compensation-for-injury is responsible to see all forms required by worker's compensation programs and local agencies are completed. The person performing this activity is also responsible to maintain a file of injuries and illnesses associated with the incident and to insure that all witness statements are obtained in writing.

Subject: Finance Function Activities

Date: 07-01-95

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- 2) Claims is responsible for handling the investigation into all civil claims involving property associated with or involved in the incident. The unit will maintain logs on claims, obtain witness statements and document investigations.

D) Cost Unit. The cost unit is responsible for providing cost analysis data for the incident.

- 1) Identify equipment and personnel requiring payment.
- 2) Obtain and record all cost data.
- 3) Analyze and prepare estimates of incident costs.
- 4) Maintain accurate records of incident costs.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Residential (1 & 2 Family)

Page 1 of 5

Section: 2-8-1

Effective Date: 07-01-95

Revised Date:

1.01 Purpose. To identify items concerning residential fires which impact on fire response strategy.

1.02 Goal. Develop response strategies which recognize hazards and conditions associated with 1 & 2 family, residential fires.

1.03 Residential Fires - General.

A) Residential fires account for about 70% of all fires, and about 80% of all fire deaths reported in the United States.

B) For this guideline, residential occupancies (1 & 2 family) are divided into three major types.

- 1) One-story house.
- 2) Two-story house.
- 3) Attached garage.

1.04 Special Problems.

A) Life Hazard.

- 1) Nighttime hours are most severe - greater chance occupants are at home, asleep and in need of rescue.
- 2) Regardless of time of day, conduct primary and secondary searches.
- 3) Life hazard in attached garage is minimal unless.
 - a) Someone was in garage at the time of the fire.
 - b) The garage lies under a portion of the house.
 - c) An explosion or flash fire has occurred.

B) Construction.

- 1) Lightweight wood frame most common.
- 2) Truss supported roof - collapse potential.
- 3) Corridors and open doorways will permit rapid fire spread.
- 4) Fire rated assemblies (walls, etc.) may slow fire spread.

Subject: Residential (1 & 2 Family)

Date: 07-01-95

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C) Contents.

- 1) Fire load will range from light to heavy.
- 2) Can include hazardous materials.
 - a) gasoline.

- b) paints.
- c) pesticides/herbicides.
- d) gunpowder, etc.

D) Occupancy.

- 1) Average occupant load is 4 (1980 census).
- 2) Can include home-based business.
 - a) authorized and unauthorized (by zoning ordinance).
 - b) office most common, but can include storage of stock.
- 3) Has been used to hide illegal activity.
 - a) clandestine drug laboratory.
 - b) potential risk to firefighters.

E) Hazards to Firefighters.

- 1) Improper building changes - collapse potential.
- 2) Contents - flammable, reactive or toxic hazard.

1.05 Strategic Considerations.

A) Pre-Planning.

- 1) Maintain map books and address lists.
- 2) Maintain computer-aided dispatch files.
 - a) handicapped persons.
 - b) home-based day care.
 - c) community based residential facilities.

B) Inter-Agency.

- 1) EMS responsible for triage, treatment and transportation of injured persons.
- 2) Sheriff's Department is responsible for traffic and crowd control.
- 3) Red Cross responsible for shelter and care of displaced persons (damaged homes, evacuated areas).

Subject: Residential (1 & 2 Family)

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C) Command Function.

- 1) Activate only those functions and staff positions needed to manage the incident.

- 2) Management structure for 1 & 2 family residential fire may resemble the following.



- 3) Safety - particular need with attached garage involvement.

- a) Use of SCBA.
- b) Decontamination of personnel.
- c) Check water runoff.

D) Operations Function.

1) One-Story House.

- a) Rescue is primary goal (primary & secondary search).
- b) Ventilation - vertical if possible.
- c) Fire Attack - from unburned side.
 - 1) Aggressive interior attack at seat of fire.
 - 2) Coordinate attack with ventilation.
- d) Salvage - begin as soon as resources are available.

Subject: Residential (1 & 2 Family)

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2) Two-Story House.

- a) Rescue - second floor is serious problem because of upward travel of heat and smoke.

- b) Ventilation.
 - 1) Start at top and work down.
 - 2) Pressurize building.
- c) Fire Attack.
 - 1) Protect stairway.
 - 2) Attack from unburned side.
 - 3) Stop vertical fire spread.
 - 4) Coordinate with ventilation.
- d) Salvage - similar to one-story, but if fire is on second floor:
 - 1) Assign personnel to salvage 1st floor.
 - 2) Arrange and cover furniture in center of room.
 - 3) Direct water out of structure (chutes, etc.).

3) Attached Garage.

- a) Rescue.
 - 1) Minimal unless someone is in garage at time of fire.
 - 2) Must complete primary and secondary searches - entire building.
- b) Ventilation - open area lends itself to forced ventilation.
- c) Fire Attack - two strategies are available.
 - 1) Quick attack on main body of fire.
 - 2) Attack from unburned side (home interior).
 - 3) Whichever attack is used, it is critical to check for extension.
 - 4) Support garage door - expect spring failure from exposure to heat.
- d) Salvage - expect minimal salvage in garage, but prompt salvage in house needed.

E) Logistics Function.

- 1) Establish REHAB area early.
 - a) Breathing air supply.
 - b) Medical monitoring of personnel.

Subject: Residential (1 & 2 Family)

Date: 07-01-95

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F) Planning Function.

- 1) Use Tactical Worksheet to maintain situation and resource status.

2) Consider documenting fire scene using photographs.

G) Finance Function. It is unlikely that function will be needed.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines
Subject: Commercial - Common Attic

- 2.01 Purpose. To identify items concerning commercial occupancy fires which impact on fire response strategy.
- 2.02 Goal. Develop response strategies which recognize hazards and conditions associated with commercial occupancies which possess a common attic.
- 2.03 Commercial Occupancies - General.
- A) Commercial occupancies will vary in appearance to project identity of the business. However, there are common fire problems which extend beyond color, shape or other outward appearance of the building.
- B) Examples of occupancies which fall within this category include.
- 1) Retail stores.
 - 2) One/ two story offices.
 - 3) Strip malls.
- 2.04 Special Problems.
- A) Common Attic. Space above two or more occupancies can be a common, undivided area.
- 1) Walls visible at floor level extend to just above ceiling.
 - 2) Exterior appearance will not identify common attic.
- B) Roof Construction.
- 1) Types of supporting system.
 - a) Wood I-beam.
 - b) Gusset plate connected, wooden truss.
 - c) Open web.
 - 2) Collapse potential with heavy fire involvement.

Subject: Commerical - Common Attic
Date: 07-01-95
Page 2 of 5

- C) Ceilings.

- 1) Common components.
 - a) T-bar framing.
 - b) Tiles - little or no fire rating.
 - c) Wire supports.
- 2) Can easily collapse after exposure to heat.
- 3) Firefighters can become entangled in collapse of metal framing.

D) Contents.

- 1) Expect large load of normal combustibles (paper, etc.).
- 2) Flammable liquids may be found in small containers (stock, processing fluids, etc.).
- 3) Compressed gases may be present.
 - a) Anhydrous Ammonia (blue print processing).
 - b) Carbon Dioxide (beverage dispensors).
- 4) Anticipate high toxic level in fire gases (example: fires involving pharmaceuticals).

E) Security Measures.

- 1) Door security - especially at rear of building can slow down access.
- 2) Illegal locks (key operated from inside) can create firefighter hazard.
- 3) Windowless side and rear walls - limits access and ventilation potential.

F) Improper Storage Practices.

- 1) Unstable high storage can fall during fire operations.
- 2) Stock may block exit passageways.
- 3) Combustible items stored too close to heat sources.

G) Personnel Practices.

- 1) Few businesses train personnel in proper action when fire occurs.
- 2) Personnel may attempt to control fire before calling fire department (delayed alarm potential).

Subject: Commercial - Common Attic

Date: 07-01-95

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2.05 Strategic Considerations.

A) Pre-Planning.

- 1) Identify occupancies having common attics/basements.
 - a) Owner/property record.
 - b) Computer-aided dispatch file.
- 2) Identify occupancies with special hazards.
 - a) Truss supported roof and truss supported ceiling and floor joists in multi-storied building.
 - b) Content hazards (compressed gases, etc.).

B) Inter-Agency.

- 1) EMS is responsible for triage, treatment and transportation of injured persons.
- 2) Law Enforcement is responsible for crowd control, traffic control, and security of salvaged contents and currency.
- 3) Regulatory agencies will be involved depending upon type of business.
 - a) Taxation - liquor sales.
 - b) Department of Agriculture - food sales.
 - c) DNR - HAZ-MAT spill.

C) Command Function.

- 1) Activate only those functions and staff positions needed to manage the incident.
- 2) Management structure for fire within this type of occupancy may resemble the following.



Subject: Commercial - Common Attic

Date: 07-01-95

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- 3) Safety.
 - a) Roof, truss ceiling and floor joists collapse potential.
 - b) Use of SCBA.
 - c) Personnel contamination - building contents.
 - d) Test for CO² before removing SCBA.

D) Operations Function.

- 1) Rescue Evacuation.
 - a) Primary Search.
 - b) Secondary Search.
 - c) Evacuate all buildings that share the common attic.
- 2) Ventilation.
 - a) Cut a hole above the seat of the fire as close as safety permits.
 - b) Trench Cut/Strip Cut - In a long narrow structure with a common attic, cut an opening in the roof from outside wall to outside wall. This opening should be at least four (4) inches wide and well ahead of the fire. In some fires, a trench cut/strip cut may have to be made on both sides of the fire.
- 3) Fire Control - cut off fire - stop horizontal spread.
 - a) Protect area of most value.
 - b) Consider wind effect on fire spread.
 - c) Quick aggressive attack at seat of fire.
 - d) Pull ceilings to get into attic from below.
 - e) Strip ventilate (isolate - trench cut).
 - f) Push fire back into involved areas.
 - g) Place exposure lines on opposite sides of attack.
- 4) Salvage.
 - a) Start salvage operations in businesses that experienced the fire.
 - b) Start salvage operations in the businesses to each side of the fire.
 - 1) Remove goods.
 - 2) Salvage covers.
 - 3) Floor runners.
 - 4) Plastic sheeting.
 - c) Pressurize each business individually to reduce smoke damage.

Subject: Commercial - Common Attic
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E) Logistics Function.

- 1) Establish REHAB area early.
 - a) Breathing air supply.
 - b) Medical monitoring of personnel.
- 2) Supplies for salvage activity.
 - a) Covers, plastic, etc.
 - b) Plywood for securing windows, etc.

F) Planning Function.

- 1) Use tactical worksheet to maintain situation and resource status.
Expand to tactical board as needed.

G) Finance Function. It is unlikely that function will be fully activated.

TOWNSHIP FIRE DEPARTMENT

CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Center Hall Occupancies

Page 1 of 4

Section: 2-8-3

Effective Date: 07-01-95

Revised Date:

- 3.01 Purpose. To identify items concerning center hallway occupancy fires which impact on fire response strategy.
- 3.02 Goal. Develop response strategies which recognize hazards and conditions associated with center hallway occupancies.
- 3.03 Center Hallway Occupancies - General.
- A) Buildings that are multiple-story that use a center hallway to access individual rooms, suites or apartments.
 - B) Examples of occupancies which fall within this category include.
 - 1) Multi-family dwellings.
 - 2) Professional offices.
- 3.04 Special Problems.
- A) A small one-room fire in a center hallway building can cause serious problems for the occupants as soon as the smoke enters the common hallway.
 - B) The smoke in the hallway affects the people attempting to evacuate the building, creating potential for panic.
 - C) The occupants are forced to evacuate through a common hallway filled with smoke.
 - D) If the fire is unchecked, it will grow in size until it spreads into the hallway. Eventually, the hallway becomes the path of fire travel to adjoining apartments/suites.
 - E) If the fire doors are open in the hallways, hot air and gases will rise up the stair shafts until they reach the top floor.
 - F) With flames in the center hallway, firefighters will essentially be attacking a fire in a tunnel.

Subject: Center Hallway Occupancies

Date: 07-01-95

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3.05 Strategic Considerations.

A) Pre-Planning.

- 1) Identify occupancies having common attics/basements.
 - a) Owner/property record.
 - b) Computer-aided dispatch file.
- 2) Identify occupancies with special hazards/problems.
 - a) Truss supported roof and truss supported ceiling and floor joists in multi story-buildings.
 - b) Storage practices of tenants.

B) Inter-Agency.

- 1) EMS responsible for triage, treatment and transportation of injured persons.
- 2) Law Enforcement is responsible for crowd control, traffic control, and security of salvaged contents and currency.
- 3) Red Cross responsible for shelter and care of displaced persons (damaged homes, evacuated areas).

C) Command Function.

- 1) Activate only those functions and staff positions needed to manage the incident.
- 2) Management structure for fire within this type of occupancy may resemble the following.

	Command			
Staging	Operations	Safety	EMS	
Firefighting Equipment	Ventilation Operations	Interior Sector		

Subject: Center Hallway Occupancies

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3) Safety.

- a) Roof, truss ceiling and floor joists collapse potential.
- b) Use of SCBA.
- c) Personnel contamination - building contents.

D) Operations Function.

1) Rescue/Evacuation. Consider rescue problem to be severe. Do not hesitate to call additional resources early.

- a) Primary search on the fire floor and above.
- b) Secondary search on the fire floor and below.
- c) Evacuate.
- d) Keep hallways open and safe.

2) Ventilation. Keep halls open and safe for evacuation if at all possible.

Relieve smoke and heat by venting at the top of the building in coordination with fire attack.

- a) Consider roof ventilation.
- b) Check light wells over stair shafts.
- c) If conditions dictate, make center hallway cut.
- d) Pressurize building as soon as conditions permit.
- e) If fire is on top floor, vent the roof or trench cut.

3) Fire Attack Push the fire from the unburned side back to the involved side.

- a) Multiple hand lines will be needed.
- b) Side by side attack: one holds the hallway, while the other extinguishes the rooms.
- c) Bring hand lines into position.
 - 1) Up stairshafts.
 - 2) Through apartments/suites from unburned side.
- d) If fire is on the top floor.
 - 1) Check for attic fire.
 - 2) Pull ceilings.
 - 3) Coordinate attack and ventilation teams.

4) Salvage.

- a) Water chutes.
- b) Salvage covers.
- c) Floor runners.
- d) Plastic.
- e) Pressurize building.

Subject: Center Hallway Occupancies

Date: 07-01-95

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E) Logistics Function.

- 1) Establish REHAB area early.
 - a) Breathing air supply.
 - b) Medical monitoring of personnel.
- 2) Supplies for salvage activity.
 - a) Covers, plastic, etc.
 - b) Plywood for securing windows, etc.

F) Planning Function.

- 1) Use tactical worksheet to maintain situation and resource status.
Expand to tactical board as needed.

G) Finance Function. Full activation is unlikely.

TOWNSHIP FIRE DEPARTMENT
CHAPTER: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines
Subject: Large Area Buildings
Page 1 of 7
Effective Date: 07-01-95

Section: 2-8-4
Revised Date:

- 4.01 Purpose. To identify items concerning large area buildings which affect fire response strategy.
- 4.02 Goal. Develop response strategies which recognize hazards and conditions associated within the exterior walls. For this guideline, large area buildings will include:
- A) Warehouses.
 - B) Wholesale/retail sales display.
 - C) Manufacturing/processing plants.
 - D) Gymnasiums/exhibition halls.
- 4.04 Special Problems.
- A) Roof Construction.
 - 1) Flat roof most common.
 - 2) Truss support is common design feature.
 - 3) Steel deck (w/truss support) - often unprotected.
 - 4) Anticipate sudden/dramatic roof failure with heavy fire involvement.
 - B) Walls.
 - 1) New buildings - light weight metal sheeting.
 - 2) Unprotected metal supports.
 - 3) Few doors, windows.
 - 4) Designed for ease of replacement - not collapse resistance.
 - 5) Collapse can be sudden/dramatic.
 - 6) Pre-fab concrete walls.
 - C) Water Supply.
 - 1) Anticipate that needed fire flow will exceed water available for nearby hydrants.

- 2) Use relays, tandem pumping, etc. to increase available water.

Subject: Large Area Buildings

Date: 07-01-95

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- 3) May require multiple fill and dump sites for tanker shuttles.
- 4) Major factor in offensive/defensive decisions.

D) Fire Protection Features.

- 1) Fire division walls may be breached.
- 2) Fire doors may have been left or blocked open.
- 3) Water curtains used to protect walls or openings have not been effective.

E) Overhead Steel Doors.

- 1) Easily distorted by heat.
- 2) Security features slow down access.
- 3) Collapse potential following heating.

F) Inadequate Stream Penetration.

- 1) Fire streams may not reach deep into interior because of distance.
- 2) Few exterior openings present need to consider commitment of companies deep into interior (SAFETY CONCERN).

G) Sprinkler System.

- 1) System was designed for specific conditions - type of building, type of occupancy.
- 2) Change in conditions could produce fire beyond system capability.
- 3) Sprinkler must have water to work - check valves, pump into system.
- 4) Building collapse can damage sprinkler system.

H) Misuse of Building.

- 1) Example: former dairy barn now used for tire storage.
- 2) Contents at or exceeding floor loads.
- 3) Contents which can produce fire exceeding ability of original sprinkler system design.

I) Poor Warehousing Practices.

- 1) Contents stacked in manner which can easily collapse.
- 2) Mix of products - chemicals, flammable/combustible liquids - potential for reaction.

Subject: Large Area Buildings

Date: 07-01-95

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- 3) Mix of products can produce severe environmental problem from water runoff.

J) Access.

- 1) Security measures - building (systems, steel doors, etc.).
- 2) Security measures - property (fences, road barricades, etc.).
- 3) Large set back from roadway (green space).
- 4) Railroad access.

K) Ventilation.

- 1) Solid walls - little or no openings.
- 2) Roof construction of wood lamination, concrete materials.
- 3) Roof supported by trusses - early collapse potential.
- 4) Plastic roof panels can melt and lead to rapid fire development.
- 5) Back draft - although considered unusual for this type of building - potential still exists.
- 6) Collapsible panels and roofs designed for ventilation.

L) Radiant Heat.

- 1) Heat may even prevent approach to building perimeter.
- 2) Building and contents may produce temperatures in thousands of degrees.
- 3) Exposure problem may become acute.
- 4) Master stream use essential.
- 5) May result in fireground abandonment assuming secondary defensive positions.
- 6) Loss of equipment/apparatus is a possibility.
- 7) Impact on personnel can be severe.

M) Command/Control.

- 1) Distance - out-of-sight operations.
- 2) Knowledge of **TODAY'S** building interior arrangement and contents may be limited.

- 3) Visual factors may conceal developing problem deep within building.

