

# Peoria Fire Department Policy



## Open Burning within the Corporate Limits of the City of Peoria

Effective Date: May 1, 2004; revised Sept. 2019

# Peoria Fire Department

## Open Burning Policy

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## Section 1 – Permits Required

A permit is required for each of the following burn operations;

1. Recreational fires; i.e. campfires, cook out/weiner roast
2. Bonfires
3. Prescribed burns
4. Construction Site burns

*Note: Commercially manufactured grills, smokers, and outside fireplaces do not require permits, yet they are subject to the restrictions outlined in Section 6.*

## Section 2 - Definitions

1. "Air Curtain Destructor" is defined as a portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.
2. "Bonfire" is defined as a large outdoor fire utilized for ceremonial purposes, as an expression of public joy and exultation, or for amusement.
3. "Construction Site Burn" is defined as a permit required controlled application of fire operation utilized to remove land clearing debris.
4. "Garbage" is defined as refuse resulting from the handling, processing, preparation, cooking and consumption of food or food products.
5. "Land Clearing Operation" is defined as the uprooting or clearing of vegetation in connection with construction of buildings and rights-of-way, residential, or industrial development, or mining activities; or initial clearing of vegetation to enhance property value; but does not include routine maintenance or property cleanup activities.
6. "Open burning" is defined as the burning of any material or substance in such a manner that products of combustion resulting from the burning are emitted directly into the ambient (surrounding outside) air without passing through an adequate stack, duct or chimney.
7. "Prescribed Burning" is defined as the controlled application of fire, to vegetative fuels, under specified environmental conditions, and following appropriate precautionary measures, which causes the fire to be confined to a predetermined area and accomplish planned fire or land management objectives. Also referred to as prairie grass burn, wildland burn, and ecology burns.
8. "Recreational Fire" is defined as a small outdoor fire for the purpose of viewing, warming, cooking food for human consumption, or for ceremonial purposes, using only seasoned dry firewood or commercially available charcoal briquettes.
9. "Rubbish" is defined as items such as paper, plastic, rubber, food products, metal, glass, and combustible liquids.
10. "Yard Waste" means vegetative matter resulting from landscaping and yard maintenance operations and includes materials such as tree and shrub trimmings, vegetables, flowers, grass clippings, trees and tree stumps.

## Section 3 – General Provisions

1. Open burning that is offensive or objectionable due to smoke or odor emissions when atmospheric conditions or local circumstances make such fires hazardous is prohibited. The fire official is authorized to order the immediate extinguishment of any open burning which creates or adds to a hazardous or objectionable situation.
2. Open burning of any material or substance that emits hazardous emissions or pollutants is strictly prohibited. This includes, but is not limited to, electrical insulation, treated lumber, plastics, pesticides, construction and/or demolition materials, asbestos containing materials, oils, asphalt materials, explosive materials, chemical wastes, synthetic materials, or rubber.
3. Open burning of rubbish, garbage, and yard waste is prohibited.
4. Open burning of any material or substance on sidewalks, public streets, alleys, right-of-ways, or highways is prohibited.
5. The use of burn barrels is prohibited. *Exception:* Burn barrels may be allowed, at the discretion of the Fire Chief, as a warming station for outdoor workers and strikers.
6. Only those containers approved by the Fire Chief may be used for the purpose of open burning. (See Approved Burn Containers)
7. Permits or other authorizations to burn will be denied or revoked for any permit holder or person who violates established rules and regulations. The denial or revocation remains in effect, based on the degree of the offense, at the discretion of the Fire Chief.
8. Open burning shall be allowed without prior notification to the Fire Chief for highway safety flares, cutting and welding torches, tar pots and similar occupational needs.
9. Open burning shall be allowed for the instruction and training of firefighting personnel.

## Section 4 – Recreational Fires

The Peoria Fire Department allows recreational fires (campfires or cookouts) for pleasure, religious, ceremonial, cooking, warmth or similar purposes only under the following conditions;

