

**PHOENIX REGIONAL  
STANDARD OPERATING PROCEDURES**

**High Piled Outside Combustible Storage Fires**

**M.P. 202.18**

**04/18**

**Page 1 of 4**

**Purpose**

The purpose of this procedure is to establish guidelines for companies operating on fire incidents involving high piled outside combustible storage. High piled outside combustible storage fires are defined as outside fire incidents including but not limited to:

- Pallet Storage
- Metal Recycling
- Tire Storage (See Tire Fires MP 202.18A)
- Paper Stock
- Mulching Operations
- Wrecking Yards
- Lumber Yards
- Large unfinished construction projects (stick cities)
- Any other fires incident involving outside combustible storage

**In These Incidents, The Tactical Objectives Are:**

1. Firefighter Safety
2. Exposure Protection
3. Environmental Protection (including public health)
4. Fire Control

**Procedures**

1. Size up the incident and identify critical fireground factors
  - A. Forecast how quickly the incident will escalate
  - B. Identify material burning and path of fire spread
  - C. Look at aerial photos
  - D. Consider initial single company sector for reconnaissance
2. Employ the Risk Management System to determine and announce an appropriate strategy (likely defensive)
3. Establish and maintain an appropriate Incident Command System
4. Build and communicate your Incident Action Plan
  - A. Water supply is critical (pumped water/reversing off forward pumper, relay operations, drafting operations)
5. Build an incident organization to achieve tactical objectives
  - A. Sectorize early (2&1 to most critical sector)
  - B. Consider geographical sectors in order of priority
6. Evaluate resource requirements
  - A. First alarm for defensive operations should cover 2 geographical sectors (consider additional resources)

## High Piled Outside Combustible Storage Fires

M.P. 202.18

04/18

Page 2 of 4

### Operational Information

High piled outside combustible storage incidents can be as dangerous to firefighters as structural fire incidents. Each incident has its own unique challenges for our service delivery as well as managing firefighter safety. It is imperative that our incident command system utilize the same strategic decision-making model for high piled outside combustible storage incidents as it does for structural fire incidents.

The standard decision-making model includes:

1. The identification of the incident's critical fireground factors
2. Selection of the appropriate risk management plan
3. Identification of strategy
4. Development of an Incident Action Plan (IAP)
5. Identification and completion of the incidents tactical objectives.

This process is ongoing and continual, which requires a review/revision based on actions and conditions until the tactical objectives are met.

### 1. Critical Factors

Identifying the critical factors while responding to and arriving on any incident scene is imperative to a successful outcome. The size up for high piled outside combustible storage incidents should include:

- Incident location
- Type and amount of material burning
- Fire growth potential
- Exposures
- Water supply (hydrants, drafting, tankers)
- Fire apparatus access
- Hazards (hazardous materials storage tanks, power lines, underground gas, railroad tracks, rail cars, etc)
- Environmental impact
- Resources required for incident mitigation (including sustaining incident operations as well as system wide response and resource considerations)

The initial dispatch information is rarely complete. These situations can evolve rapidly, and it is necessary to assume that the information, which is initially received, will change. It is important to approach these incidents slowly and cautiously. High piled outside combustible storage fires may grow quickly. Over-committing prior to fully evaluating the critical factors can pose significant danger to firefighters, as well as unnecessary damage to apparatus and equipment.

**PHOENIX REGIONAL  
STANDARD OPERATING PROCEDURES**

**High Piled Outside Combustible Storage Fires**

**M.P. 202.18**

**04/18**

**Page 3 of 4**

The success of any fire suppression operation begins at the company level. The Company Officer should familiarize his/her crew with all high piled outside combustible storage facilities located within their area of response. Information gathered should be entered into the CAD system for the specific locations allowing easy access on the MCT during response and for pre-incident planning in the station.

## **2. Risk Management System**

It is critical that all hazard zone decisions are based on the application of the Risk Management System.

This application will be continuously re-assessed throughout the incident.

- We will risk our lives a lot, in a calculated manner, to save SAVABLE lives.
- We will risk our lives a little, in a calculated manner, to save SAVABLE property.
- We will not risk our lives at all for lives or property that are already lost.

“Actions in a calculated manner” require the following:

- Incident Command established (where applicable, refer to M.P. 201.01)
- Proper personal protective equipment
- Accountability system established (where applicable, refer to M.P. 201.03)
- Safety procedures in place
- Continuous risk assessment by all members

The use of this Risk Management System will improve the incident commander’s ability to provide a more predictable, safe environment to achieve the tactical objectives. Fires involving high piled outside combustible storage often burn and extend quickly. We will not risk our lives at all for property that is already lost. All firefighters operating on these types of incidents should employ a pessimistic application of the Risk Management System which includes realistic forecasting.

## **3. Strategy**

Strategy defines the operational posture of the incident. We are either operating in an offensive or defensive strategy. An offensive strategy aimed at rescuing victims is unlikely in a high piled outside combustible storage fire. More likely are offensive operations to save property; however, there is typically a very small window in which offensive attacks could be successful. Forecast how much the fire will grow, and in most cases, a defensive operation is appropriate. Incident Commanders need to make sure all personnel operating on the incident are aware of the strategy. Regardless of strategy, the first priority is firefighter safety, and there is no reason to endanger firefighters during defensive operations.

## High Piled Outside Combustible Storage Fires

M.P. 202.18

04/18

Page 4 of 4

### 4. Incident Action Plan

High piled outside combustible storage fires have the potential to be large scale incidents. The incident action plan must be safe, well communicated and consistently evaluated against the conditions and the effectiveness of the actions being taken. The incident action plan should always match the strategy.

- *Offensive High Piled Outside Combustible Storage Fire Incident Action Plan:* Quick aggressive rescue, quick aggressive fire attack to stop the fire spread early, providing for firefighter safety, and a continuous water supply throughout. Once rescue operations are completed, pessimistic evaluation and forecasting of risk vs. gain will be applied to offensive operations to save property.
- *Defensive high piled outside combustible storage fire incident action plan:* Provide for firefighter safety, identify main body of fire and paths for extension through pessimistic forecasting, address exposures including public health, address environmental protection, and extinguish fire using master streams, if appropriate.

### 5. Tactical Objectives

- *Firefighter Safety:* Awareness of the hazards involved in high pile outside combustible storage fire can be the best personnel protection. Firefighter safety is our top priority. Rapid fire spread, toxic exposure, fatigue, heavy equipment, fire apparatus, and master streams are some of the unique hazards on these incidents.
- *Exposure Protection:* High piled outside combustible storage fires have a potential to grow rapidly and threaten structural exposures and public health. Incident Commanders should establish sectors early to protect exposures and evacuate if necessary.
- *Environmental Protection (including public health):* There are many considerations associated with environmental protection and public health on high piled outside combustible storage fires. Incident Commanders need to give careful consideration regarding the material burning, and the consequences of letting the material burn vs. fire suppression with big water. Hazmat units and environmental specialists like the Arizona Department of Environmental Quality can assist Command with evaluation of environmental protection and public health on these incidents.
- *Fire Control:* Depending on the nature of the incident, fire control may be addressed in a variety of ways. For example, fire suppression with big-water, removing fuel from the fire with heavy equipment, and letting the fire burn itself out are all acceptable considerations for fire control. Emphasis should be placed on potential for fire spread and exposure protection. Clean-up will likely be turned over to an appropriate environmental protection agency.