Subject: Large Area Buildings

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N) Flying Brands (Embers).

- 1) Can be severe problem - especially when building is in area adjacent to buildings with combustible walls and roofs.
- 2) Will require commitment of personnel and resources.
- 3) Wind conditions can complicate problem.

4.05 Strategic Considerations.

A) Pre-Planning.

- 1) Review map books, aerial photos, owner property and CAD files, to verify access, exposure potential, etc.
- 2) Review resources listed for multiple alarms.
- 3) Identify special resources needed - heavy equipment, Haz-Mat Team, etc.
- 4) Review available water supplies.
- 5) Identify potential safety hazards.
- 6) Estimate fire flow.
- 7) Determine location of fire department connections (stand pipes).

B) Inter-Agency.

- 1) Anticipate need for traffic/crowd control (law enforcement).
- 2) Anticipate need to protect in place or for downwind evacuation (law enforcement).
- 3) Anticipate need for utility control (gas/electric utility).
- 4) Anticipate need for water utility support.
- 5) Assign Liaison Officer early.

C) Command Function.

- 1) Position command post upwind.
- 2) Determine direction and rate of fire spread.
- 3) Collect situation and resource status information.
- 4) Consider potential when determining resource needs.
- 5) Assign Safety Officer early.

D) Operations Function.

- 1) Rapid fire development/multiple operating positions.
 - a) Rate of spread can overtake placement of companies.

Subject: Large Area Buildings

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- b) Anticipate sudden roof/wall failures with heavy fire involvement.
 - c) Companies may be advanced too far toward center of building.
 - d) Consider immediate downwind brand patrol.
- 2) Reliable information is critical.
 - a) Perimeter of fire and direction of fire spread.
 - b) Number of exposures.
 - c) Potential for further spread.
 - d) Consider use of reconnaissance officer.
- 3) Mobility.
 - a) Rate of spread could overrun companies.
 - b) Companies should be aware of need to move quickly.
 - c) Beware of relying on fire walls and separations.
- 4) Evacuation.
 - a) Use non-fire personnel for evacuation.
 - b) Select locations for injured and displaced persons.
- 5) Use of Resources.
 - a) Do not commit all companies until extent of problem is determined.
 - b) Maintain reserve force for contingencies.
- 6) Safety (personnel and apparatus).
 - a) Potential for injuries to personnel is great.
 - 1) Collapse of roof, walls and ceilings.
 - 2) Radiant heat.
 - 3) Fatigue.
 - 4) Confusion.
 - 5) Inadequate water supply.
 - 6) Test atmosphere - CO²
 - b) Apparatus placement is important.
 - 1) Building collapse.
 - 2) Changing fire conditions.

E) Logistics Function.

- 1) Resources.

- a) Maintenance of reserve.
 - b) Fatigue will be a factor.
 - c) Relief companies required for extended operations.
- 2) Water Supply.
- a) Expect water supply to be taxed.

Subject: Large Area Buildings

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- b) Increase or supplement existing supply.
 - 1) Assign water supply officer.
 - 2) Request maximum pumpage from utility.
 - 3) Emergency inter-connect with adjoining utility.
 - 4) Use of available static sources (swimming pools, etc.).
- 3) Maintenance/Support.
- a) Extended operations will require special support.
 - 1) Food.
 - 2) Fuel.
 - b) Need for specialized equipment.
 - 1) Aircraft.
 - 2) Street barricades.
 - 3) Lighting equipment.
- 4) Communications.
- a) May require more than one tactical channel.
 - b) Consider separate command channel.
 - c) Use cellular and commercial telephone service.

F) Planning Function.

- 1) Strategy.
 - a) Determine perimeter, amount of fire, and potential.
 - b) Have a contingency plan.
 - c) Pick spot to hold and control fire.
- 2) Reflex time.
 - a) Large resource commitment takes time to arrive.
 - b) Base plans on resources available on-scene.
- 3) Situation/Resource status.
 - a) Immediate and accurate status display critical.
 - b) Need reliable information.
 - c) Cover all bases.
 - d) DO NOT WASTE RESOURCES.

- 4) Documentation.
 - a) Log of decisions considered to be minimum.

Subject: Large Area Buildings

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G) Finance Function.

- 1) Track costs of specialized equipment.
- 2) Track costs of supplies and services.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Public Assembly

Page 1 of 4

Effective Date: 07-01-95

Section: 2-8-5

Revised Date:

- 5.01 Purpose. To identify items concerning Public Assembly occupancies which affect fire/emergency response strategy.
- 5.02 Goal. Develop response strategies which recognize hazards and conditions associated with Public Assembly occupancies.
- 5.03 Special Problems.
- A) Public assembly occupancies pose a potential for high life loss.
 - B) Exits in public assembly are very critical because:
 - 1) Occupants are not familiar with their location.
 - 2) The lighting on the premises may be very poor.
 - 3) The locations may not be readily apparent.
 - 4) The exit markings may not be up to standards.
 - 5) The reliability of exits may not be up to standard.
 - C) Overcrowding in places of assembly is a very common practice. When an occupancy becomes overcrowded, the exits become blocked by people.
 - D) The use of combustible furnishings and decorations will enable the fire to start to spread at a rate that the occupants cannot get to the exits fast enough. Further, with most fire-resistive fabrics or plastics, toxic products of combustion will be released.
 - E) Exits and passageways may be blocked by chairs, tables, portable bars, etc.
 - F) Exits may be locked.

- G) People exiting a building create crowds which can block fire department access. **Fire department access should not interfere with the orderly evacuation of the occupants.**

Subject: Public Assembly

Date: 07-01-95

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- H) Panic - "a fear-induced flight behavior which serves to reduce the escape possibility of the group as a whole." However, studies conducted following recent fires show little evidence of panic during most fires. Instead people in these cases showed unselfish concern for the welfare of others, especially between common social groups.

- I) Evacuation can be made difficult by:

- 1) Configuration of the premises.
- 2) Placement of chairs, tables, or other fixtures.
- 3) The location of the fire.
- 4) Obstruction of the exits.
- 5) Access.
- 6) Physical and mental condition of the occupants.

- J) Employees may not have been trained to assist patrons in the event of fire.

- K) The building may have been constructed to serve a purpose other than public assembly. (Example: barn converted for nightclub use.)

- L) Vehicles to transport handicapped persons (persons confined to wheelchairs).

5.04 Strategic Considerations.

- A) Pre-Planning.

- 1) Identify and track places of public assembly.
 - a) Code enforcement program.
 - b) CAD, owner/property, map books.
- 2) Identify and monitor peak times of public assembly.
- 3) Identify special events.
 - a) Festivals.

- b) Reduced admission rates to attract crowds.
- 4) Monitor perimeter activities which could affect response.
 - a) Parking.
 - b) Crowd control measures.
 - c) Traffic routing.

Subject: Public Assembly

Date: 07-01-95

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B) Inter-Agency.

- 1) Expect need for traffic/crowd control (law enforcement).
- 2) Emergency Medical Service responsible for triage, treatment and transportation of injured.
- 3) Medical Examiner is responsible for collection, identification and disposition of the dead.

C) Command Function.

- 1) Need for very visible, strong command
- 2) Fill staff positions early - consider priority order of Liaison, Safety, Public Information.
- 3) Collect situation and resource status information.
- 4) Expand management system anticipating the potential problems.

D) Operations Function.

- 1) Anticipate need to address the following.
 - a) Rescue.
 - 1) Access may be blocked by injured (or dead) persons.
 - 2) Secondary exits may require forcible entry.
 - b) Fire Control.
 - 1) Quick strong attack on fire may save lives.
 - 2) Ventilation (especially roof) may relieve trapped occupants.
 - 3) Access may be blocked by evacuating occupants.
 - c) Medical.
 - 1) Triage may be hampered by having victims located over large area.
 - 2) Treatment - expect multiple respiratory and burn problems.
 - 3) Transportation - do not overload any one hospital.
- 2) Conditions may indicate need for separate fire and medical branches.

- 3) Rotate personnel on regular basis. Direct unassigned personnel to Rehab or Resource area.
- 4) Consider de-briefing for all personnel.

Subject: Public Assembly

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E) Logistics Function.

- 1) Supplies.
 - a) Anticipate supply shortages (long boards, casualty bags).
 - b) Anticipate transport problems because of access.
- 2) Personnel support.
 - a) Air for SCBA.
 - b) Fluids and food.
 - c) Sanitary facilities (prolonged incident).
 - d) Shelter - weather extremes - hot or cold (buses?).
- 3) Need for specialized equipment.
 - a) Lighting.
 - b) Street barricades.
 - c) Wreckers (clearing blocked streets).

F) Planning Function.

- 1) Situation status.
- 2) Resource status.
- 3) Documentation.
 - a) Written log of activity.
 - b) Photographic log.
 - 1) Operations.
 - 2) Location of injured, deceased.
- 4) Casualty log.
 - a) Occupant count from management.
 - b) List of employees.
 - c) List of persons transported to hospitals.
 - 1) Ambulance transported.
 - 2) Private vehicle.

G) Finance Function.

- 1) Track cost of contracted equipment.
- 2) Track cost of supplies and services.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Conflagration

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Section: 2-8-6

Effective Date: 07-01-95

Revised Date:

- 6.01 Purpose. To identify items concerning conflagrations which affect fire response strategy.
- 6.02 Goal. Develop response strategies which recognize hazards and conditions associated with conflagrations.
- 6.03 Conflagration Defined. The term conflagration is usually applied to fires that extend over considerable area and destroy many buildings. For this guideline, conflagrations will involve the following situations.
- A) Fires involving deteriorated or abandoned buildings in congested areas. These fires usually spread in more than one direction before adequate resources are organized to bring them under control.
 - B) Fires involving residential buildings which spread beyond control because of combustible construction (wood wall and roof surfaces).
 - C) Brush fires that spread over a wide front and cause damage to, or destroy structures.
 - D) Explosion causing individual fires to ignite over a large area. (Example: Crash of large aircraft in built up area)
 - E) Multiple location fires caused by natural disaster evolving into one large fire.
- 6.04 Special Problems. Understanding the reasons why fires can develop into a

conflagration will emphasize that the potential is found in all communities.

A) Exposures.

- 1) Most conflagrations involve a multitude of exposures.
- 2) Exposure problems do not suddenly appear. These situations have pre-existed or developed gradually.
 - a) Closeness of structures.
 - b) Combustible exteriors (primarily roofs).
 - c) Abandoned buildings.

Subject: Conflagration

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- 3) Key factors that allow fire to spread to exposed buildings.
 - a) Radiated heat.
 - b) Convection.
 - c) Flying brands.
 - d) Wind conditions.

B) Rapid Fire Development.

- 1) Fire spreads quicker than ability of fire department to control it. (Inadequate on-scene resources)
- 2) Multi-front situation.
 - a) May spread simultaneously to more than one exposure or in more than one direction.
 - b) Fire spreads in one direction but quickly involves large area (wind effect).
- 3) Delayed alarm and situation is out of hand upon arrival of first units.

C) Life Safety/Evacuation.

- 1) Safety of building occupants should be priority.
 - a) Fire moves quickly.
 - b) Buildings may collapse.
- 2) Evacuation may be required in immediate or extended area.
 - a) Decision to combat or evacuate?
 - b) Use non-fire personnel for evacuation if available.
- 3) Vacated buildings pose a security problem.
 - a) Law enforcement responsibility.
 - b) Establish liaison early.

D) Communications.

- 1) Often difficult because of rapidly developing situation and number of

units involved.

- 2) Radio communication with mutual aid and support agencies is important.
- 3) Face to face contact often impossible because of fire perimeter.

E) Duration.

- 1) Size of fire or number of structures involved can mean long-term operation.

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- 2) Final extinguishment and overhaul may require commitment of many hours or even days (need for relief, extensive use of mutual aid).

F) Water Supply.

- 1) Amount of firefighting activity can quickly diminish water supply.
 - a) Multiple fire locations.
 - b) Fully involved structures.
 - c) Heavy stream appliances.
 - d) Supply not based on conflagration conditions.
- 2) Water supply may be non-existent.
 - a) New system not fully in service (new construction).
 - b) System may have been disconnected (demolition).
 - c) Rural operation with inadequate tanker shuttle operations.

G) Resources.

- 1) Large resource commitment needed in short time period.
 - a) Need to get ahead of fire.
 - b) Multiple operating positions.
 - c) Potential for large fire perimeter.
- 2) Congestion problems are common.
 - a) Many vehicles in confined area.
 - b) Civilian traffic can complicate access problems.
- 3) Personnel relief requirements must be considered.
 - a) Fatigue.
 - b) Duration of incident.

H) Containment. Often difficult because of rate of spread or lack of access to structures.

- 1) Unable to get resources quickly.
- 2) Building collapse or volume of fire can complicate efforts.

7.05 Strategic Considerations.

A) Pre-Planning.

- 1) Situations or conditions that lead to conflagration are often obvious.
 - a) Lack of adequate fire separations.
 - b) Combustible exteriors.
 - c) Inadequate water supplies.

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- 2) Plans must consider maximum commitment of resources.
 - a) Resource availability and response times (day/night).
 - b) Supplemental water supply.
 - c) Communications.

B) Inter-agency.

- 1) Support assistance will maximize use of fire personnel.
- 2) Request mutual aid promptly.
- 3) Coordination and communication with other agencies is essential.
 - a) Common radio frequencies (FIRECOM, etc.).
 - b) Early assignment of Liaison Officer.

C) Command Function.

- 1) Position command post upwind and use natural fire breaks.
- 2) Determine direction and rate of fire spread.
- 3) Collect (Immediately) situation and resource status information.
- 4) Consider potential when determining resource needs.

D) Operations Function.

- 1) Rapid fire development/multiple operating positions.
 - a) Rate of spread can overtake placement of companies.
 - b) Consider need to give up a few structures to save many.
 - c) Consider immediate downwind brand (ember) patrol.
- 2) Reliable information is critical.
 - a) Perimeter of fire and direction of fire spread.
 - b) Number of exposures.

- c) Potential for further spread.
 - d) Consider use of reconnaissance officer.
- 3) Mobility.
- a) Rate of spread may require hit-and-run tactics.
 - b) Companies should be aware of need to move quickly.
 - c) Critical in areas with combustible roofs and wind blown fire.
- 4) Rescue/Evacuation and medical emergency.
- a) Could be major problem in inhabited area.
 - b) If available, use non-fire personnel for evacuation.
 - c) Select safe locations for injured and displaced persons.

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- 5) Use of Resources.
- a) Do not commit all companies until extent of problem is determined.
 - b) Maintain reserve force for contingencies.
 - c) Consider use of task force organization.
- 6) Safety (personnel and apparatus).
- a) Potential for injuries to personnel is great.
 - 1) Collapsing buildings.
 - 2) Radiant heat.
 - 3) Fatigue.
 - 4) Confusion.
 - 5) Inadequate water supply.
 - 6) Test atmosphere - CO².
 - b) Apparatus placement is important.
 - 1) Building collapse.
 - 2) Changing fire conditions.

E) Logistics Function.

- 1) Resources.
- a) Maintain reserve.
 - b) Fatigue will be a factor.
 - c) Relief companies required for extended operations.
- 2) Water Supply.
- a) Common problem at most conflagration incidents.
 - b) Increase or supplement existing supply.
 - 1) Assign water supply officer.

- 2) Request maximum pumpage from utility.
 - 3) Emergency inter-connect with adjoining utility.
 - 4) Use of available static sources (swimming pools, etc.).
- 3) Maintenance/Support.
- a) Extended operations will require special support.
 - 1) Food.
 - 2) Fuel.
 - 3) Mechanical service and repair.
 - b) Need for specialized equipment.
 - 1) Aircraft.
 - 2) Street barricades.
 - 3) Lighting equipment.

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4) Excavation equipment.

- 4) Communications.
- a) May require more than one tactical channel.
 - b) Consider separate command channel.
 - c) Use cellular and commercial telephone service.

F) Planning Function.

- 1) Strategy.
 - a) Determine perimeter, amount of fire, and potential.
 - b) Have a contingency plan.
 - c) Pick spot to hold and control fire.
- 2) Reflex Time.
 - a) Large resource commitment takes time to arrive.
 - b) Base plans on resources available on-scene.
- 3) Situation/Resources status.
 - a) Immediate and accurate status display critical.
 - b) Need reliable information.
 - c) Plan ahead.
 - d) Do not waste resources..
- 4) Documentation.
 - a) Needed to support request for disaster assistance.
 - b) Log of decisions considered to be minimum.

G) Finance Function.

- 1) Track cost of specialized equipment.
- 2) Track cost of supplies and services.

TOWNSHIP FIRE DEPARTMENT CHAPTER 8: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Brush

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Effective Date: 07-01-95

Section: 2-8-7

Revised Date:

7.01 Purpose. To identify items concerning Brush Fires which affect fire response strategy.

7.02 Goal. Develop response strategies which recognize hazards and conditions associated with Brush Fires.

7.03 General.

- A) Probably one of the most demanding and involved situations facing an incident commander.
- B) Conditions can cause them to be extremely fast-moving and unpredictable.
- C) Can stretch command and control capabilities to the limit.
- D) Size of incident can range from incipient fire to major emergency.
- E) Three of the most critical conditions are fuel, weather, and topography.

7.04 Special Problems.

A) Fuel.

- 1) Types.
 - a) Ground Fuels (flash fuels).
 - 1) Example (grass).

- 2) Ignites readily.
- 3) Burns rapidly and nearly completely.
- b) Aerial Fuels.
 - 1) Example (trees).
 - 2) Separation increases air circulation.
 - 3) Rapid fire spread and large quantities of heat.
 - 4) "Crowning" may occur.
- 2) Distinction between ground fuels and aerial fuels.
 - a) Not clear cut in many areas.
 - 1) Variety of native plants.
 - 2) Differences in burning characteristics.
 - b) Frequent brush fires equal flash fuels.
- 3) Arrangement and Volume.
 - a) Volume of fuel determines total heat output.
 - b) Volume estimate = height and density.
- c) Estimate of total heat output important in planning control.
- d) Arrangement affects continuity of fire progression.
 - 1) Patchiness of fuel.
 - 2) Availability of oxygen.
 - 3) Exposure to preheating.
- 4) Fuel Moisture.
 - a) In dead fuels largely determined by air humidity.
 - b) Live fuels depend mostly on moisture in ground.
 - c) Moist fuels can produce a severe fire.
- 5) Fuel Temperature.
 - a) Ignition temperature 400-700 degrees F. (540 average).
 - b) On very hot day surface temperature can be 150-160 degrees, or **25% of ignition temperature.**

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B) Weather.

- 1) Probably the most dominant factor.
 - a) Major weather conditions affecting entire area.
 - b) Microclimate in fire area.
- 2) All weather conditions are interrelated (Example: Change in temperature will result in change in air movement and humidity.).
- 3) Temperature is important.
 - a) Hot air rises, cold air sinks.
 - b) High pressure areas force air toward low pressure.
 - c) Affect on firefighters.
- 4) Air Movement.
 - a) Air is a fluid and almost constantly moving.