1. The owner of the land which the recreational fire is to be kindled must obtain a recreational burn permit (\$10.00) from the Peoria Fire Department, Fire Prevention Division at least 24 hours prior to the start of the fire. Rain dates will be considered at the time of application.
2. The location of the outdoor fireplace shall be no closer than 15 feet from any structure. Outdoor fire pits and campfire rings shall be no closer than 25 feet from any structure. Outdoor fires shall not be allowed to spread beyond their container.
3. Recreational fires are strictly prohibited on sidewalks, public streets, alleys, rights-of-way, or highways.
4. Recreational fires shall be contained in an outdoor fireplace, fire/barbecue pit, campfire ring or other container approved by the Fire Chief and shall be limited in size to a total fuel area of 3 feet or less in diameter and 2 feet or less in height. The use of devices made of earth, stone, or metal designed for the purpose of containing a fire shall also be allowed, provided the area containing the fire is no more than three (3) feet wide by three (3) feet long. The pieces of wood contained in permissible fires shall be no more than three (3) feet in length.
5. All recreational fires have a maximum time limit of 4 hours and shall be properly extinguished at the end of the activities. Regardless of when the fire was initiated it is not allowed to extend later than 11:00 p.m.
6. The fuel for recreational fires shall consist of seasoned dry firewood or charcoal briquettes. Construction materials or yard waste are strictly prohibited. Small amounts of paper and kindling may be used to kindle the fire. The use of flammable or combustible liquids, other than commercially produced charcoal lighter fluid, to start the fire is strictly prohibited.
7. A responsible adult shall enforce attendance and supervision of children at all times the fire is kindled. An approved on-site extinguishing agent, such as sand, water container, or garden hose shall be available for immediate use.
8. The fire shall be immediately extinguished anytime the wind conditions become strong (at or above 15 MPH or greater) or if there are sustained wind gusts in excess of 20 MPH, or if the wind begins to carry brands or embers creating a potential for fire extension. *It is the responsibility of the permit holder to ensure the safety of those enjoying the fire and therefore must extinguish the fire when the winds are too high.*
9. Recreational fires identified as offensive or objectionable due to excessive smoke or odor emissions are prohibited. The Peoria Fire Department and/or Peoria Police Department shall order the extinguishment of any recreational fire that creates or adds to a hazardous or objectionable situation.

**Note:** *Commercially manufactured grills, smokers, and outside fireplaces do not require permits, yet they are subject to the restrictions outlined in Sections 3 & 4.*

# Approved Burn Containers

## Outdoor Fireplaces (Do not require Fire Permit)

- *Must be at least 15' from structures and other combustible surfaces*
- *Not allowed on combustible decks*
- *Burn only dry, seasoned firewood or charcoal briquettes*
- *Specifically designed for this purpose* ▪ *Has spark arrestor or ember screen*

Examples:



## Outdoor Fire/Barbecue Pits (Do not require Fire Permit)

- *Must be at least 25' from structures and other combustible surfaces*
- *Burn only dry, seasoned firewood or charcoal briquettes*
- *Specifically designed for this purpose*

Examples:



## Campfire Rings (Requires Fire Permit)

*Must be at least 25' from structures and other combustible surfaces*

- *Not allowed on combustible decks*
- *Burn only dry, seasoned firewood or charcoal briquettes*
- *Specifically designed for this purpose*
- *Extinguishing agent on hand ( i.e. water hose, sand, fire extinguisher etc.)*



Examples:



Note: The use of earth, concrete, or stone for the purpose of containing a campfire or cooking fire is permitted provided the area is free of combustibles and the diameter of the containment area is not greater than three (3) feet.

**BURN BARRELS ARE**



**STRICTLY PROHIBITED**

## **Section 5 – Bonfires** - Bonfires are not approved for the general public.

The Peoria Fire Department may allow bonfires only for officially sponsored activities of civic, educational and religious organizations that are subject to the following conditions;