- 1) Hot air rises, cold air sinks.
 - 2) High pressure areas force air toward low pressure areas at surface.
 - 3) High pressure (air is sinking).
 - 4) Low pressure (air is rising).
- b) Air pressure.
- 1) 15 mph wind = 1 psi.
 - 2) 30 mph wind = 4.5 psi.
 - 3) 60 mph wind = 18 psi.
 - 4) Doubling rate of wind will quadruple (approx.) rate of fire spread.
 - 5) Pushes flying brands (embers) and heat (spot fires).
 - 6) Spot fires may occur in unexpected location.

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- c) Impact of air movement.
- 1) Strong winds.
 - a) Rapid fire spread.
 - b) Spot fires likely.
 - 2) Stable air.
 - a) Signs - poor visibility at low levels (smog/fog) stratus-type clouds, smoke columns drift apart.
 - b) Predictable fire behavior.
 - 3) Unstable air.
 - a) Signs - cumulus clouds, tall smoke columns, dust levels, wind gusts.
 - b) Unpredictable fire behavior.
 - 4) Local air movement.
 - a) Reverses at night.
 - b) Large fires create own local wind pattern (air sucked inward).

C) Topography.

- 1) Exposures or aspect.
 - a) North slopes have heavier growth, south slopes lighter growth.
 - b) East slopes morning sun, west slopes afternoon sun.
 - c) Impact: The North slopes usually burn hotter and faster; in midmorning, east slopes more ready to burn than west slopes.
- 2) Slope.
 - a) Degree of slope effects fire spread (rising heat preheats fuel

- and air).
- b) With steep slope, the fire head will be narrower with greater chance of spotting.
- c) At crest, fire will normally meet upslope winds from other side (most likely place to stop and hold fire).
- d) Fire burns down hill slowly (valley bottom second-best place to stop and hold fire).
- e) Unless good fire break is set up, slope is poor place to stop fire.

D) Fire Behavior.

- 1) From small fire to major emergency - incident may be beyond control of fire department efforts.
 - a) High winds.
 - b) Heavy fuel load.

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- c) Inaccessible location.
- 2) Effect on resource commitment.
 - a) As perimeter grows so do resource needs.
 - b) Creation of multi-location operations.
- 3) Effect on strategy.
 - a) Changes in wind direction and velocity.
 - b) Changes from day to night hours.
- 4) Effect on safety.
 - a) Fishhooking.
 - b) Spot fires cutting off escape routes.

E) Exposures.

- 1) Most brush fires equal few fire loss dollars unless they occur in areas where structures are located. Current trend has found development in wooded areas.
- 2) Site location, aesthetic emphasis and types of construction exaggerate the problem.
- 3) Wood roof and siding major problems.
- 4) Construction type and building materials must be considered when evaluating exposures.
- 5) Exposure protection should be a primary concern.
- 6) Difficulty in obtaining information on exposure problem.
 - a) Strategic location of command post.
 - b) Need input from line officers.
 - c) Aircraft valuable in reviewing exposures.

- 7) Exposure protection is hit-and-run, fast moving operation.
 - a) Resources are usually spread thin.
 - b) Mobility is the key.
- 8) Multiple exposure/insufficient resources.
 - a) What action will do most good?
 - b) Ignoring slightly involved to attack well involved, **may result in TWO TOTAL LOSSES.**

F) Access.

- 1) Difficult access usually goes with the territory.
 - a) Narrow road.
 - b) Narrow driveways.
 - c) Steep hills.
 - d) Dead ends.
 - e) Tree limbs hanging over narrow driveways.

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- f) Sharp corners.
 - g) No yard space for fire fighting equipment.
 - h) Low, wet areas.
- 2) Incorrect reporting locations can cause shifts in original response patterns.
- 3) Civilian vehicular traffic can impede fire apparatus.
 - a) Evacuation.
 - b) Illegal or improper parking.
 - c) Sightseers.
- 4) Roads blocked by fire apparatus.
 - a) Laying supply lines.
 - b) Failure to park off road.
- 5) Fires may start or extend into areas that are not accessible.
- 6) Inability to reach small fire is often prime cause for major emergency.

G) Evacuation.

- 1) Occasionally necessary.
 - a) Structures lacking physical protection.
 - b) Rate of spread overcomes resource potential.
- 2) Basic reasons for evacuation.
 - a) Protect lives.
 - b) Prevent panic.
 - c) Control traffic.
 - d) Provide access.
 - e) Minimize suppression problems.

- 3) Decision should originate with fire department.
 - a) Based on several factors.
 - 1) Magnitude of fire.
 - 2) Prediction of fire behavior.
 - 3) Potential for control.
 - b) **ANTICIPATE!**
- 4) Evacuation should be law enforcement function.
 - a) Suppression is primary fire department activity.
 - b) Evacuation involvement will weaken firefighting ability.
- 5) Orderly evacuation **TAKES TIME!**
 - a) **Do not** wait until fire is threatening structures.
 - b) Plan ahead based on predicted behavior and potential.
- 6) In some situations, evacuation is not necessary.
 - a) Structures protected by clearance and/or terrain.
 - b) Occupants safe if they remain inside structure.
 - c) Civilians can be helpful after fire sweeps by.

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d) If any doubt - **EVACUATE.**

H) Resource Requirements.

- 1) Major brush fire has great potential for large resource commitment.
 - a) Size of fire area (perimeter).
 - b) Rate of spread (wind, terrain).
 - c) Exposure protection (number of structures).
 - d) Duration (control time).
- 2) Resource needs are minimized if fire is held to smallest possible area.
 - a) Early recognition of potential.
 - b) Prompt requests for adequate help.
 - c) Calling for just enough help **can be disastrous.**
 - 1) Sudden change in conditions.
 - 2) Reaction time delay.
- 3) Resources at a premium - use them wisely.
 - a) **MOBILITY** is the key.
 - b) Conditions can change rapidly.
 - c) Lack of mobility increases resource commitments.
- 4) Strike team concept.
 - a) Groups of companies (three to five).
 - b) Commanded by company or chief officer.
 - c) Operate as a quick attack unit.
 - d) Can handle flank attack or exposure protection for multiple structures.

- e) Requires minimal radio communications.
- 5) Staging areas.
 - a) Close to general fire area.
 - b) Resource holding area prior to commitment.
 - c) Facilitates making up strike teams.
 - d) Reporting location after completion of assignment.
 - e) Consider using parks, picnic areas, fire station or other municipal building (telephone capability).
 - f) Use of staging area reduces radio communications.
 - 1) Predesignated reporting location.
 - 2) Assignments are given face-to-face.

l) Specialized Equipment.

- 1) Helicopters or aircraft..

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- a) Uses₁₃
 - 1) Observation
 - 2) Personnel/equipment movement.
 - 3) Rescue/evacuation.
- b) Observation.
 - 1) Quickly cover entire perimeter.
 - 2) Relay information to incident commander.
 - 3) Vital to strategic decisions.
- c) Transporting.
 - 1) Moving attack teams, relief personnel.
 - 2) Reduces firefighter fatigue.
 - 3) Effective in delivering equipment.
- d) Evacuation.
 - 1) Occasional sudden demand.
 - 2) Should not be considered primary evacuation tool.

J) Radio Communications.

- 1) Activity level and number of resources can create serious problems.
 - a) Compounded by terrain and capability of portable radios.
 - b) Can have detrimental effect on strategy development and action plan implementation.
- 2) Reducing Problems.
 - a) Assign frequencies to functions (ie, command, tactical).
 - b) Reduce number and length of messages.
 - c) Face-to-face contact when possible.

- d) Cellular telephones.
- 3) Acknowledge messages.
 - a) A message not acknowledged is a message not received.
 - b) Receiver should repeat message.

K) Water Supply.

- 1) Critical at any fire incident.
 - a) No practical substitute.
 - b) Without it we are out of business.

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The uses listed for helicopters were based upon the capability of those aircraft available within the immediate region.

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- 2) May be seriously deficient in brush areas.
 - a) Nonexistent - must use tanker shuttle.
 - b) Distance from hydrant too great for relay.
- 3) Must be used wisely.
 - a) Fire Department operations.
 - 1) Wetting down is questionable.
 - 2) Attack conditions are critical.
 - a) Lightest fuel load.
 - b) Natural fire breaks.
 - c) Coordinated effort.
 - b) Civilians can complicate problem.
 - 1) Indiscriminate use of hoses, sprinkler systems, etc.
 - 2) Wetting down nonaffected areas.
- 4) Maximizing availability.
 - a) System pressure can be increased.
 - b) Relay with large diameter hose.
 - c) Use of static sources (swimming pools, etc.).

L) Safety.

- 1) Command officers and safety considerations.
 - a) Usually not in danger area but decision and orders may endanger subordinates.
 - b) Must know safety rules, make sure subordinates know them and practice them.

- 2) Brush fires cause very little actual fire damage, however;
 - a) Potential for high life loss is always present.
 - b) No reason to put firefighter lives in jeopardy.
 - c) Formal safety orders are a must.
 - 1) US Forest Service standard firefighting orders.
 - 2) Analysis of FF fatalities at Wildland Fires show at least one safety order was violated in every case.
- 3) Ten standard firefighting orders (FIRE ORDERS).
 - F - Fight fire aggressively but provide for safety first.
 - I - Initiate all action based on current and expected fire behavior.
 - R - Recognize current weather conditions and obtain forecasts.
 - E - Ensure instructions are given and understood.

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- O - Obtain current information on incident status.
 - R - Remain in communication with crew members, your supervisor and adjoining resources.
 - D - Determine safety zones and escape routes.
 - E - Establish lookouts in potentially hazardous situations.
 - R - Retain control at all times.
 - S - Stay alert, keep calm, think clearly and act decisively.
- 4) Terrain and situation hazards. (Locating crews on a slope above a fire can be hazardous.)
 - a) Preheating of fuel and rate of spread.
 - b) Normal up-slope winds (daytime).
 - c) Wait until fire reaches ridge before attacking.
 - 5) Spot fires are one of the most hazardous conditions.
 - a) Can cause fires to go in any direction at great intensity.
 - b) Do not attack from above.
 - 1) Approach from downwind side.
 - 2) Attack from same level or lower.
 - c) Do not ignore because of size of main fire.
 - 6) Saddles are extremely dangerous locations.
 - a) Venturi-type vacuum created by saddles.
 - b) Fire will burn rapidly, may spot over ridge.
 - c) Can burn rapidly by adjoining ridges.
 - 7) Ridges are logical places to stop and hold upslope fire.
 - a) Do not stand in front unless small.

- b) Wait at side until fire crests, then ATTACK.
- c) If trapped, far side of ridge is safest.
- 8) Placing apparatus.
 - a) Note safe areas when moving in.
 - 1) Wide areas in road.
 - 2) Sparse growth areas.
 - 3) Natural and man made barriers.
 - b) Always position apparatus for quick exit.
 - c) Do not park in obvious hazard area.
 - d) Keep roads open.
 - 1) Park off pavement.
 - 2) Do not block road with hoselines.
 - e) Watch for falling embers.
 - f) Possibility of apparatus exhaust starting fires.

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M) Coldtrailing (Sparking Out)..

- 1) Same as overhaul.
 - a) Be sure fire is out.
 - b) Prevent rekindle.
- 2) Experience has shown that coldtrailing is often neglected.
- 3) Requires hand tools and hose lines.
- 4) Easier from top down. Best from bottom up.
 - a) Better view from direction of fire travel.
 - b) Closer eye contact with ground.
- 5) Do not forget spot fire locations.
- 6) Considerations.
 - a) Follow edge of burn.
 - b) Place all cut material in burned area.
 - c) Trench below smoldering objects.
 - d) Smoldering stumps plus wind equal sparks.

7.05 Strategic Considerations.

A) Pre-Planning.

- 1) Maintain map-books and aerial photographs.
- 2) Special emphasis given to maps/photos of marsh areas, and interface.
- 3) Review response assignments for brush incidents.

4) Plan for special equipment needs.

B) Inter-Agency.

- 1) Law enforcement will be lead agency for evacuation.
- 2) Department of Natural Resources (technical assistance).
- 3) Coordination and communication will be critical.
 - a) Common radio frequencies (FIRECOM, MARC, etc.)
 - b) Early assignment of Liaison Officer.

C) Command Function.

- 1) Position command post upwind and use natural fire breaks.
- 2) Reliable information will be critical.
 - a) Perimeter of fire and direction of fire spread.
 - b) Number of exposures.
 - c) Potential for further spread.

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- d) Consider use of reconnaissance officer.
- 3) Consider potential when determining resource needs.
- 4) Organize considering potential for multi-front operation.
- 5) Communicate safety orders.

D) Operations Function.

- 1) Rapid fire development/multiple operating positions.
 - a) Rate of spread can overtake placement of companies.
 - b) Consider need to give up a few structures to save many.
 - c) Consider immediate downwind patrol (spot fires).
- 2) Mobility.
 - a) Rate of spread may require hit-and-run tactics.
 - b) Companies must be aware of need to move quickly.
 - c) Critical in areas with combustible roofs and wind blown fire.
- 3) Use of resources.
 - a) Do not commit all companies until extent of problem is determined.
 - b) Consider use of task force organization.
- 4) Exposure protection should be primary concern.

E) Logistics Function.

- 1) Resources.

- a) Maintain reserve.
- b) Fatigue will be a factor.
- c) Relief companies required for extended operations.
- 2) Water Supply.
 - a) Set-up refill sites for Brush Units and Back-Packs.
 - b) Use of available static sources (swimming pools, etc.).
- 3) Maintenance/Support.
 - a) Extended operations will require special support.
 - 1) Food.
 - 2) Fuel.
 - 3) Mechanical service and repair.
 - b) Need for specialized equipment.
- 4) Communications.
 - a) May require more than one tactical channel.
 - b) Consider separate command channel.

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F) Planning Function.

- 1) Situation status.
 - a) Track perimeter, types of fuels, and potential.
 - b) Monitor weather conditions (current forecast).
 - c) Consider monitoring news stations (live reports).
- 2) Resource status.
 - a) Accurate status display critical.
 - b) Status critical to safety of working units.
- 3) Documentation.
 - a) Log of decisions considered to be minimum.

G) Finance Function.

- 1) Track cost of specialized equipment.
- 2) Track cost of supplies and services.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Railroad Incidents

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Section: 2-8-8

Effective Date: 07-01-95

Revised Date:

- 8.01 Purpose. To identify items concerning railroad incidents which impact on fire response strategy.
- 8.02 Goal. Develop response strategies which recognize hazards and conditions associated with railroad incidents.
- 8.03 Special Problems.
- A) Life Loss Potential.
- 1) Crew members and passengers.
 - 2) Residents living near rail line.
 - 3) Emergency personnel.
 - 4) Bystanders.
- B) Access.
- 1) Fields adjacent to rail lines.
 - 2) Debris/damage following derailment or explosions.
 - 3) Brush clogged right-of-ways.

C) Personnel Safety.

- 1) Possible explosions.
- 2) Hazardous materials.
- 3) Prolonged operations.

D) Water Supply.

- 1) 100% of operations will require tanker shuttle.
- 2) Expect needed fire flow to tax available water.

E) Hazardous Materials.

- 1) Identification may be a problem.
- 2) Waybill carried in engine.
- 3) Need for Haz-Mat team support.

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- 4) Technical assistance needed.

F) Resources.

- 1) Railroad company technical/material resources.
- 2) Owners of rail cars/contents.
- 3) Need for large quantities of foam.
- 4) Specialized equipment (lighting, rail car moving equipment, etc.).

G) Multi-Jurisdictional.

- 1) Accident may extend over community boundary.
- 2) Railroad/regulatory authority.
- 3) Owners of rail car/contents.
- 4) Environmental protection agencies.
- 5) Expect need for multiple liaison positions.

H) Incident Command.

- 1) Fire Department responsible for inner-perimeter of incident.
- 2) Law Enforcement is responsible for outer-perimeter.
- 3) Liaison will be critical.
 - a) Evacuation (if indicated).
 - b) National Transportation Safety Board (NTSB).
 - c) Environmental Protection Agency.

d) DNR.

l) Public.

- 1) Crowds will hinder movement of emergency equipment and operations.
- 2) Crowds can be in danger if too close to spilled liquids or other hazards.
- 3) Crowds may abandon vehicles in traffic and walk to scene to get better view - compounding traffic problems.
- 4) Use barrier tape to identify hazard areas. Law Enforcement is responsible for outer-perimeter.

8.04 Strategic Considerations.

A) Pre-Planning.

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- 1) Maintain current contact list (telephone, etc.) for railroad companies.
- 2) Maintain map books.
- 3) Maintain command file of maps/aerial photos of railroad lines.
 - a) One-half mile evacuation distance from track.
 - b) Population estimates in one-half mile distance.
- 4) Monitor train lists to track types of materials being transported.
- 5) Monitor number of trains passing through area. Monitor schedules for time of regular trains.

B) Inter-Agency.

- 1) Fire department responsible for inner-perimeter.
- 2) Emergency Medical Service responsible for triage, treatment and transportation of the injured.
- 3) Law Enforcement is responsible for outer-perimeter.
- 4) Medical Examiner is responsible for collection, identification and disposition of the dead.
- 5) NTSB is responsible for accident investigation.
- 6) Red Cross is responsible for shelter and care of persons displaced by incident (damaged homes, evacuated areas).
- 7) DNR is responsible for environmental protection.

C) Command Function.

- 1) Need for visible, strong command.
- 2) Fill staff positions early - consider priority order of Liaison, Safety, Public Information.
- 3) Command post location must consider safety and possible long-term operation.
- 4) Collect situation and resource status information.
- 5) Consider reflex time to assemble and deploy resources.
- 6) Prepare written objectives to support prolonged operations.
- 7) Do not let guard down during clean-up operations.

D) Operations Function.

- 1) Anticipate need to address the following.
 - a) Evacuation.
 - 1) Relocation
 - 2) Protect-in-place.
 - 3) Provide evacuation area guideline for Law Enforcement.

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- b) Fire control.
 - 1) Limited water supply.
 - 2) Need for foam operations.
 - 3) Hazardous materials.
- c) Rescue.
 - 1) Access.
 - 2) Extrication.
- d) Medical.
 - 1) Triage.
 - 2) Treatment.
 - 3) Transportation.

- 2) Rotate personnel on regular basis.

E) Logistics Function.

- 1) Supplies.
 - a) Anticipate supply shortages (foam concentrate, casualty bags, etc.).
 - 1) County FD resources.
 - 2) Private contractors.
 - b) Anticipate transport problems because of access.
- 2) Need for specialized equipment.
 - a) Lighting.

- 1) FD lighting units.
- 2) Construction lighting towers.
- b) Heavy equipment (lifting, excavation, etc.).
- c) Wreckers.
- d) Rescue Tools.
 - 1) Hydraulic spreaders, cutters and rams.
 - 2) Non-sparking equipment.
 - 3) Cutting torches.
- 3) Maintenance/Support.
 - a) Fuel/Fluids for vehicles and equipment.
 - b) Mechanical service and repair.
 - c) Consider calling for repair specialities (rescue tools, etc.).
 - d) Acetylene, oxygen for torches, etc.
- 4) Personnel Support.
 - a) Food & fluids for many persons.
 - b) Sanitary facilities.
 - c) Shelter (weather extremes - hot and cold).

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F) Planning Function.

- 1) Situation Status.
 - a) Use aerial photographs/maps to plot perimeter.
 - b) Monitor local television (views from live broadcast).
 - c) Video scene from helicopter view.
- 2) Resource Status.
- 3) Documentation.
 - a) Written log of activity.
 - b) Photographic log.
 - 1) Operations.
 - 2) Location of debris, injured, deceased.
- 4) Casualty log.
- 5) Responder log.
 - a) Exposure to hazardous materials.
 - b) Critical incident stress follow-up.

G) Finance Function.

- 1) Track cost of specialized equipment.
- 2) Track cost of contracted equipment (heavy equipment, buses, lighting, etc.)

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Aircraft Incidents

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Effective Date: 07-01-95

Section: 2-8-9

Revised Date:

- 9.01 Purpose. To identify items concerning aircraft accidents which impact on fire response strategy.
- 9.02 Goal. Develop response strategies which recognize hazards and conditions associated with aircraft accidents.
- 9.03 Aircraft Accident General.
- A) Township Fire Department's Area lies within ten miles of the Chippewa Valley Regional Airport. The flight paths for this airport include the airspace over this area. This airport services private, commercial and military aircraft.
- B) Department planning will emphasize hazards and conditions associated with an off-field accident.
- 1) The FAA and the NTSB anticipate the chance of passenger survival after an off-field crash to be 10% or less.
 - 2) Because of the many variables (location of crash, structure

involvement, etc.), off-field planning will be outlined using general terms.

- C) Department resources may also be called to support an on-field operation. This support would most likely involve logistical support (mass casualty supplies, foam concentrate, etc.).

9.04 Special Problems.

A) Large Life-Loss Potential.

- 1) Passengers.
- 2) Persons on the ground.
- 3) Firefighters and other responders.

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B) Large Injury Potential.

- 1) Passengers.
- 2) Persons on the ground.
- 3) Firefighters and other responders.

C) Fuel and Hazards.

- 1) Large commercial aircraft (747) can have up to 22,000 gallons of fuel on-board.
- 2) Common jet fuel has an ignition temperature of 464 degrees F. (JP 4 will flash at -10 degrees F.) (gasoline will flash at -45 degrees F.).
- 3) Ammunition aboard military aircraft.

D) Crash with Ignited Fuel.

- 1) May require large quantities of foam - master stream application.
- 2) May lead to multiple structure fires - (example: crash in residential or commercial area).
- 3) Could produce severe brush fire.
- 4) Could produce conflagration conditions.

E) Crash with Unignited Fuel.

- 1) Severe flash and fire potential.
- 2) Spill must be secured with foam - and maintained. Need for large quantities of foam concentrate.
- 3) Need for non-sparking rescue tools.
- 4) No smoking.
- 5) Potential for surface and ground water contamination.

F) Remote Area (wooded areas, farm fields, marshes).

- 1) Control of access roads will be critical.
- 2) Heavy equipment may be needed to clear access path.
 - a) Highway Departments (city, county, township).
 - b) Private contractors.
- 3) Wreckers may be needed to remove stuck response vehicles, or remove vehicles blocking access.
- 4) Anticipate time delays in setting up operations.

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- 5) Consider school bus transport of personnel (especially relief crews) leaving apparatus in staging areas.

G) Water Supply.

- 1) Large fire (aircraft fuel, structures) will tax water system capacity.
- 2) Traffic (ambulance, civilian) may hinder tanker shuttle.

H) Transportation of Injured.

- 1) Triage will be critical.
 - a) Do not overload transportation with low priority patients.
 - b) Patients must be routed to appropriate facility according to type/extent of injury and hospital capability/capacity.
- 2) As the distance to the hospital increases, the number of ambulances needed will increase.
- 3) Helicopter support is an advantage, but must be rigidly controlled.
 - a) Landing zone must not risk patients or responders.
 - b) Down-blast will scatter debris, triage tags, blankets.
 - c) Noise will complicate communications.

I) Handling of the Dead.

- 1) Activity under direction of Medical Examiner.

- 2) Bodies and body parts will be flagged using survey flags.
- 3) Protect human remains - leave in position found.
- 4) All pieces of bodies are important to Medical Examiner; fingers being the most important for identification purposes.
- 5) For temporary storage of dead, a minimum of four refrigerated trucks will be needed.
 - a) one for male.
 - b) one for female.
 - c) one for children.
 - d) area for examination/autopsy.
- 6) Cover signs of commercial trucks used for storing bodies.

J) Valuables.

- 1) Security must be provided.
- 2) Anticipate looting.
- 3) Medical Examiner is responsible for valuables of deceased.

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K) Inter-Agency.

- 1) Anticipate over response; fire departments, EMS and law enforcement agencies responding without being requested.
- 2) Fire department is responsible for inner-perimeter of crash site.
- 3) Law Enforcement is responsible for outer-perimeter.
- 4) Liaison will be critical.
 - a) Federal Aviation Administration (FAA).
 - b) National Transportation Safety Board (NTSB)/
 - c) Red Cross (and other welfare agencies).
 - d) Airline company.
 - e) Medical Examiner.
 - f) Department of Natural Resources (environmental protection).
 - g) Military.
 - h) Emergency Government.

L) Multi-Jurisdictional.

- 1) Crash may occur on (or spread beyond) community boundary.
- 2) Command/control and strategy must adjust to phases of incident: impact, rescue and hazard control, body recovery, investigation, clean-up.

M) Public.

- 1) Expect that The Curious, The Morbid, The Looters will rush to the scene.
- 2) Crowds will hinder movement or emergency equipment and operations.
- 3) Crowds can be in danger if too close to spilled fuel or other hazards.
- 4) Crowds may abandon vehicles in traffic and walk to scene to get better view - compounding traffic problems.
- 5) Use barrier tape to identify hazard areas. Law Enforcement is responsible for outer-perimeter.

N) Relatives.

- 1) Will be frantic with worry and grief.
- 2) Need central meeting point.
 - a) Assign liaison to coordinate.
 - b) Assign Chaplains.

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O) Weather.

- 1) Aircraft accidents can happen in all types of weather.
- 2) Temperature extremes will affect survivors and responders.
- 3) Snow or rain will complicate access and movement of equipment.

P) Prolonged Operations.

- 1) Need for relief crews (continued fire/hazard control, body removal, support of clean-up).
- 2) Food and fluids needed for large crews.
- 3) Lighting (football field dimensions minimum) will be needed.
- 4) Fuel will be needed for vehicles/equipment.
- 5) Fatigue of responders will increase safety problem.
- 6) Toilet facilities (portable) must be provided.

Q) Psychological Impact on Response Personnel.

- 1) Direct all personnel to attend an exit de-briefing.
 - a) Explain signs/symptoms of critical incident stress.
 - b) Identify contact for support (telephone counseling source at minimum).

- 2) Limit inner-perimeter assignment of personnel to only those needed. Rotate often to remote Rehab or Staging areas.
- 3) Assign observer to detect signs/symptoms of personnel at scene (consider as assignment for Safety Officer).
- 4) Post incident support must be provided.

R) Media.

- 1) Providing accurate information in a timely fashion is a Command concern.
- 2) Expect to be over-loaded by media requests for information.
- 3) Remember - if the information is not provided - it will be found somewhere, from someone.
- 4) Media personnel will also be affected by the incident - expect unexpected behavior.
- 5) One way to avoid "interference" is to provide a means for the media to complete their job.
 - a) Regular updates.
 - b) Guided tours of area.

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9.05 Strategic Considerations.

A) Pre-Planning.

- 1) Review mutual aid assignments.
 - a) Major fires/flammable liquid capability.
 - b) Mass casualty capability.
- 2) Maintain map books and aerial photos.
 - a) Access.
 - b) Staging for many vehicles.
- 3) Review multi-mass casualty protocols.
 - a) Training for personnel.
 - b) Review EMS system capability.

B) Inter-Agency.

- 1) Fire department is responsible for inner-perimeter of crash site.
- 2) Emergency Medical Service is responsible for triage, treatment, and transportation of injured.
- 3) Law Enforcement is responsible for outer-perimeter of crash site.
- 4) Medical Examiner is responsible for collection, identification and disposition of the dead.

- 5) FAA, NTSB is responsible for crash investigation.
- 6) Red Cross is responsible for shelter and care of persons displaced by accident (damaged homes, evacuated areas).
- 7) DNR is responsible for environmental protection.

C) Command Function.

- 1) Need for very visible, strong command.
- 2) Fill staff positions early - consider priority order of Safety, Liaison, Public Information.
- 3) Collect situation and resource status information.
- 4) Expand management system anticipating the potential problems.
- 5) Medical and EMS
 - a) Triage.
 - b) Treatment.
 - c) Transportation.

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D) Operations Function.

- 1) Anticipate need to address the following.
 - a) Fire control.
 - b) Rescue.
 - 1) Access.
 - 2) Extrication.
 - c) Hazardous Materials.
- 2) Conditions may indicate need for separate fire/hazard, and medical branches.
- 3) Rotate personnel on regular basis. Remove unassigned personnel from inner-perimeter to Rehab or Staging area.
- 4) All personnel must go through exit de-briefing.
- 5) Decontamination if needed.

E) Logistics Function.

- 1) Supplies.
 - a) Anticipate supply shortages (long boards, casualty bags, foam concentrate).
 - 1) County FD resources.

- 2) Airport stockpiles.
- 3) Private contractors.
- b) Anticipate transport problems because of access.
- 2) Personnel Support.
 - a) Food and fluids for many persons.
 - b) Sanitary facilities.
 - c) Shelter (weather extremes - hot or cold).
- 3) Maintenance/Support.
 - a) Fuel/Fluids for vehicles and equipment.
 - b) Mechanical service and repair.
 - c) Consider calling for repair specialists (rescue tools, etc.).
- 4) Need for specialized equipment.
 - a) Lighting.
 - 1) FD lighting units.
 - 2) Construction lighting towers.
 - b) Street barricades.
 - c) Excavation equipment.

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- d) Wreckers.
- e) Rescue tools.
 - 1) Hydraulic spreaders, cutters and rams.
 - 2) Non-sparking equipment.

F) Planning Function.

- 1) Situation Status.
 - a) Perimeter of crash site.
 - b) Use aerial photographs to plot perimeter.
 - c) Monitor local television (views from live broadcasts).
- 2) Resource Status.
- 3) Documentation.
 - a) Written log of activity.
 - b) Photographic log.
 - 1) Operations.
 - 2) Location of debris, injured, deceased.
- 4) Casualty log.
 - a) Passenger/crew (airline, owner best source).
 - b) On-ground casualties.
- 5) Responder log.

- a) Exposures to hazardous materials.
- b) Critical incident stress follow-up.

G) Finance Function.

- 1) Track cost of supplies and services.
- 2) Track cost of contracted equipment.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 8: Strategic Guidelines	
Subject: Hazardous Materials	
Page 1 of 13	Section: 2-8-10
Effective Date: 07-01-95	Revised Date:

- 10.01 Purpose. To identify items concerning hazardous materials incidents which affect fire response strategy.
- 10.02 Goal. Develop response strategies which recognize hazards and conditions present at hazardous materials incidents.
- 10.03 Hazardous Materials - Defined. A material or materials accidentally released from the original container and used in a manner not originally intended. Hazardous materials include materials that are unintentionally contaminated or mixed with other chemicals, or involved some outside reactive source such as heat, light, liquids, shock, or pressure.¹⁴

A) First Responder Awareness.

- 1) Action. Recognize problem. Identify (if possible). Notify more qualified responders.

- 2) Who. Law Enforcement. Some firefighters. Public works. Other field units.

B) First Responder Operations.

- 1) Action. Defensive skills. Contain spill (diking). Minimize harm (evacuation, water fog, protecting in place).
- 2) Who. Law Enforcement. Firefighters. Industrial spill team. Emergency Medical Service.

C) Technician.

- 1) Action. Offensive operations. Plugging and patching. Controlling the spill and stopping release.
- 2) Who. Hazardous Materials Response Team.

¹⁴

Surviving the Hazardous Materials Incident. Emergency Resource, Inc. 1989.

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D) Specialist.

- 1) Action. Similar to technician, but more product specific.
- 2) Who. Skill oriented basis. Industrial (Dupont, Dow, etc.)

E) Incident Commander.

- 1) Action. Any incident commander trained above the awareness level.
- 2) Who. Fire Chiefs. Duty Officers.

10.05 Hazardous Materials Incident Types. The type of incident determines the type of response or action. Township Fire Department's Area may experience the following types.

- A) Railway. The most common reason for railway accidents is track failure or collision. Other common factors causing rail emergencies include human, signal, or mechanical errors. Problems can be magnified because of large quantities of materials involved and poor access to the emergency

site.

- B) Highway Accidents. The most common type of Haz-Mat incident.
- C) Fixed Installation Accidents. These incidents can occur anywhere materials are manufactured, processed, used, transported or stored. Common causes of fixed installation accidents include:
 - 1) Equipment failure.
 - 2) Human error.
 - 3) Accidental mixing of reactive products.
 - 4) Product or tank overflow.
 - 5) Physical damage to containers.
 - 6) Exposure to fire, water or heat.
- D) Pipeline Accident. These accidents occur as a result of mechanical failure and human error (digging prior to locating the pipe).
- E) Container Failure. Generally, any material is safe in its container. Conditions which may cause the container to fail if it is involved in an accident include:

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- 1) Container is filled beyond its capacity.
- 2) Poor quality control, causing contamination or impurity in the product.
- 3) Defective container.
- 4) Container fails from heat or direct flame impingement.
- 5) Gasket, valve stem, or connection failure.
- 6) Physical damage to the valve.
- 7) Container is damaged by flying debris from another container.
- 8) Mishandling or human error.

F) Aircraft Accidents.

10.06 Identification and Recognition. Hazardous materials must be properly identified before any action can be taken to control an incident. Failure to properly identify the hazardous materials will only increase the hazard.

A) Labels. Package labels are four inch square diamond symbols that are attached to the package being shipped. Every DOT classified Haz-Mat shipment must be marked with the appropriate label or labels, unless otherwise specified. Displaying the name of the material on the package is also required. In addition, when two or more warning labels are

required, they must be displayed next to each other. Materials classified as Explosive A, Poison A, or radioactive or meet the definition of another hazard class, must be accurately labeled for each class.

- B) Placards. Placards are 10 3/4 inch square diamond symbols applied to each side and end of a motor vehicle, rail car, freight container or portable tank container carrying hazardous materials. Refer to CFR 49, Transportation, Parts 100 - 177 for placarding guidelines.
- C) NFPA 704 System. The National Fire Protection Association 704M system is designed for fixed facilities such as buildings, storage tanks, or individual rooms when additional hazardous materials identification is necessary. This system also uses a diamond symbol to identify the hazard. The diamond is divided in four differently colored sections, each identifying a type of hazard. Each hazard poses a varying degree of danger and is rated on a scale of 0 to 4. The least hazardous is rated 0 and the most hazardous is 4.
- D) Shipping Papers. DOT regulations require shipping papers to accompany the shipment of hazardous materials and wastes. When responding to a possible Haz-Mat call, check for: shipping papers, proper shipping name, type of packaging and total quantity.

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1) Highway.

- a) Title of shipping paper. Bill of lading.
- b) Location. Cab of vehicle.
- c) Responsible person. Driver.

(MSDS generally are available from driver in addition to bills of lading.)

2) Railway.

- a) Title of shipping paper. Waybill consist.
- b) Location. With conductor or engineer.
- c) Responsible person. Conductor or engineer.

(STCC (Standard Transportation Commodity Code) number is used extensively on rail transportation shipping papers.)

3) Air.

- a) Title of shipping paper. Air bill.
- b) Location. Cockpit.
- c) Responsible person. Pilot.

E) Material Safety Data Sheets. The MSDS is another source of Haz-Mat information that can be useful in recognition and identification of hazardous materials. Although no format for the MSDS is mandated, the following information must be provided on each sheet.

- 1) Material name.
- 2) Chemical formula.
- 3) Common synonyms.
- 4) Chemical family.
- 5) Manufacturers name.
- 6) Emergency number.
- 7) Hazardous ingredients.
- 8) Regulated exposure limits.
- 9) Physical data.
- 10) Fire and explosion data.
- 11) Health hazard data.
- 12) Reactivity data.
- 13) Spill or leak procedures.

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- 14) Special protection information.
- 15) Special precautions.

F) Other Methods. The first responder can often gain valuable information from:

- 1) Bystanders or responsible parties.
- 2) Location of the incident.
- 3) Type of occupancy.
- 4) Type of container(s) involved.
- 5) Obvious chemical and physical characteristics.
- 6) Chemical or scientific name.
- 7) Manufacturer or trade name.

10.07 Information Resources. The following are valuable key resources.

A) Printed Resources.

- 1) Emergency Response Guidebook (Dept. of Transportation).

- 2) Emergency Action Guides (Association of American Railroads).
- 3) Fire Protection Guide on Hazardous Materials (National Fire Protection Association).

B) Verbal Resources.

- 1) CHEMTREC. (1-800-424-9300)
- 2) National Response Center (USCG & EPA) (1-800-424-8802)
- 3) Dept. of Defense-Nuclear Accident Center (1-505-264-4667)
- 4) Center for Disease Control (1-404-639-3535)
- 5) Oil & Hazardous Material Technical Assistance Data System (OHM-TADA) (1-202-245-3045)
- 6) Agency for Toxic Substances and Disease Registry (ATSDR) (1-404-452-4100)
- 7) ACFX Rail Car Manufacturer (1-314-724-7850)
- 8) GATX Rail Car Manufacturer (1-312-621-6200)
- 9) UTLX Rail Car Manufacturer (1-312-431-3111)

C) Electronic Resources.

- 1) Owner-Property Data Base (Department Info. Mgmt. System).
- 2) Comm Center Time System.
- 3) CAMEO (Computer-Aided Management of Emergency Operations).

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- 4) CHRIS (Chemical Hazards Response Information System).
- 5) Emergency/Haz-Mat Information System.

D) Waste Research and Reclamation.