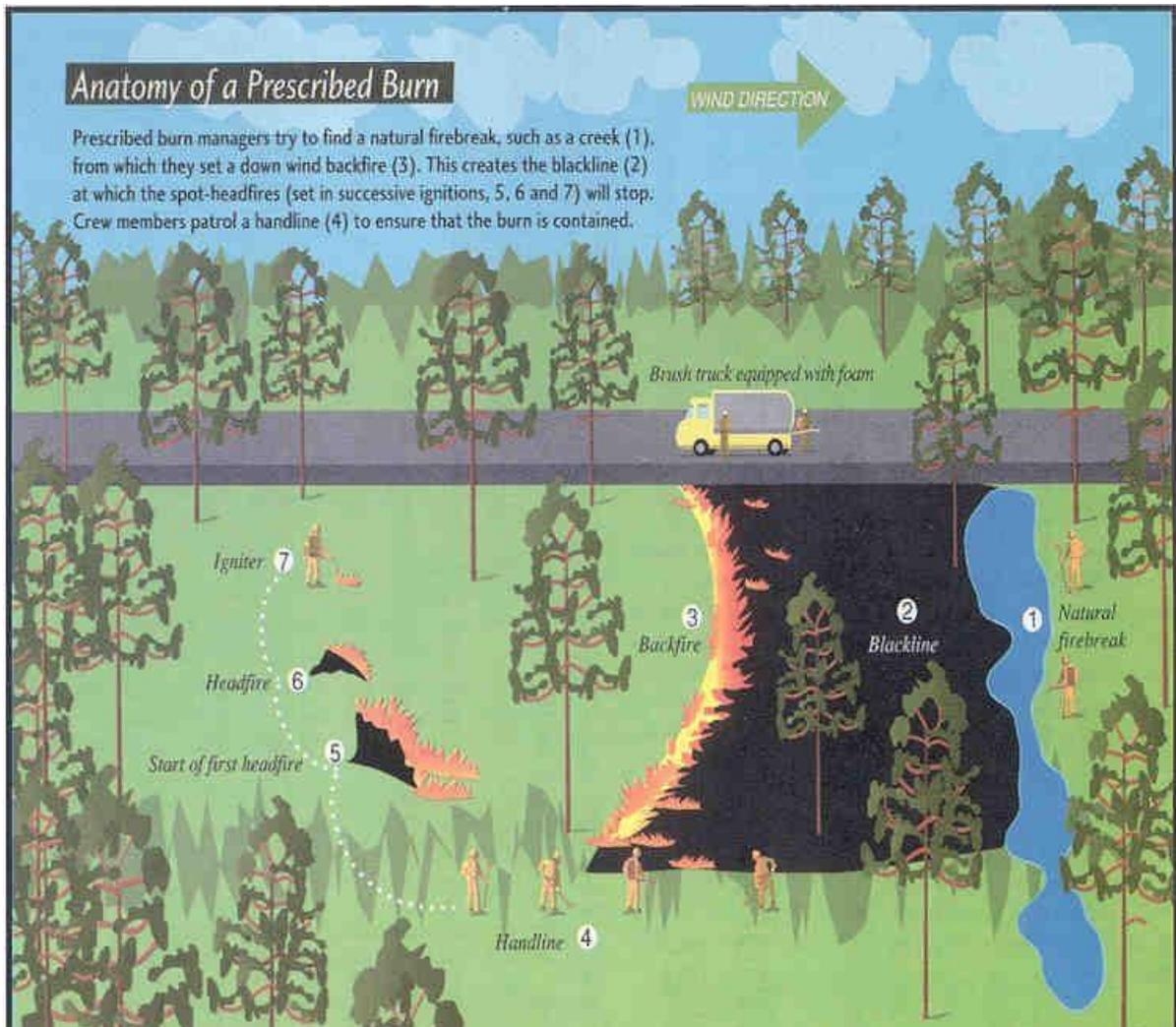
1. The organization requesting the bonfire must submit a map of the burn site to the Peoria Fire Department for review. The site map must show emergency access points to the site (i.e. roads, parking lots, alleys, etc.), burn sites proximity to buildings/ structures, available water source (i.e. fire hydrants), and approximate number and location of crowd.
2. The organization requesting the bonfire must obtain a burn permit (\$80.00) from the Peoria Fire Department, Fire Prevention Division at least 48 hours prior to the start of burning operations. An appointment must be made with a fire inspector to inspect the site the day of the burn.
3. The location of the bonfire shall be no closer than 100 feet to any structure, tree, shrub or combustible material and provisions shall be made to prevent the fire spreading to within 100 feet of any structure or combustible material.
4. The organization requesting the bonfire will appoint and identify at least four (4) adults (bonfire supervisors) to supervise the event throughout its entirety.
5. The fuel for the bonfire shall consist only of clean, dry, non-treated lumber or firewood stacked no more than 10 ft in height with a diameter not to exceed 10 feet at the base of the pile.
6. Small amounts of paper and kindling may be used to kindle the fire. The use of flammable or combustible liquids to start the bonfire is strictly prohibited. Only the dedicated bonfire supervisor(s) will initiate the fire.
7. No one, except the bonfire supervisor(s) and/or emergency personnel, shall be allowed within 20 ft of the bonfire throughout the duration of the event. Adequate security measures must be in place to prevent the audience from encroaching on the pile.
8. The bonfire shall be properly extinguished at the end of the activities, but in any event, not later than 11:00 p.m.
9. A fully staffed Peoria Fire Department fire engine must be on-site, located in an easily accessible location near the bonfire at least 30 minutes prior to the start of the fire. The fire crews will monitor the bonfire throughout its entirety and will remain afterwards to ensure that it is extinguished. *It is the responsibility of the organization requesting the bonfire to ensure that this has been arranged.*
10. The bonfire will be suspended or cancelled by the on-site fire crew anytime throughout the event if wind conditions become strong (15 MPH or greater) or if there are sustained wind gusts in excess of 20 MPH, or if the wind begins to carry brands or embers creating a potential for fire extension.
11. Bonfires identified as offensive or objectionable due to excessive smoke or odor emissions may be extinguished based on the opinion of the fire officer in charge of the fire crews on-site.

## Section 6 – Prescribed burn or Wildland Management

The Peoria Fire Department allows prescribed burns that accomplish planned fire or land management objectives. They are permitted only under the following conditions;

1. Authorization to conduct a prescribed burn must first be obtained from the Illinois Environmental Protection Agency and an I.E.P.A. permit issued to the contractor responsible for the project prior to local authorization.
2. The contractor responsible for the project must submit a validated copy of the I.E.P.A. permit, and a copy of the prescription for the burn must be submitted for review. The prescription will contain, as a minimum, the following:
  - Site Description
  - Map of the area to be burned
  - Personnel and equipment to be used on the prescribed burn
  - Training level of personnel conducting burn
    - Personnel conducting the prescribed burn must be in compliance with;
      - *NFPA 1051 - Standard for Wildland Fire Fighter Professional Qualifications*
      - *NFPA 1143 - Standard for Wildland Fire Management*
  - Desired outcome
3. The contractor responsible for the project must obtain a burn permit (\$100.00) from the Peoria Fire Department, Fire Prevention Division at least 48 hours prior to the start of the fire. Rain date(s) will be considered at the time of application.
4. Burning shall be conducted only when wind direction and other meteorological conditions are such that smoke and other pollutants will not cause adverse effects to any public road, or off-site structure. Refer to attachment on page 8.
5. The initiation of burning shall commence no earlier than one hour after sunrise. Burning shall be completed on the same day by 5pm. In cases where residual fires and / or smoldering objects continue to emit smoke after this time, such areas shall be extinguished.
6. The responsible agent of the organization conducting the burn must notify the fire dispatcher of the time the fire is started and when it is concluded. (Non-emergency Fire Dispatch phone #, 309/674-3131.)

# Prescribed Burn



*Personnel conducting the prescribed burn must be in compliance with NFPA 1051-Standard for Wildland Fire Fighter Professional Qualifications and NFPA 1143 - Standard for Wildland Fire Management. This information must be included in the application*

## Section 7 – Construction Site Burns

The Peoria Fire Department allows for the burning of land clearing debris at construction sites only under the following conditions;

1. All land clearing debris to be burned must be from the site specified on the burn permit(s) and must not be transported to the site from another location.
2. All land clearing debris that is to be disposed of on-site must be incinerated using an air curtain destructor (refer to diagram on pages 11-13).
3. Authorization to conduct a construction site burn using the air curtain destructor must first be obtained from the Illinois Environmental Protection Agency and an I.E.P.A. permit issued to the contractor or developer responsible for the project prior to local authorization.
4. The contractor or developer responsible for the project must submit a validated copy of the I.E.P.A. permit, plus a site map of the area, to the Peoria Fire Department for review.
5. The contractor or developer responsible for the project must obtain a burn permit (\$200.00) from the Peoria Fire Department at least 72 hours prior to the start of burning operations. An appointment must be made with a fire inspector to inspect the site for permit approval.
6. The contractor or developer responsible for the project must ensure the following is adhered to throughout the duration of the burning operation;
  - The air curtain destructor meets the manufacturer's specifications for operation and upkeep to ensure complete burning of material charged into the pit.
  - Manufacturers specifications shall be kept on site and be available for inspection by Fire Department personnel.
  - The air curtain destructor operator is fully trained in the correct operation and maintenance of the unit.
  - The burn pit width, length, and depth are the proper dimensions, in accordance with manufacturer's specifications.
  - The moisture content and composition of the materials to be burned shall be favorable to good burning to minimize air pollution. The amount of dirt in the piles shall be minimized to enhance combustion and reduce emissions.
  - The location of the burn pit must be at least 1,000 feet from any occupied structure(s).
  - A temporary fire apparatus access road, capable of supporting the imposed load of fire apparatus weighing 75,000 lbs., must be constructed and in place, easily accessible to within 100 ft of the burn pit, prior to the start of the operation.