- 1) Jim Hager Phone: 834-9624

10.09 Incident Management.

- A) All incidents involving hazardous materials will be managed using the department's Incident Command System.
- B) To assist in the development of a safe, effective response to a Haz-Mat incident, the following six part guideline is provided.
 - 1) Hazard Identification. Recognize and identify the presence of a hazardous material.
 - 2) Action Plan. Evaluate the situation by determining what you are going to do, immediate and long-term needs, and who is in charge.

- 3) Zoning. Control the risk by establishing a restricted zone, limited access zone, and support zone.
- 4) Managing the Incident. Establish the necessary incident command structure to handle the emergency.
- 5) Assistance. Determine additional resources needed including more fire companies, Haz-Mat response team, technical assistance, or private contractors.
- 6) Termination. Assess what is needed to conclude the incident such as clean-up, decontamination, physical exams, rehabilitation and post-incident analysis.

C) Hazard specific guidelines are included within Section 2-1-9 of this manual.

10.09 Incident Level Criteria.

- A) An incident involving Hazardous Materials will be grouped into one of three levels. The three levels are determined by the following criteria.
- 1) Extent of municipal, county, and state government involvement.
 - 2) Extent of injuries and/or deaths.
 - 3) Extent of civilian evacuation needed.
 - 4) Availability and need of Haz-Mat Response Team.

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- 5) Level of Technical expertise required to abate the incident.
- B) Level I Incident. An incident which can be effectively managed and mitigated by first response personnel without a Haz-Mat response team or other special unit.
- 1) Spills that can be properly and effectively contained and/or abated by equipment and supplies immediately accessible to fire engine or ladder companies.
 - 2) Leaks and ruptures that can be controlled using equipment and supplies immediately accessible to engine or ladder companies.
 - 3) Fires involving toxic materials that can be extinguished and cleaned up with resources immediately available to engine or ladder companies.
 - 4) Haz-Mat incidents not requiring civilian evacuation.
 - 5) Haz-Mat incidents that can be contained and controlled using engine or ladder company resources.
- C) Level II Incident. An incident requiring the special technical assistance

of a Haz-Mat response team, industrial specialist, or government strike team.

- 1) Spills that can be properly and effectively contained and/or abated by specialized equipment and supplies immediately available to a Haz-Mat response team or other special unit.
- 2) Leaks and ruptures that can be controlled using specialized equipment and supplies immediately available to a Haz-Mat response team or other special unit.
- 3) Fires involving toxic and/or flammable materials that are permitted to burn for a controlled time period or are allowed to consume themselves.
- 4) Haz-Mat incidents that require civilian evacuation within the area of the agency that has primary jurisdiction.
- 5) Haz-Mat incidents where specialized technical information is required.
- 6) Haz-Mat incidents that can be contained and controlled using the available resources of a Haz-Mat response team or other specially trained unit.

D) Level III Incident. Major disaster.

- 1) Spills that cannot be properly and effectively contained and or abated by highly specialized equipment and supplies immediately accessible

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to a Haz-Mat response team or special unit.

- 2) Leaks and ruptures that cannot be controlled using highly specialized equipment and supplies immediately available to a Haz-Mat response team.
- 3) Fires involving toxic materials that are allowed to burn because water is ineffective or dangerous; or because there is a threat of large container failure; or because a large explosion, detonation or BLEVE has occurred.
- 4) Haz-Mat incidents that require evacuation of civilians across jurisdictional boundaries.

10.10 Safety Zones. To reduce the danger to the public and emergency personnel, control zones will be established. Safety zones can be expanded or reduced depending on the situation. Zones should be clearly marked. Remember, a site control system needs to be established EARLY, and should be used to some degree in every haz-mat incident.

A) Restricted HOT Zone. The area represents danger to life or health and should be approached with extreme caution. Depending on the material

involved, appropriate protective clothing and equipment is necessary to enter this zone. The size of the zone depends on the amount and properties of the material involved and location of the incident. The DOT Emergency Handbook is one source of information that can be used to determine the initial size of this zone.

- B) Limited Access WARM Zone. This area is intended for site control directly outside the restricted HOT zone. It provides the forward access point to the restricted zone for the necessary support personnel and equipment, escape routes, and decontamination stations. The limited access zone must be restricted to essential personnel only. All others must stay out of the limited access area unless needed for restricted zone support.
- C) Support COLD Zone. This area is directly outside the limited access zone. This is the safe area for the incident commander, outside agencies involved in the incident, media, Red Cross, and medical personnel.

10.11 Assistance. Adequate resources are needed to deal with the complexities of hazardous materials. The following resources will make incident management more successful.

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- A) Dispatcher. Critical information provided by the dispatcher will be a key to a safe, effective response.
- B) Department of Natural Resources.
 - 1) DNR has statutory responsible for Haz-Mat spills.
 - 2) Will provide assistance in arranging for clean-up.
- C) Law Enforcement.
 - 1) Many times the person who is first at the scene.
 - 2) Critical information can be obtained from a trained first responder.
 - 3) Law enforcement has been assigned the role of conducting evacuation. Area to be evacuated must be outlined for law enforcement.
 - 4) Must explain SAFETY ZONES to law personnel.
- D) City of Eau Claire - Hazardous Incident Response Team.

- 1) Level A capability.
- 2) Response will include Hazardous Material Team and Chief Officer.

E) Private Technical Specialist.

- 1) Can provide specific technical advise.
- 2) Access through County or HIRT Team resource list.
- 3) Access through facility management or owner of product.

F) Private Contractor.

- 1) Waste Research and Reclamation.
- 2) Coordinate with DNR representative.

10.12 Termination. Terminating a hazardous materials incident requires careful consideration to detail. As a minimum, the following areas must be addressed.

A) Decontamination. Procedures to decontaminate anything leaving the restricted zone must prevent or reduce the transfer of contaminants by people and equipment. These procedures should include decontamination of:

- 1) Personnel and victims.
- 2) Protective equipment.

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- 3) Monitoring equipment.
- 4) Clean-up equipment.

B) Rehabilitation. The welfare of personnel must not be overlooked. The following guideline is provided.

- 1) Provide a minimum 30 minute rest period for personnel who experience extreme physical exertion or emotional pressure.
- 2) Provide nutritional food and liquid supplements.
- 3) Have personnel evaluated by medical personnel for possible chemical exposure and physical exhaustion. Vital signs should be taken when they arrive at rehabilitation and as they are released for assignment.
- 4) Provide shower facilities and fresh clothing.
- 5) Evaluate personnel for signs of emotional distress.

C) Medical Screening. Medical exams and taking blood samples of personnel

who were possibly exposed should be part of termination. Blood samples are often the only way to determine if personnel were exposed to the chemical(s) involved. Personnel should report any possible exposure to harmful substances.

- D) Post-Incident Analysis. The post-incident analysis should be a positive learning experience. A responsible party from each agency should discuss what part the agency played, why it was done, and how it may be done more effectively in the future. If deficiencies are noted, it is imperative that they be addressed prior to the next incident.

10.13 Strategic Considerations.

A) Pre-Planning.

- 1) Maintain listing of facilities using hazardous materials.
 - a) Owner/Property System.
 - b) Comm Center CAD.
 - c) Map Book Entries.
- 2) Plans must consider maximum commitment of resources.
 - a) Resource availability and response times (day/night).
 - b) Supplemental water supply.
 - c) Communications.
- 3) Maintain maps and aerial photographs.
 - a) Haz-Mat transportation routes.

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- b) Pipeline locations.
 - c) Population estimates (exposure, evacuation areas).
 - d) Storm sewer maps (runoff of spilled material).
 - e) Sanitary system maps (infiltration).
 - f) Water system maps (supply, risk to aquifer).
- 4) Conduct risk assessments.
 - a) Traffic counts.
 - b) Inventory of storage facilities.
 - c) Monitor reporting facilities.

B) Inter-Agency.

- 1) Inform support agencies of SAFETY ZONES.
- 2) Request mutual aid promptly.
- 3) Coordination/communication with other agencies critical.
 - a) Common radio frequencies (FIRECOM, MARC, etc.).
 - b) Early assignment of Liaison Officer.

C) Command Function.

- 1) Position command post upwind, uphill, and upstream.
- 2) Determine wind direction and monitor.
- 3) Collect (immediately) situation and resource status information.
- 4) Consider potential when determining resource needs.
- 5) Consider activating OPERATIONS for Level III incidents.

D) Operations Function.

- 1) Skill level, protective clothing and product information will be key element to decisions.
- 2) Decon must be in place before any offensive operation begins.
- 3) Technical Assistance should be assigned to Haz-Mat Group.
- 4) Minimum number of personnel exposed is the goal.

E) Logistics Function.

- 1) Resources.
 - a) Maintenance of reserve
 - b) Fatigue will be a factor.
 - c) Relief companies required for extended operations.

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- 2) Water Supply.
 - a) Assign water supply officer.
 - b) Request maximum pumpage from utility.
 - c) Emergency inter-connect with adjoining utility.
 - d) Use of available static sources (swimming pools, etc.).
- 3) Maintenance/Support.
 - a) Extended operations will require special support.
 - 1) Food/fluids (REMOTE FROM POTENTIAL CONTAMINATION).
 - 2) Fuel.
 - 3) Mechanical service and repair.
 - b) Need for specialized equipment.
 - 1) Helicopter.
 - 2) Street barricades.
 - 3) Lighting equipment.
 - 4) Excavation equipment.

- 4) Support of Decontamination.
 - a) Containers for "dirty" tools, clothing, etc.
 - b) Supplies to prepare Decon solutions.
 - c) Clothing for persons following Decon procedures.
 - d) Shelter for persons passing through Decon.
 - 1) Sheltered area for Decon line.
 - 2) Vehicle marked "dirty" for transport to Decon line.
- 5) Communications.
 - a) May require more than one tactical channel.
 - b) Consider separate command channel.
 - c) Use cellular and commercial telephone service.

F) Planning Function.

- 1) Strategy.
 - a) Determine perimeter, forecast potential.
 - b) Have a contingency plan.
- 2) Reflex Time.
 - a) Large resource commitment takes time to arrive.
 - b) Base plans on resources available on-scene.

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- 3) Situation/Resource status.
 - a) Immediate and accurate status display critical.
 - b) Need reliable information.
 - c) Obtain current and forecasted weather informatio
- 4) Documentation.
 - a) Needed to support request for cost recovery and disaster assistance.
 - b) Log of decisions considered minimum.

G) Finance Function.

- 1) Track costs of specialized equipment.
- 2) Track costs of supplies and services.
- 3) Track personnel costs.
 - a) Compensation.

b) Medical evaluations.

<p style="text-align: center;">TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES</p>

<p>Part 8: Strategic Guidelines</p>

<p>Subject: Natural Disaster</p>

<p>Page 1 of 9</p>

<p>Section: 2-8-11</p>

<p>Effective Date: 07-01-95</p>

<p>Revised Date:</p>

11.01 Purpose. To identify items concerning natural disasters which affect fire response strategy.

11.02 Goal. Develop response strategies which recognize the problems associated with natural disasters.

11.03 Natural Hazards.

A) The following types of natural hazards present a threat to the area.

- 1) Tornado (Windstorm).
- 2) Blizzard.
- 3) Extreme Cold (pro-longed).
- 4) Extreme Heat (pro-longed).
- 5) Snow/Ice.
- 6) Flooding.
- 7) Drought.
- 8) Landshift.
 - a) earthquake.
 - b) earthslide.
 - c) erosion.

B) The degree of threat is measured by assessing the following:

- 1) How often does the hazard pose a threat?
- 2) What is the total population that could be seriously affected by the hazard?
- 3) What is the duration of impact to be expected from the hazard?
- 4) What is the intensity of impact to be expected from the hazard?
- 5) What is the scope of damage to be expected?
- 6) How predictable is the threat from the hazard?
- 7) How easy is it to reduce the effects of the hazard?

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11.04 Special Problems.

A) Access.

- 1) Normal access routes may be blocked by debris.
- 2) Roads, bridges may be damaged beyond safe use.

B) Communications.

- 1) Communications equipment may be damaged by the event, making them unusable.
- 2) In disasters, what are thought to be communications "problems" are often coordination problems in disguise.
- 3) Communications may be overloaded by increased use.
 - a) Survivors contacting or being contacted by relatives.

b) Increased system use by responding agencies.

C) Resource Shortage.

- 1) Department resources may have been damaged.
- 2) Mutual aid resources may be committed to response in home communities.
- 3) Over-response of resources creates coordination problems.
 - a) Persons and organizations arrive at the scene without have been requested.
 - b) Multiple organizations independently request resources without informing the other organization.
 - c) Responsibility for tracking resources is not assigned.
 - d) It is not clear to arriving resources who is responsible for site coordination.

D) Size-up.

- 1) Type and extent of damage and the secondary threats (leaking gas, downed power lines) are not immediately apparent.
- 2) Initial actions may be started with vague and inaccurate information.
- 3) Disasters are "fluid" in nature with needs changing minute to minute.

E) Financial.

- 1) Natural disasters can require extensive amounts of personnel time and materials.

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- 2) Expenses can easily exceed funds available within the Department's operating budget.
- 3) Tracking response expenses will be a critical function if the community applies for State or Federal disaster assistance.

F) Disruption.

- 1) Electrical outage.
- 2) Natural gas outage.
- 3) Telephone service outage.

G) Evacuation.

- 1) Panic is not a common problem in disasters; getting people to evacuate is.

- 2) Even if people have been convinced to evacuate, inhabitants may return while the threat is still present.
- 3) Why do people hesitate to evacuate?
 - a) Not convinced that a risk actually exists.
 - b) Wish to stay and protect their property.
 - c) Wanting to assure the safety of other family members before leaving.

H) Large Loss Potential.

- 1) Property damage can vary from slight to complete; from localized to area wide.
- 2) Injuries can vary in severity and number.
- 3) Fatalities.

I) Complexity.

- 1) Fires (multiple locations, types, lack of resource).
- 2) Medical needs (number of injuries, type).
- 3) Adverse weather conditions.
- 4) Impact may create other hazards. (Example - LP Gas storage damaged during windstorm.)

J) Inter-Agency Operations.

- 1) Organizations are accustomed to operating autonomously and fail to change in a disaster.

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- 2) Terminology and procedures may vary between organizations.
- 3) Hesitancy to depend on other organizations.
- 4) Persons (organizations) possessing information do not realize that another person (organization) needs it.

K) Safety of Personnel.

- 1) Size-up may not identify all potential safety hazards.
- 2) Urgency to act may lead to disregard for safety practices or use of protective clothing.
- 3) Command structure may not provide adequate supervision.

L) Specialized Equipment/Supply Needs.

- 1) Heavy Equipment (lifting, debris removal).

- 2) Sand, sandbags and other expendibles.
- 3) Test instruments (toxicity, flammability, etc.).

M) Transportation of Injured.

- 1) Triage will be critical.
 - a) Do not overload Transportation with low priority patients.
 - b) Patients must be routed to appropriate facility according to type/extent of injury and hospital capability/capacity.
- 2) As the distance to the hospital increases, the number of ambulances needed will increase.
- 3) Helicopter support is an advantage, but must be rigidly controlled.
 - a) Landing zone must not risk patients or responders.
 - b) Down-blast will scatter debris, triage tags, blankets.
 - c) Noise will complicate communications.

N) Handling of the Dead.

- 1) Activity under direction of Medical Examiner.
- 2) Mark location of bodies and body parts using survey flags.
- 3) Protect human remains - leave in position found.
- 4) All body pieces are important for identification process.
- 5) For temporary storage of dead, a minimum of four refrigerated trucks will be needed.
 - a) one for male.
 - b) one for female.
 - c) one for children.

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- d) area for examination/autopsy.
- 6) Cover signs of commercial trucks used for storing bodies.

O) Valuables.

- 1) Security must be provided.
- 2) Coroner is responsible for valuables of deceased.

P) Public.

- 1) Expect that The Curious, The Morbid, The Looters will rush to the scene.
- 2) Crowds will hinder movement of emergency equipment and operations.
- 3) Crowds can be in danger if too close.

- 4) Crowds may abandon vehicles in traffic and walk to scene to get better view - compounding traffic problems.
- 5) Use barrier tape to identify hazard areas.

Q) Relatives.

- 1) Will be frantic with worry and grief.
- 2) Need central meeting point.
 - a) Assign liaison to coordinate.
 - b) Assign Chaplains.
- 3) Casualty and relocation lists will reduce problems.

R) Weather.

- 1) Temperature extremes will affect survivors and responders.
- 2) Snow or rain will complicate access and movement of equipment.

S) Prolonged Operations.

- 1) Need for relief crews (continued fire/hazard control, body removal, support of clean-up).
- 2) Food and fluids needed for large crews.
- 3) Lighting will be needed.
- 4) Fuel will be needed for vehicles/equipment.
- 5) Fatigue of responders will increase safety problem.
- 6) Toilet facilities (portable) must be provided.

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T) Psychological Impact on Response Personnel.

- 1) Concern for own family/property.
 - a) Provide information concerning status of families.
 - b) Provide way for members to contact families.
 - c) Provide shelter or meeting place for families to assemble.
- 2) Direct all personnel to attend an exit de-briefing.
 - a) Explain signs/symptoms of critical incident stress.
 - b) Identify contact for support (telephone counseling source at minimum).
- 3) Limit assignment of personnel to only those needed.
Rotate often to remote Rehab or Staging areas.
- 4) Assign observer to detect signs/symptoms of personnel at scene (consider as assignment for Safety Officer).

5) Post-incident support must be provided.

U) Media.

- 1) Providing accurate information in a timely fashion is a Command concern.
- 2) Expect to be overloaded by media requests for information.
- 3) Remember - if the information is not provided - it will be found somewhere, from someone.
- 4) Media personnel will also be affected by the incident - expect unexpected behavior.
- 5) One way to avoid "interference" is to provide a means for media to complete their job.
 - a) Regular updates.
 - b) Guided tours of area.

11.05 Strategic Considerations.

A) Pre-Planning.

- 1) Review mutual aid assignments.
 - a) Major fire/search and rescue capability.
 - b) Mass casualty capability.
- 2) Maintain map books, aerial photos, full-size maps.
 - a) Access.
 - b) Staging for many vehicles.
 - c) Maps of adjacent communities.
 - d) Copies of city-wide map.

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- e) Water, sewer, drainage systems.
- 3) Review multi-mass casualty protocols.
 - a) Training for personnel.
 - b) Review EMS system capability.

B) Inter-Agency.

- 1) Fire department is responsible for search, rescue and hazard control.
- 2) Emergency Medical Service is responsible for triage, treatment and transportation of injured.
- 3) Law Enforcement is responsible for impact site security, pedestrian and traffic control.
- 4) Medical Examiner is responsible for collection, identification and disposition of the dead.

- 5) Red Cross is responsible for shelter and care of persons displaced by accident (damaged homes, evacuated areas).
- 6) DNR is responsible for environmental protection.

C) Command Function.

- 1) Need for very visible, strong command.
- 2) Fill staff positions early - consider priority order of Liaison, Safety, Public Information.
- 3) Collect situation and resource status information.
- 4) Expand management system anticipating the potential problems.
- 5) Provide LEADERSHIP when hazard calls for FD to be lead agency.

D) Operations Function.

- 1) Reliable information is critical.
 - a) Perimeter of impact area.
 - b) Extent of damage/exposures.
 - c) Number and type of injures; fatalities.
- 2) Anticipate need to address the following.
 - a) Fire control.
 - b) Rescue.
 - 1) Access.
 - 2) Extrication.
 - c) Medical.
 - 1) Triage.
 - 2) Treatment.

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- 3) Transportation
 - d) Hazardous Materials.
- 3) Conditions may indicate need for separate fire/hazard, and medical branches.
- 4) Rotate personnel on regular basis. Remove unassigned personnel from inner-perimeter to Rehab or Staging area.
- 5) All personnel must go through exit de-briefing.
- 6) Decontamination.

E) Logistics Function.

- 1) Supplies.
 - a) Anticipate supply shortages (long boards, casualty bags, foam concentrate).

- 1) County FD resources.
- 2) Private contractors
 - b) Anticipate transport problems because of access.
- 2) Personnel Support.
 - a) Food and fluids for many persons.
 - b) Sanitary facilities.
 - c) Shelter (weather extremes - hot or cold).
- 3) Maintenance/Support.
 - a) Fuel/fluids for vehicles and equipment.
 - b) Mechanical service and repair.
 - c) Consider calling for repair specialists (rescue tools, etc.).
- 4) Need for specialized equipment.
 - a) Lighting.
 - 1) FD lighting units.
 - 2) Construction lighting towers.
 - b) Street barricades.
 - c) Excavation equipment.
 - d) Wreckers.
 - e) Rescue tools.
 - 1) Hydraulic spreaders, cutters and rams.
 - 2) Non-sparking equipment.

F) Planning Function.

- 1) Situation Status.
 - a) Perimeter of area stricken.
 - b) Use aerial photographs to plot perimeter.

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- c) Monitor local television (views from live broadcasts).
- 2) Resource Status.
- 3) Documentation.
 - a) Written log of activity.
 - b) Photographic log.
 - 1) Operations
 - 2) Location of debris, injured, deceased.
- 4) Casualty log.
- 5) Responder log.
 - a) Exposure to hazardous materials.
 - b) Critical incident stress follow-up.

G) Finance Function.

- 1) Track cost of supplies from response agencies and private sources (foam concentrate, mass casualty supplies).
- 2) Track cost of contracted equipment (heavy equipment, buses, lighting, etc.).
- 3) Track personnel time.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Structure Fire

Page 1 of 3

Section: 2-9-1

Effective Date: 07-01-95

Revised Date:

1.01 Goal. To provide a guideline for decision making in response to structure fires.

1.02 Checklist.

A. The checklist is a starting point for making decisions in response to

structure fires. Additional information can (and should) be obtained from the following:

1. Strategic Guidelines.
 - a. Residential (2-8-1)
 - b. Commercial-Common Attic (2-8-2)
 - c. Center Hallway Occupancy (2-8-3)
 - d. Large Area Buildings (2-8-4)
 - e. Public Assembly (2-8-5)
 - f. High Rise (2-8-12)
2. Pre-Fire Plans.
3. Map Book.
4. Visual Factors.
5. Reconnaissance information.

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STRUCTURE FIRE TACTICAL GUIDELINES

During Response

Check map book - hydrants, access, tanker fill-sites, etc.
Use tactical worksheet.

Upon Arrival

Make Initial Size-Up

Give On-Scene Report - Take Command

- building size - small, medium, large

- building height

- occupancy

- fire/smoke conditions - nothing showing, smoke showing, fire showing, working fire, fully involved

Consider Upgrading Assignment - Level II Staging

Report Command Post Location

Determine Nature and Extent of Emergency

- location of occupants (outside/inside - need for rescue)

- fire ground factors

- what is most likely to happen?

Formulate Action Plan

- Prioritize needs

- Consider your options

- Address needs

Initial Action

Make Initial Assignments - Make Objectives Known:

- type of attack - offensive/defensive

- cut-off points

- early ventilation

Personnel Safety

Determine Resources Needed

Subject: Structure Fire

Date: 07-01-95

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Outside Assistance - traffic/crowd control, EMS, heavy equipment, etc.

Additional Action

Back-Up Initial Attack

Water Supply

Progress Reports

Update Plan

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Chimney Fires

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Effective Date: 07-02-95

Section: 2-9-2

Revised Date:

- 2.01 Goal. To provide a guideline for response to chimney fires.
- 2.02 Chimney Fires. Any fire which is confined to the chimney, vents or connectors heating appliances.

- A) When fire is suspected of, or does extend out of the chimney, vents or connectors, into any portion of the structure, **request a STRUCTURE FIRE response.**

2.03 Equipment for Chimney Fires.

- A) Chimney Fire Kit.
 - 1) Metal bucket.
 - 2) Chimney chain.
 - 3) Mirror.
 - 4) Insulated gloves.
 - 5) Safety goggles.
- B) Bulk Dry Chemical.
 - 1) Apply to source fire in stove or fireplace.
 - 2) Placed in plastic bags and dropped down chimney.
- C) Salvage Covers and Floor Runners.
- D) Blowers and Fans.

2.04 Size-Up.

- A) Smoke.
 - 1) Color - black indicates possible burning of creosote within chimney.
 - 2) Amount - is smoke exiting chimney in amounts greater than expected from fire in stove or fireplace?
 - 3) Location - is smoke exiting only from the chimney, or is building filling with smoke?
- B) Are sparks and flames showing at top of chimney?
- C) Examine building interior for entire length of the chimney.
 - 1) Do wall surfaces feel hot? Is the paint discolored?
 - 2) Are there any visible cracks or separations found on the chimney?

Subject : Chimney Fires

Date 07-01-95

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2.05 Occupant Safety.

- A) If occupants have exited building before arrival, restrict reentry until interior survey finds that building is safe.
- B) If occupants have remained in the building.
 - 1) Request that they leave the building until fire is controlled.
 - 2) Protect in place - monitor their location - be prepared to remove them from building if necessary.
- C) Check condition of occupants:

- 1) Effects of smoke or carbon monoxide exposure.
- 2) Burns from attempts to control fire.
- 3) Effects of excitement.
- 4) Provide emergency care and request EMS response as needed.

2.06 Suppression.

- A) Spread salvage covers and floor runners before starting fire control (fire is confined to chimney, vents or connectors).
- B) Extinguish fire in stove or fireplace.
 - 1) Open damper.
 - 2) Apply bulk dry chemical on burning fuel.
 - 3) Close oxygen supply.
 - 4) Provide standby with pump can or portable extinguisher while crews control fire in chimney.
- C) Control fire in chimney.
 - 1) If fire is small and contained - let it burn itself out.
 - 2) If fire spread danger exists.
 - a) Drop bulk dry chemical in plastic bags into chimney.
 - b) Apply small amount of water to hot fuel in stove or fireplace to produce steam. (With the damper open, the steam should rise up the chimney cooling the fire.)
 - c) Use chimney chain to dislodge burning waste in chimney

2.07 Incident Clean-Up and Occupant Information.

- A) Remove burned fuel from stove or fireplace.
 - 1) Use metal containers.

Subject: Chimney Fires

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- 2) Dispose burned fuel outside of structure in a safe location.
- B) Recheck roof and structural areas next to chimney, vents or connectors.
- C) Vent building of residual smoke using blowers.
- D) Inform occupants of need for inspection, cleaning and repair of chimney **before** further use. ¹⁶

2.08 Safety.

- A) Laddering.
 - 1) Use roof ladders.
 - 2) Special call mutual aid Ladder Company if chimney position or height is beyond Engine Company ladders.
- B) Use eye protection.
- C) Test atmosphere, building can contain products of combustion (carbon monoxide). If indicated, use SCBA.

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Fire department use of a "chimney chain" is a fire control action. This action **is not** chimney cleaning. Chimney cleaning is best completed by a professional chimney sweep who will clean and inspect the chimney. Direct the resident's attention to the telephone directory where a listing of available chimney sweeps can be found.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Fire Protection Systems

Page 1 of 9

Effective Date: 07-01-95

Section: 2-9-3

Revised Date:

3.01 Goal. To provide information concerning fire protection systems to help make accurate decisions and take proper action.

3.02 Fire Protection Systems.

- A) Private fire protection includes various devices and equipment installed or located within or about a property to deal with the out-break of fire.
- B) These devices can be either manually or automatically operated.
- C) The purpose of private fire protection is to provide a means by which fires may be detected or attacked in their incipient phase and controlled until public fire protection can arrive.
- D) There are many types of private protection systems.
 - 1) Automatic Fire Sprinkler Systems.
 - 2) Standpipe Systems.
 - 3) Carbon Dioxide Systems.
 - 4) Halogenated Agent Systems.
 - 5) Dry Chemical Systems.
 - 6) Foam Systems.
 - 7) Fire Detection and Alarm Systems.

Subject : Fire Protection Systems

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3.03 Automatic Fire Sprinkler Systems.

- A) Description. Automatic sprinkler protection consists of a series of devices so arranged that the system will automatically distribute water to either extinguish a fire or hold it in check until firefighters arrive. Water is supplied to the sprinkler heads through a system of piping.

B) FD Operations and Sprinkler Systems. Fire response to buildings equipped with automatic sprinklers should include the following actions.

- 1) One of the first-due Engine Companies will pump into the sprinkler system fire department connection.
- 2) The Engine Company will REVERSE LAY two hoselines from the FD connection to the water source.
- 3) Assign a firefighter to check the control valves to be sure they are wide open. Where a fire pump is used, check to be sure it is operating and valves are open. Open any closed valves. The firefighter will report conditions found to Command.
- 4) The pump operator will slowly develop recommended P.S.I. for the system at that location and maintain this pressure if possible.
- 5) Fire operations will follow Tactical Priorities.
- 6) Support the sprinkler systems within exposed buildings.
- 7) Protect unprotected areas or areas where sprinkler distribution might be blocked.
- 8) Do not rob the sprinkler system of the water supply by overtaxing the water system with other Engine Companies.
- 9) Avoid premature shutoff of a sprinkler system which has been in operation.
- 10) Keep Engine Company and hoselines attached to sprinkler system during overhaul and station a firefighter at the valve to reopen if necessary.
- 11) See that the sprinkler system is properly restored.¹⁷

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It is the responsibility of the owner to restore an activated sprinkler system to ready status. This action, including the replacement of sprinkler heads, is normally carried out by maintenance personnel or a sprinkler contractor.

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3.04 Standpipe Systems.

A) Description. Properly installed standpipe systems provide a quick and convenient means for operating fire streams on the various floors of buildings. If the system is the type which permits fire department pumpers to supply the interior network of pipes, the various hose stations function similar to discharge ports from a pumper.

B) Classes of Standpipe Systems.

- 1) Class I. For use by fire department personnel and those trained in handling heavy fire streams (2 1/2 inch hose).
- 2) Class II. For use primarily by the building occupants until the arrival of the fire department (1 1/2 inch hose).
- 3) Class III. For use by fire department personnel and those trained in handling heavy streams or by the building occupants (1 1/2 inch hose with connections for 2 1/2 inch hose).

C) FD Operations and Standpipe Systems.

- 1) One of the first-due Engine Companies will pump into the standpipe system fire department connection.
- 2) The Engine Company will REVERSE LAY two hoselines from the FD connection to the water source.
- 3) Pump discharge pressure will be dependent on:
 - a) Friction loss in hose lay from pump to siamese.
 - b) Friction loss in hose used on the fire floor.
 - c) Nozzle pressure from the type of nozzle used.
 - d) Quantity of water flowing from the nozzle.
 - e) Back pressure from elevation (ground to fire floor).
 - f) Friction loss in the standpipe.
- 4) Engine Companies assigned to work from standpipes will take the following equipment into the building.
 - a) Standpipe hose pack (or 2 inch hose from crosslay).
 - b) Nozzle.
 - c) Gated wye (or apartment line).
 - d) Wrenches (spanner, pipe, crescent).
 - e) Forcible entry tools.
- 5) Before the Engine Company leaves the building lobby, review the building floor plan.

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- 6) Use stairways to go to the floor below the fire floor. (Do not use elevators.) Connect to the standpipe on this floor and stretch the line to the floor **above the fire**. (It is much easier to bring the hose down the stairs than up, especially after it has been charged.)
- 7) One firefighter must remain at the outlet valve to charge the line after it has been moved into operating position. This firefighter should watch for fire or heat developing behind the attack team and

warn them before their position becomes untenable. This person will not proceed to assist them on the hoseline until certain they will not be entrapped.

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3.05 Carbon Dioxide (CO₂) Systems.

- A) Description. Carbon dioxide is a very effective extinguishing agent. When liquid carbon dioxide is discharged from a container, it immediately flashes to a mixture of vapor and fine dry ice particles. Extinguishment by application of carbon dioxide is based on removing the oxygen from the fire.

B) Advantages.

- 1) Effective for extinguishment of fires in open and closed tanks of flammable liquids.
- 2) Very effective for total flooding of areas containing electrical hazards or flammable liquids.
- 3) Halts active combustion of Class A fires.
- 4) Non-conductor of electricity.
- 5) Does not damage or leave residue on high-value contents such as records, or electrical machinery.

C) Disadvantages.

- 1) After the carbon dioxide dissipates, re-ignition can occur.
- 2) Generally, it will not extinguish a smoldering Class A fire.
- 3) Accomplishes little cooling (about one-tenth as effective as water).
- 4) Reduction in oxygen content can cause asphyxiation.
- 5) Discharge noise and limited visibility can cause panic.

D) FD Operations and Carbon Dioxide Systems.

- 1) Firefighters entering areas protected by a CO₂ system must be protected by self-contained breathing apparatus. (It is assumed that the system has discharged before the arrival of the fire department.)
- 2) Operations will follow Tactical Priorities.
- 3) If fire still exists, it may have to be attacked with other extinguishing agents.
- 4) If the fire has been extinguished, it may be desirable to seal the area and allow the high concentration of carbon dioxide to remain.

However,

heavy smoke conditions may require immediate ventilation to reduce damage.

- 5) See that the system is properly restored.¹⁸

¹⁸

Carbon Dioxide Systems are restored to ready status by persons specifically trained for this work. The Department's responsibility is to assure that the owner/operator has the system restored according to NFPA Standards by a qualified person.

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3.06 Halogenated Agent Systems.

A) Description. Halogenated agents work chemically to extinguish fire. They

stop

the combustion process itself by breaking the chemical chain reaction. Halogenated agents are used in both total flooding and local application systems. These systems require automatic detection and actuation. Agents are stored in containers as liquified compressed gases which are pressurized with nitrogen to provide rapid discharge.

B) FD Operations and Halogenated Systems.

- 1) Use SCBA when entering areas where halogenated systems have discharged.¹⁹
- 2) When entry to the area is gained, search for and remove persons from the immediate and adjacent areas.
- 3) Operations will follow Tactical Priorities.
- 4) If fire still exists, it may have to be attacked with other extinguishing agents.
- 5) If the fire has been extinguished, it may be desirable to seal the area and allow the high concentration of halogenated agent to remain. However, heavy smoke conditions may require immediate ventilation to reduce damage.
- 6) See that the system is properly restored.²⁰

¹⁹

Based on sources such as NFPA 12A Halogenated Extinguishing Systems of Halon 1301, there appears to be no need for concern regarding halogenated systems; however, products of decomposition after discharge of the agent present a more serious hazard. Tests have discovered that decomposition products such as hydrogen fluoride, hydrogen bromide and other carbonyl halides are toxic.

²⁰

Halogenated Agent Systems are restored to ready status by persons specifically trained for this work. The Department's responsibility is to assure that the owner/operator has the system restored according to NFPA Standards by a qualified person.

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3.07 Dry Chemical Systems.

A) Description. A dry-chemical extinguishing agent is a mixture of fine powders which have been treated to be water repellent. They can be stored under pressure and discharged through piping or hoses. Dry chemical is primarily intended to combat fires involving liquids, gases, grease and electrical equipment. Dry chemical systems can be designed for either manual or automatic actuation.

B) FD Operations and Dry Chemical Systems.

- 1) Use SCBA in areas where dry chemical is suspended in the air.²¹
- 2) Dry chemical suspended in the air may seriously reduce visibility in the area.
- 3) Operations will follow Tactical Priorities.
- 4) If fire still exists, it may have to be attacked with other extinguishing agents.
- 5) Guard against re-ignition. (Although dry chemicals are good extinguishing agents, their ability to "cool" the material is not significant.)
- 6) Damage to contents can occur when water and multi-purpose agents combine into a sticky mass that requires extensive cleanup. Powder residue can damage delicate electrical equipment. Assist owner/occupant within capabilities as part of Property Conservation.
- 7) See that the system is properly restored.²²

²¹

Dry chemical powders are generally thought to be non-toxic, but persons who breathe in high concentrations may experience coughing and irritation of the respiratory tract.

²²

Dry Chemical Systems are restored to ready status by persons specifically trained for this work. The Department's responsibility is to assure that the owner/operator has the system restored according to NFPA Standards by a qualified person.

3.08 Foam Systems.

- A) Description. Fixed foam systems are permanently mounted extinguishing systems provided to protect a specific hazard. They may be complete, including automatic detection, activation and foam delivery, or simply be the piping for fire departments to attach foam equipment.
- B) FD Operations and Foam Systems. Most systems of this type are specifically designed for the hazard and location being protected. As a result, specific actions taken to support these systems can vary from site to site. However, the following guidelines will apply to our operations.
- 1) Contact person responsible for system operation.
 - a) Plant supervisor, etc.
 - b) Person trained in system operation.
 - 2) Determine if system is operating as designed.
 - a) Are water supply valves fully opened?
 - b) Is supply of foam concentrate flowing as designed?
 - 3) Verify that correct foam agent is being used.
 - 4) Verify that foam agent is being applied at the correct rate.
 - 5) Before a system is augmented with other systems or agents, the compatibility of the agents must be examined.
 - 6) Care must be taken when burning liquids have been allowed a long pre-burn. If the liquid is hotter than 212 degrees F, the application of the foam may result in a froth which increases the volume and size of the fire without helping to control the fire.
 - 7) See that the system is properly restored.²³

²³

Foam Systems are restored to ready status by persons specifically trained for this work. The Department's responsibility is to assure that the owner/operator has the system restored according to NFPA Standards by a qualified person.

Subject: Fire Protection Systems

Date: 07-01-95

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3.09 Fire Detection and Alarm Systems.

A) The purpose of a Fire Detection and Alarm System is to reduce loss of life and property. Where there is a need to automatically protect occupants of a building from fire, an alarm system may provide one or more of the following.

- 1) Provide an evacuation alarm for building occupants.
- 2) Shutting down or reversing heating, ventilation and air conditioning systems for smoke control.
- 3) Closing smoke or fire-rated doors and dampers.
- 4) Pressuring stairwell for evacuation purposes.
- 5) Overriding control of elevators to prevent stops on fire floors.
- 6) Automatically returning elevators to ground level for fire department use.
- 7) Activating special fire suppression systems to extinguish or control the spread of fire.
- 8) Notifying the public fire department of an emergency condition, and providing information concerning fire location through devices such as annunciator panels.

B) FD Operations and Fire Detection/Alarm Systems. These systems are part of the notification process for the fire department. Therefore, fire department action primarily involves assuring that a system is restored to ready status following activation.

- 1) Attempt to determine the source of system activation (pull station, smoke detector, heat detector) before alarm system is reset.
- 2) Reset alarm system following directions found at main alarm panel.
- 3) If the system will not reset, take the following actions:
 - a) Attempt to notify responsible party for building or system.
 - b) Inform responsible party that the system requires repair service.
 - c) Inform responsible party that the building occupants must be notified (unless immediate repairs can be completed).
- 4) Fire Department personnel do not maintain or repair fire alarm systems.
- 5) Report within incident report, the location of the detector or pull-station which caused the system activation.
 - a) Indicate any problems observed with system (physically

damaged

parts, signs of corrosion, etc.)

- b) Fire Prevention personnel will conduct follow-up to determine system status based upon information included within incident report.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Brush Fire

Page 1 of 2

Section: 2-9-4

Effective Date: 07-01-95

Revised Date:

4.01 Goal. To provide a guideline for decision making in response to brush fires.

4.02 Checklist. A copy of the checklist is shown on the next page.

- A) The checklist is a starting point for making decisions in response to brush fires.

4.03 Ten Standard Firefighting orders - Brush.

Keep informed on fire/weather conditions and forecasts.

Know what fire is doing at all times.

Base all actions on current and expected fire behavior.

Have escape routes for everyone and make them known.
--

Post a lookout when there is a possible danger.

Be alert, keep calm, think clearly, act decisively.

Maintain communications with your crew, your I.C. and adjoining crews.
--

Give clear instructions and be sure they are understood.
--

Maintain control of your personnel at all times.
--

Fight fires aggressively, but provide safety first.

Subject: Brush Fire
Date: 07-01-95
Page 2 of 2

BRUSH FIRE TACTICAL CHECKLIST

During Response

- Check map book - access, water supply, exposures
- Use tactical worksheet
- Consider upgrading assignment
- Consider weather conditions

Upon Arrival

- Give On-Scene Report - take command
- Report Command Post Location
- Determine Likely Direction of Spread/Extent of Fire
- Develop Plan
- Determine Resources Needed
 - upgrading assignments
 - additional brush trucks, tankers
 - DNR Aircraft (for observation)
 - DNR Heavy Equipment

Initial Action

- Make Initial Assignments - state objectives
- Assign Sectors Early
- Establish Cut-Off Points

Additional Action

Personnel Safety

- closely monitor condition of firefighters
- early REHAB

Update Plan

<p style="text-align: center;">TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES</p>

<p>Part 9: Tactical Checklist</p>

<p>Subject: Vehicle Fires</p>

<p>Page 1 of 4</p>

<p>Section: 2-9-5</p>

<p>Effective Date: 07-01-95</p>

<p>Revised Date:</p>

5.01 Goal. To provide a guideline for response to vehicle fires.

5.02 Vehicle Fires - General.

A) A response of one Engine, Tanker, and Rescue Unit are assigned to vehicle fires.

B) When the incident involves the need for extrication, the Rescue Truck will respond before the Engine and the Tanker.

C) If hazardous materials are involved, consider need to upgrade the response.

D) If the vehicle is within or near a structure, consider need to upgrade the response.

E) A search for victims must be made of all vehicle compartments.

- 1) Passenger areas.
- 2) Cargo areas.
- 3) Trunks of passenger vehicles.

F) Chock the wheels of vehicles involved with fire to prevent movement.

5.03 Hazards to Personnel.

A) Toxic fumes are generated by burning vehicles. **Use SCBA.**

- B) Hazardous materials.
 - 1) Cargo in trucks.
 - 2) Flammable/combustible liquids in fuel tanks.
 - 3) Alternative fuels (LP, Compressed Natural Gas, LNG).
 - 4) Contents of vehicles (gasoline can in trunk).

- C) Explosive action of vehicle parts (overpressure rupture).
 - 1) Hydraulic shock absorbers and bumpers.
 - 2) Hydraulic systems.
 - 3) Brake systems.

Subject: Vehicle Fires

Date: 07-01-95

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- 4) Drive shafts.
- 5) Rear door cylinders on hatch-back autos.
- 6) Fuel tanks.

D) Electrical shock (vehicle contacting downed power lines).

5.04 Positioning Apparatus.

- A) If possible, park **uphill** and **upwind** at least **75 feet** from burning vehicle.
- B) Angle the Engine to protect personnel from on-coming traffic.
- C) Use traffic cones and flares to guide traffic away from fire area.
- D) Coordinate traffic control with police.

5.05 Vehicle Fire with Trapped Victims.

- A) Goal is to cut off the fire from the victim(s).
- B) If spilled fuel is under the vehicle, direct narrow fog pattern under vehicle.
This action will sweep fuel from under the vehicle.
- C) Direct wide fog pattern into window to cool the vehicle interior.
- D) Provide protection and cooling as rescuers remove victims from the vehicle.

5.06 Fire Involving Engine Compartment.

- A) Hood Open.

- 1) Attack with short bursts from a dry-chemical extinguisher from side of vehicle.
- 2) Direct narrow fog pattern from side of vehicle.

B) Hood Closed.

- 1) Do not open hood completely - the hood is limiting the oxygen supply to the fire.
- 2) Open hood a few inches and direct dry-chemical agent or water stream into compartment.
- 3) If hood will not open, direct agent or water stream through vehicle grill.

Caution: Vehicle Bumpers Can React With Explosive Force

Subject: Vehicle Fires

Date: 07-01-95

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5.07 Fire Involving Passenger Compartment.

- A) Position hoseline or extinguisher before opening closed vehicle.
- B) Open door slowly - fire could flash.
- C) Always search for victims.
- D) Use narrow fog pattern.

5.08 Fire Involving Cargo Area or Trunk.

- A) Attempt to identify material(s) carried within cargo areas.
 - 1) Information from driver (statements, bill of lading).
 - 2) Markings on vehicle (placards, company name on vehicle, alternative fuel stickers).
- B) Position hoselines or extinguishers before opening closed compartment.

Caution: Truck cargo areas can have volume equal to some structures. The potential for backdraft or flashover exists!

- C) Always search for victims.

5.09 Leaking Fuel Tanks.

- A) Attempt to stop leak by plugging hole.
- B) Attempt to stop leaking fuel line by closing valve or crimping fuel line.

C) Prevent ignition of fuel vapors by applying foam blanket on surface of spilled fuel.

D) Prevent spilled fuels or liquids from entering storm or sanitary sewers with the use of absorbing or containment materials. Any spillage should be reported to DNR through Base.

5.10 Overhaul.

A) Delay extensive overhaul until investigator or Officer in Charge has had the opportunity to examine vehicle for origin and cause.

Subject: Vehicle Fires

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B) Strip smoldering interior finishes and complete extinguishment using water.

C) Dashboard fires may require removal of the unit to complete extinguishment.

D) Disconnect or cut negative cable from vehicle battery.

E) Avoid contamination of personnel when overhauling contents. Seek technical assistance if personnel are exposed to hazardous materials.

F) Contain water run-off if it contains flammable liquids or other contaminants.

5.11 Terminating the Incident.

A) Obtain information for incident report.

1) Vehicle license number and year.

2) Make, model and year of manufacture.

3) Vehicle identification number.

4) Owner name, street address, city, state, zip code and telephone number.

5) Operator at time of fire (Name, etc.)

6) Insurance company or agent.

B) Offer assistance to owner/operator in obtaining towing service if requested.

C) Offer assistance to police to restore roadway to normal traffic conditions.

D) Thoroughly clean equipment (especially protective clothing) which may have

contacted flammable liquids or other substances.

TOWNSHIP FIRE DEPARTMENT CHAPTER: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Confined Space Operations

Page 1 of 3

Section: 2-9-6

Effective Date: 07-01-95

Revised Date:

- 6.01 Goal. Provide guidelines for confined space operations.
- 6.02 Confined Space Operations. Incidents which require personnel to enter confined spaces present a serious safety problem. Safe operations require special precautions and strict supervision.
- A) Confined spaces include tunnels, pipes, tanks, and any other location where ventilation and access are restricted by the configuration of the space.
 - B) Confined spaces may include basement areas of buildings.
 - C) Confined space incidents may involve injured persons, persons asphyxiated or overcome by toxic substances, cave-ins or fires occurring within the space.
- 6.03 Guideline.
- A) Operations within confined spaces must be approached with extreme caution.
 - B) Operations must avoid premature commitment to unknown risks.
 - C) Determine nature of emergency (find a responsible witness).

- 1) Number of victims.
 - 2) Time of collapse.
 - 3) Depth, width and length of collapse/space.
 - 4) Potential of further collapse.
 - 5) Are other hazards present?
- D) Evaluate atmosphere of confined space.
- 1) Assume an unsafe atmosphere until tests show it is safe.
 - 2) Use test instruments to determine.
 - a) Oxygen level.
 - b) Flammability.
 - c) Toxicity.

Subject: Confined Space Operations

Date: 07-01-95

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- 3) Request test assistance.
 - a) Hazardous Incident Response Team
 - b) Utilities.
- D) Develop action plan.
- 1) Provide scene control.
 - a) Establish hazard area.
 - 1) Mark with tape.
 - 2) Notify personnel of area.
 - b) Entrance control.
 - 1) Control access at entrance/exit point.
 - 2) Record names, assignments, entry times, SCBA pressure of entry teams.
 - 3) Prevent overcrowding at entrance to confined space.
 - c) Traffic control.
 - 1) Stop traffic within 300 foot radius (cave-ins).
 - 2) Coordinate with law enforcement.
 - d) Reduce vibration (possible cause of cave-in).
 - 1) Turn off all running machinery.
 - 2) Including F.D. vehicles.
 - 3) Restrict walking near confined space.
 - e) Safety officer.
 - 1) Evaluate risks.
 - 2) Enforce safety requirements.
 - 3) Judge safety of operation.

- 2) Provide adequate support.
 - a) Provide 2:1 ratio of personnel outside of space to support entry teams.
 - b) Standby rescue team with 1:1 ratio to entry team.
 - c) Treatment group with BLS or greater capability.

- 3) Ventilation.
 - a) When possible, provide fresh air using positive pressure ventilation.
 - b) Equipment **taken inside** confined space **MUST BE EXPLOSION PROOF.**
 - C) When venting area containing flammable vapors, consider concentration in relation to flammable limits.

Subject: Confined Space Operations

Date: 07-01-95

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- 4) Entry teams.
 - a) Personnel entering a confined space **must not** travel beyond point that provides sufficient air reserve to return and exit safely (with at least 5 minute safety margin).
 - b) Time available for operations is based on air supply.
 - c) Time in monitored by Entry Control Officer..
 - d) Lifelines will be used by entry teams.

- E) Additional Action
 - 1) Monitor progress and re-evaluate plan.
 - 2) Consider need for decontamination.
 - 3) Provide medical screening.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Trench Rescue

Page 1 of 4

Effective Date: 07-01-95

Section: 2-9-7

Revised Date:

- 7.01 Goal. Provide guidelines for the safe management of trench rescue operations.
- 7.02 Trench Rescue Operations. Trench rescue operations present significant dangers to personnel. Management of these incidents may involve complex actions involving shoring, hand tools, earth moving equipment and other special resources.
- A) General.
- 1) Cave-ins and collapses generally occur because unstable soil conditions combine with improper or inadequate shoring.
 - 2) Most fatal trench accidents occur in trenches less than 12 feet deep and 6 feet wide.
 - 3) The potential for additional collapse is a primary hazard to personnel.
 - 4) Actions taken must consider both rescue potential and risk to rescue personnel.
- B) Types of Trenches.
- 1) Hand dug for irrigation pipe.
 - 2) Machine dug for sewer, water pipe.
 - 3) Situations which require trench rescue techniques, but do not involve

earth trench (gravel/sand piles, grain).

C) Shoring/Sheeting Equipment.

- 1) Plywood sheeting (1 1/4" thickness minimum).
- 2) Timber shoring.
- 3) Screw jacks.
- 4) Hydraulic shoring (best when walls are vertical).

D) Power Tools and Miscellaneous Supplies.

- 1) Chain saw.
- 2) Shovels.
- 3) Pry bars, wrecking bars.
- 4) Sledge hammers.
- 5) Measuring tapes and rope.
- 6) Salvage covers.
- 7) Flood lights (illumination & heat).
- 8) Ventilation blowers.

Subject: Trench Rescue

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7.03 Guideline.

A) Scene Assessment.

- 1) What has collapsed?
- 2) Where has cave-in occurred?
- 3) How many people are trapped?
- 4) When did it happen? How long have they been trapped?
- 5) Are other hazards present?

B) Develop action plan.

- 1) Provide scene control.
 - a) Establish hazard area.
 - 1) Mark with tape.
 - 2) Notify personnel of area.
 - b) Entrance control.
 - 1) Control access.
 - 2) Maintain count of personnel in hazard zone.
 - 3) Prevent overcrowding at entrance to trench.
 - c) Traffic control.
 - 1) Stop traffic within 300 foot radius (cave-ins).
 - 2) Vehicles not needed at the site are to park at least 100 feet away from trench.
 - 3) Coordinate with law enforcement.
 - d) Reduce vibration (possible cause of cave-in).

- 1) Turn off all running machinery.
 - 2) Including F.D. vehicles.
 - 3) Restrict walking near confined space.
- 2) Safety Officer.
 - a) Evaluate risks.
 - b) Enforce safety requirements.
 - c) Judge safety of operations.
 - 3) Extrication Officer.
 - a) Responsible for digging and shoring operations.
 - b) Takes advantage of qualified technical assistance when available (example: on-scene contractors).
 - c) Determine resource needs.
 - 1) Shoring materials.
 - 2) Earth moving equipment.

Subject: Trench Rescue

Date: 07-01-95

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- 4) Provide adequate support.
 - a) Provide 2:1 ratio of personnel outside of trench to support extrication teams.
 - b) Standby rescue team with 1:1 ratio to extrication team.
 - c) Treatment group with ALS capability.
 - d) Materials, shoring, jacks and rescue equipment.
 - e) Sump or mud pumps as necessary (local contractors).
 - f) Lifting equipment, cranes, aerial apparatus, etc.
- 5) Access.
 - a) Soil near edge of trench may be unstable.
 - b) Ladders to provide access into and out of trench to be placed on both sides, at not more than 6 foot intervals.
- 6) Extrication teams.
 - a) Protect personnel with appropriate shoring.
 - b) Limit number of personnel to those who can operate safely within the trench.
 - c) Digging must serve a purpose. Random earth movement can lead to further collapse.
 - d) Trench rescue is exhausting. Rotate personnel at first sign of fatigue.
- 7) Ventilation.
 - a) When possible, provide fresh air using positive pressure

- ventilation.
- b) Equipment **taken inside** trench (confined space) **MUST BE EXPLOSION PROOF.**
- c) Consider need for heat within trench (flood lights?).

8) Victim Removal.

- a) Locate victim and secure airway.
- b) Use shoring and sheeting to protect victim.
- c) Prevent secondary cave-ins.
- d) Package victim for removal (cervical collar, backboard, KED).
- e) Stokes basket or rope sling with backboard.

Subject: Trench Rescue

Date: 07-01-95

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F) Additional Action.

- 1) Monitor progress and re-evaluate plan.
- 2) Assemble reserve personnel in Resource Area.
- 3) Provide Rehab & medical screening, debriefing.
- 4) Consider need for decontamination (sewers).
- 5) Safe removal of shoring and other support equipment.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Vehicle Rescue

Page 1 of 4

Effective Date: 07-01-95

Section: 2-9-8

Revised Date:

8.01 Goal. Provide guidelines for vehicle rescue operations.

8.02 Guideline.

A) Command Considerations.

1) Inner and Outer Circle Surveys.

- a) Identify hazards (scene safety).
- b) Locate all patients and those affected by the incident.
- c) Determine the extent of the patient's entrapment.
- d) Triage.
- e) Develop mental picture of how the incident occurred.
- f) Anticipate any needs and provide for them.

2) Take Action.

- a) Call for resources.
- b) Develop an action plan.
- c) Clearly inform team members how the patient(s) will be

- extricated.
- d) Assign tasks.

- 3) While Working.
 - a) Keep the action circle clear.
 - b) Provide adequate lighting.
 - c) Re-evaluate resources.
 - d) Plan ahead.
 - e) Maintain simultaneous functions.
 - f) Keep planning ahead.

B) Extrication Problem Solving.

- 1) Command must categorize problems, determine their severity and develop solutions.
- 2) Develop alternative solutions to each of the above.
- 3) Be prepared to move to another tactic if actions fail.

Subject: Vehicle Rescue

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C) Vehicles Up-Right.

- 1) Head-on.
 - a) While vehicles may be up-right, they may have separated creating "two" individual incidents.
 - b) It may be necessary to "split" the tools.
 - c) Perform staggered, yet simultaneous functions until additional resources arrive.
 - d) Organize incident site as necessary.
- 2) T-Bone.
 - a) Also known as a "broadside" accident.
 - b) Especially difficult if a larger vehicle hits a smaller vehicle folding the wreckage down onto the patient.
 - c) Solutions may include pulling the wreckage off the patient. (Remember to secure the vehicle to keep it from sliding when the pulling begins.)
 - d) Other solutions include:
 - 1) Third-door conversion.
 - 2) Dash lift.
 - 3) Complete removal of the side of the vehicle.
- 3) Vehicle vs. Immovable Objects.
 - a) Vehicles may end up in any position.

- b) Stabilization may not be necessary or may be very difficult.
- c) Remember the hazards of power lines.

4) Vehicle Underrides.

- a) When a small vehicle ends up underneath a larger one.
- b) Benchmarks include:
 - 1) Identify the load.
 - 2) Stabilize the vehicle.
 - 3) Access the patient.
 - 4) Consider lowering the smaller vehicle.
 - 5) Lift the larger vehicle - crib as you go.
 - 6) Separate the vehicles.
 - 7) Extricate the patient.

D) Vehicles on their Side.

1) Stabilization.

- a) Build a cradle for the car to rest on.

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- b) Lock the cradle in place.
- c) Continue to monitor stabilization efforts.
- d) Stay low. Don't climb on the car. Maintain a lower center of gravity.
- e) Fuel will probably leak. ALWAYS have charged hand-line in position.

2) Vehicle Nose Down.

- a) Roof is intact and the car is usually leaning forward towards the engine compartment.
- b) Solution usually involves cribbing the high side with access/removal through the doors.

3) "Pancake"

- a) Roof is crushed leaving little access to the patient.
- b) Stabilization needed. Door removal used in most cases.
- c) Cutting hole in floor is ineffective - especially with smaller cars. Hole can be used for inspection of problem.
- d) If the vehicle has to be lifted, lift from the most substantial point possible, preferably the firewall.

E) Multi-Vehicle Accidents.

- 1) Key to success is planning and use of Command System.
- 2) Call for resources prior to needing them.
- 3) Consider need for supplies/equipment.
 - a) Lifting equipment.
 - b) Multi-casualty supplies.
- 4) Staging.
 - a) 1 or 2 blocks from the scene. (parking lot, roadway)
 - b) Assign staging supervisor.
 - c) Maintain status of staged equipment.

F) Hazardous Materials.

- 1) Identify BEFORE entering scene if possible.
 - a) Use field glasses.
 - b) Review manifest.

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- c) Review bill of lading.
 - d) Interview driver.
- 2) Take action based on hazards presented by product.

TOWNSHIP FIRE DEPARTMENT
CHAPTER: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist
Subject: School Bus Rescue
Page 1 of 4
Effective Date: 07-01-95

Section: 2-9-9
Revised Date:

9.01 Goal. Provide guidelines for school bus rescue operations.

9.02 Guideline.

A) Command.

- 1) Expect distractions.
- 2) Incident will require large number of rescuers.
- 3) Size-Up.
 - a) Inner-circle survey.
 - b) Outer-circle survey.
 - c) Interior survey and **PATIENT COUNT**.
- 4) Organize the scene, assign supervision.
- 5) Plan for many patients. Call adequate resources.
- 6) Begin triage immediately.
- 7) Search for walk-off patients.

- 8) Consider need for Command Staff.
 - a) Public Information.
 - b) Safety.
 - c) Liaison.

B) Scene Safety.

- 1) Electrical System.
 - a) Shut off master switch.
 - b) Shut off ignition switch.
 - c) Access batteries.
 - 1) Outside battery compartment.
 - 2) Under hood.
 - 3) Disconnect negative side first. Isolate cable.
- 2) Fuel System.
 - a) Determine type of fuel.
 - b) Locate tanks and check for leaks.
 - c) Control spilled fuel as needed.

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Date: 07-07-95

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- 3) Fire Protection.
 - a) Position hand-lines.
 - b) Control vapors from spilled fuel.
- 4) Traffic Control.
 - a) Coordinate with law enforcement.
 - b) Use vehicle as barrier between traffic and work area.

C) Stabilization.

- 1) Initial Stabilization. Chock wheels while making circle surveys.
Use 4 x 4's.
- 2) Sustained Stabilization.
 - a) Place box cribs in at least three locations, near front and rear.
 - b) DO NOT FLATTEN TIRES.
 - c) Use wedges to tighten box cribs.
 - d) Bus on side must be stabilized.
 - e) Tie off bus where appropriate.

D) Initial Access.

- 1) Front Service Door.
 - a) Mechanical Arm.
 - 1) Try hand operation.
 - 2) Break glass and open with pike pole.
 - b) Pneumatic Door.
 - 1) Emergency release located above door.
 - 2) Main control at instrument panel.
 - c) Latched Door.
 - 1) Small latch at center of door.
 - 2) Break glass and open door.
 - d) Glass in Door. Designed for rescuer access.
- 2) Rear or Side Door.
 - a) Single point latch.
 - 1) Try normal operation.
 - 2) Break glass and try inside.
 - 3) Pry with hydraulics.
 - 4) Remove with cutting tool.
 - b) Three point latch. (same steps as above)

Subject: School Bus Rescue

Date: 07-01-95

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- 3) Glass.
 - a) Tempered side and rear.
 - b) Laminated front.
 - c) Rubber mounted gasket.
 - d) Clean out all glass.

E) Disentanglement.

- 1) The concept is to "dig a tunnel".
- 2) Establish a "flow" route for tools and rescuers to enter and patients to exit.
- 3) Enlarge existing openings, or create new openings.
- 4) Enlarging Doors.
 - a) Front Door. Front door is not big enough to remove a patient on a long board.
 - 1) Cut away panels.
 - 2) Cut away rivets and remove.

- 3) Tape sharp edges.
- b) Rear Door.
 - 1) Open rear door with hydraulic spreader.
 - a) Remove all adjacent glass.
 - b) Start low and roll latch out.
 - 2) Remove rear door.
 - a) Pry off with spreader.
 - b) Cut away hinge with air chisel.
- 5) Enlarging Rear Door Opening.
 - a) Cut out all window posts.
 - b) Cut at each window opening (low and outside).
 - c) Pry out rub rails (cut with hydraulic shears).
 - d) Remove reflectors and tail lights.
 - e) Use reciprocating saw to cut away panel.
- 6) Enlarging Window Openings.
 - a) Remove glass and frame from two windows.
 - b) Cut post between windows.
 - c) Avoid using tools which produce spark or flame.

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- 7) Opening the Side Wall.
 - a) Side wall contains both rub-rails and collision beams.
 - b) Remove adjacent seats.
 - 1) Spread up and away with hydraulic spreader.
 - 2) Cut away with hydraulic shears or reciprocating saw.
 - 3) Break away bolts with wrench.
 - 4) Cover or remove debris.
 - c) Making side wall opening (folded down).
 - 1) Cut top of center post.
 - 2) Make relief cut to center frame member at floor level.
 - 3) Make side wall cuts and fold panel down.
 - d) Making side wall opening (removed).
 - 1) Cut away top of center post and then cut away panel as desired. (Consider stopping at seat level to avoid collision beam.)
 - 2) Cover all sharp edges.

8) Bus On Its Side:

- a) Use windshield and rear doors as initial access and egress points when possible.
- b) A "sunroof" type of opening is possible.

F) Patient Care/Removal.

- 1) Start with the patient closest to the point of impact when possible.
- 2) Interior rescuers must inform Command of number and condition of patients.
- 3) Prioritize patients - TRIAGE.

TOWNSHIP FIRE DEPARTMENT CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist Subject: Tornado/ Windstorm Page 1 of 3 Effective Date: 07-01-95	Section: 2-9-10 Revised Date:
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10.01 Goal. Provide guidelines for operations during and after tornados or severe windstorms.

10.02 Guideline. This guideline will outline the tasks completed during the four stages of this type of emergency; Preparatory Period, Tornado Watch Period, Tornado Alert and Tornado Strike Period. Note: Tornado warning periods are usually short duration (3-15 minutes), therefore, preparation should begin prior to tornado seasons.

A) Preparatory Period.

- 1) Review and update disaster plans with other local, county and state agencies.

- 2) Review mutual aid agreements to determine available resources, updating as needed.
- 3) Review these guidelines as part of the department training program.
- 4) Inventory resources and their locations. Example: Regular and auxiliary manpower, public and private equipment, supplies and replacement parts (especially vehicle tires because of damage resulting from broken glass.)
- 5) Review sites used by Tornado Spotters. Post primary and secondary sites for Tornado Spotters.

B) Tornado Watch Period.

- 1) Department personnel will be notified of any tornado or severe thunderstorm "watch" by an announcement made over the department paging system.
- 2) All units on assignment (inspection, training, etc.) at the time of the "watch" announcement are to be notified and advised to return to quarters.
- 3) Prepare for water, food, and electrical shortages.
- 4) Check emergency electrical generating systems.
- 5) Prepare for possible breakdown of communications.
- 6) Be sure fuel requirements will be met.
 - a) Vehicle fuel tanks full.
 - b) Portable gasoline-powered equipment tanks full.

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- c) Check operation of chain and circular saws.
- 7) Assign Spotters to selected sites within city. (See Item E for details.)

C) Tornado Warning.

- 1) Department personnel will be notified of any tornado or severe thunderstorm "warning" by an announcement over the department paging system.
- 2) Response to Alert:
 - a) If at home - make preparations for family to take shelter. Respond to station if present weather conditions permit safe travel.
 - b) If at station - be prepared to take shelter.

D) Tornado Strike Period.

- 1) Department personnel will take shelter and remain in that location until danger has passed.
- 2) Department personnel will respond to quarters if conditions permit safe travel.
- 3) Department personnel will report damage to equipment and injuries to the officer-in-charge.
- 4) Fire department units will respond to incidents requiring search, rescue, and fire operations as assigned by the officer-in-charge.
- 5) All units will report damaged areas and extent of damage to the officer-in-charge or designated command post.
- 6) Personnel are to watch for looters and report incidents to police.
- 7) Assist in shutting off utilities and clearing roads (clear priority roads first).
- 8) Supply food to personnel as needed.
- 9) Supply fuel to fire department units as needed.
- 10) Continue operations until all hazards are under control and all areas have been searched for victims.
- 11) Establish duty crews to rotate personnel from on-scene work to rest areas.
- 12) Take inventory of department equipment to determine damaged or missing items.
- 13) Report losses to Chief and Board of Directors.

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E) Skywarn Spotters.

- 1) Assign spotters if conditions or information (National Weather Service, TV) indicate a threat.
- 2) Assign spotters to primary and secondary locations as manpower permits.
- 3) Use Fire Department frequency for routine communications with base.
- 4) Report severe weather directly to BASE using Fire Department Frequency.
- 5) What to report.
 - a) Funnel cloud, Tornado, Hail, Destructive winds.
 - b) Position of storm.
 - c) Direction of movement.
- 6) Be prepared to seek shelter.

TOWNSHIP FIRE DEPARTMENT
CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 9: Tactical Checklist

Subject: Winter Storms/Blizzards

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Section: 2-9-11

Effective Date: 07-01-95

Revised Date:

11.02 Goal. Provide guidelines for fire department operations during winter storms or blizzards.

11.03 Guideline. This guideline will outline the tasks completed during the four stages of this type of emergency: Pre-Storm Season Preparation; Storm Warning Period; Storm Period and Thawing Period.

A) Pre-Storm Season Preparation.

1) Provide local media with winter storm fire safety tips, winter

automobile travel considerations, etc.

- 2) Determine availability of equipment such as four-wheel drive vehicles, snowmobiles, etc. Sources include other local agencies and private citizens. Obtain written agreement for the emergency use of this equipment.
- 3) Inventory snow tires, chains, shovels, anti-freeze, oil and gasoline, and stock as necessary.
- 4) Check telephone numbers and addresses of persons included in number 2 above.
- 5) Check with Emergency Medical Service concerning the operation of snow-emergency rescue and medical teams.
- 6) Check with Water Utility concerning maintenance and snow removal plans for hydrants.

B) Storm Warning Period. Implement the following actions as needed.

- 1) Review signs and symptoms of frostbite and exposure with department personnel.
- 2) Encourage plenty of rest.
- 3) Have personnel prepare their personal affairs (make sure family has heating oil, gas, food that is stocked, automobiles winterized).
- 4) Place sand, snow shovels, extra de-icing fluid on apparatus.
- 5) Check all marking and warning lights on apparatus.
- 6) Add moisture evaporative to mixture in fuel tanks.
- 7) Check air brake systems to detect any moisture buildup and eliminate as needed.

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- 8) Arrange for sleeping accommodations for Fire and EMS personnel.
- 9) Arrange for the feeding of personnel in quarters.

C) Storm Period.

- 1) Upon declaration of a snow-emergency, notify department personnel.
- 2) Obtain official information on highway and street closings, and pass information on to the personnel.
- 3) Rotate personnel from emergency scenes to lessen fatigue, tension, and flare-ups of tempers.
- 4) Obtain four-wheel drive vehicles and snowmobiles as needed.
- 5) Arrange for snowplow response to all scenes. Verify radio communications capability.
- 6) Consider assigning an engine company to respond to any EMS request within the area.

- 7) Staff station with personnel if needed, use minimum response requirements as a guideline. Establish rotating shifts for the period of the snow emergency.
- 8) Issue public assistance requests for clearing hydrants.
- 9) Place sleds/toboggans on apparatus or other vehicles for use with stokes litter.
- 10) Obtain police approval for use of snowmobiles on streets.
- 11) Be alert for excess snow accumulation and possible collapse of roofs. Caution citizens of hazards associated with clearing roofs.
- 12) Department vehicles will be driven with headlights on at all times.
- 13) Check for drifts against exit doors. Pay particular attention to residential occupancies, commercial locations and other places of public assembly that remain in operation.
- 14) Check for blocked fire lanes, plowed-over post indicator valves, and and stand-pipe connections.
- 15) Check tire pressure (tire pressure decreases with cold weather).
- 16) Drain condensation from air brake system at beginning of cold weather and check periodically.

D) Thawing Period.

- 1) Check availability of portable pumps.
- 2) Review procedures and precautions involving flooding, water rescue and ice rescue.
- 3) Determine decontamination procedures for equipment and personnel.

TOWNSHIP FIRE DEPARTMENT	
CHAPTER 2: SUGGESTED OPERATING GUIDELINES	
Part 9: Tactical Checklist	
Subject: Barn Fires	
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Effective Date: 07-01-95	Revised Date:

12.01 Goal. To establish a working guideline for operations, before, during, and after a dairy barn fire.

12.02 Guideline. This guideline will outline the tasks completed during the three stages of this type of emergency; Preplan Period, Fire Period, Salvage and Overhaul Period.

A) Preplan Period.

- 1) Preplan all farms in the response area.
 - a) A sketch of the farm building layout.
 - b) Normal wind direction.
 - c) Space available for emergency equipment.
 - d) Location of overhead electrical wires and shut off switches.
 - e) Location of other fuel sources (gasoline, propane, diesel fuel, fuel oil, etc.)
 - f) Location of water sources
 - g) Exposures.
 - h) How cattle are tied in barn.
 - 1) Calves in pens.
 - 2) Bull in a pen.
 - 3) Horses.
 - i) Size of barn and exposures.
- 2) Contractor's.
 - a) Electrical
 - 1) A response during and after the fire needs to be confirmed.
 - b) Earthmoving Contractors (to remove hay).
 - 1) Backhoe.
 - 2) Crane with clam bucket.
 - 3) Dozer - Bobcats - Endloader.
 - 4) Contact is needed for response during and after the fire.

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B) Fire Period.

1. Establish Command Post.
2. Size Up Fire Situation.
 - a) Amount of equipment needed.
 - b) Call mutual aid.
 - c) Set up proper size attack lines.
3. Fire Attack.
 - a) Protect exposures with minimum amount of water.
 - b) Layout attack lines with enough fire flow to put out fire.
(Length x width x height divided by 100 equal gallons per

- minute flow to control fire.)
- c) Protect exposures until this flow can be reached.
 - d) When this flow can be reached, the fire can be attacked. The water must be put on or into the burning area. Do not wash the building.
 - e) Two 1 - 1/2" handlines proceed into the cattle portion of the barn. Once they are in the doorway, they stop and control all fire extending down into this portion of the barn. All ceiling joist pockets along both sides of the barn. Hay loft doors should be closed. Any cattle left in barn should be removed if possible.
 - f) One 1 - 1/2" handline must be manned in the barn yard to protect the two 1 - 1/2" handlines in the building. Their job is to put out any fire which might endanger the waterflow to the entrance crew.

C) Salvage and Overhaul Period.

- 1) When fire in hay loft is knocked down, a crane with clam bucket, backhoe, bobcat, or whatever is available may be needed to remove the smoldering hay from the barn. A dozer endloader is needed to remove the smoldering hay to a safe location where it can burn out.
- 2) The hayloft floor must be swept clean and any holes patched.
- 3) A final check must be made to be sure fire is out.

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- 4) Under freezing conditions, water collected in cement block type construction must be drained by breaking a hole in the block at the lowest point.

Glossary of Abbreviations

ACFX -	ACF Industries (Cars are owned by this company. It does not indicate what is in the car.)
AFFF -	Aqueous Film-Forming Foam
ALS -	Advanced Life Support
ATSDR -	Agency for Toxic Substance and Disease Registry
BASE -	Township Fire Department Dispatch Center
BLEVE -	Boiling Liquid Expanding Vapor Explosion
BOARD -	Board of Directors of Township Fire Department, Inc.
CAD -	Computer Aided Design
CAMEO -	Computer Aided Management of Emergency Operations
CDL -	Commercial Driver's License
CFR -	Crash, Fire, Rescue
CHRIS -	Chemical Hazards Information System

CISM - Critical Incident Stress Management
CO - Carbon Monoxide
Comm Center - Eau Claire County Communication Center
CP - Command Post
CTH - County Trunk Highway
Department - Township Fire Department
DNR - Department of Natural Resources
DOT - Department of Transportation
e.g. - for example
EMS - Emergency Medical Services
EOD - Explosive Ordnance Disposal
EPA - Environmental Protection Agency
EVOC - Emergency Vehicle Operators Course
FAA - Federal Aviation Agency
FD - Fire Department
FF - Firefighter
FIRE COMM - Fire Communications
Fire Department - Township Fire Department
GATX - General American Transportation Company (Car is owned by this company. It does not indicate what is in the car.)
GPM - Gallons per minute
HAZ MAT - Hazardous Material
HBV - Hepatitis B Virus
HIRT - Hazardous Material Response Team
HIV - Human Immunodeficiency Virus
HMRT - Hazardous Material Response Team
IC - Incident Command
ID - Identification
i.e. - that is
IFSTA - International Fire Service Training Association
ILHR - Department of Industry, Labor and Human Relations

Glossary of Abbreviations (Cont'd.)

JP4 - Jet propulsion grade 4 fuel
LDH - Large diameter hose
LP - Liquid propane
MABA - Mutual Aid Box Alarm
MARC - Mutual Aid Radio Channel
MSA - Mine Safety Appliance Company
MSDS - Material Safety Data Sheet
MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association
NIOSH - National Institute for Occupational Safety and Health
NTSB - National Transportation Safety Board
OHM-TADA - Oil and Hazardous Material Technical Assistance Data System

OSHA - Occupational Safety and Health Administration
PASS - Personal Alert Safety System
PO - Purchase Order
PPM - Parts per million
PSI - Pounds per square inch
REHAB - Rehabilitation
RX - Receive
SCBA - Self-Contained Breathing Apparatus
SOG - Standard Operating Guidelines
STCC - Standard Transportation Commodity Code
TFD - Township Fire Department
TX - Transmit
USCG - United States Coast Guard
UTLX - Union Tank Car Leasing (Car is owned by this company. It does not indicate what is in the car.)