Prevailing winds at the time of the burn must be away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be significantly affected by smoke, ash or other air pollutants from the burning

- No land clearing debris or waste will be burned above the level of the air curtain in the pit.
- The operator of the air curtain must not allow ash to build up in the pit to a depth higher than one-third of the depth of the pit or to the point where the ash begins to impede combustion, whichever occurs first.
- The initiation of the pit burn shall commence no earlier than 7:30 a.m. daily. Burning shall be completed each day by 4pm. Operators must stop filling the burn pit with additional land clearing debris at least 1 hour prior to the end of each work day to allow the debris in the pit to burn down. In cases where residual fires and / or smoldering objects continue to emit smoke, such areas shall be fully extinguished. *The site must not be abandoned or left unattended until all fires and embers are extinguished.*
- Access to the burn pit must be restricted to the public at all times to prevent accidents. Barriers must be placed around the open burn pit to prevent accidental entry, specifically after hours.

# Air Curtain Destructor

## Recommended Operating Instructions



### Operating Procedures for Air Curtain destructor

#### Step 1 - Site Select and Preparation

Select a site, which will likely have a low water table, can be easily excavated, and is not less than 1000 feet from any occupied structure.

#### Step 2 - Pit Preparation

Excavate the pit using either a front-end loader or backhoe.

### Pit Dimensions:

The depth, width, and length of each pit must conform to the specifications prescribed by the Air Curtain manufacturer. Each pit must be excavated with at least three (3) vertical sides, in soil capable of maintaining the vertical walls without failure.

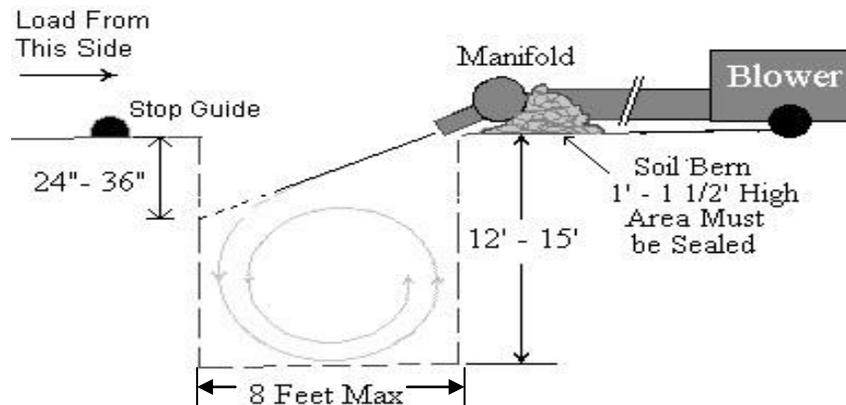
**Note 1:** The length of the pit is dependent upon the length of the air curtain destructor manifold.

**Note 2:** Caution must be exercised to ensure that walls are not undercut during excavation. If a frontend loader is used for excavation, the end used for travel must be filled in with dirt beginning at the end of the manifold and filling up the ramp.

### Step 3 - Air Curtain Destructor Set Up

Using a small berm of soil (1 to 1 1/2 feet high), place the manifold (plenum & nozzles), such that the manifold is properly supported, and the space between the manifold and the ground is sealed. Rotate the manifold until the air curtain will be directed at an imaginary horizontal line 24 to 36 inches below the top of the opposite wall. Slide the skid containing the blower and motor into place and connect the manifold. A "stop guide" or restraint must be provided at the loading side of the pit in order to keep the loader from getting too close to the edge of the pit during charging operations. *Note: A fence or barrier must be erected around the pit to protect the public.*

Example of Air Curtain Destructor set up for proper operation (refer to mfg. specifications)



### Step 4 - Ignition Procedure

Load the pit half full with homogeneous mixture of trees, logs, and large brush. Douse the wood with 1/2 gallon of fuel oil or kerosene. The majority of the fuel oil or kerosene should be put on the wood at the front center side of the pit. Allow sufficient time for the fire to take hold before introducing any air from the air curtain destructor. As the fire grows in intensity, gradually bring the blower up to optimum speed (refer to manufacturer's recommendation)

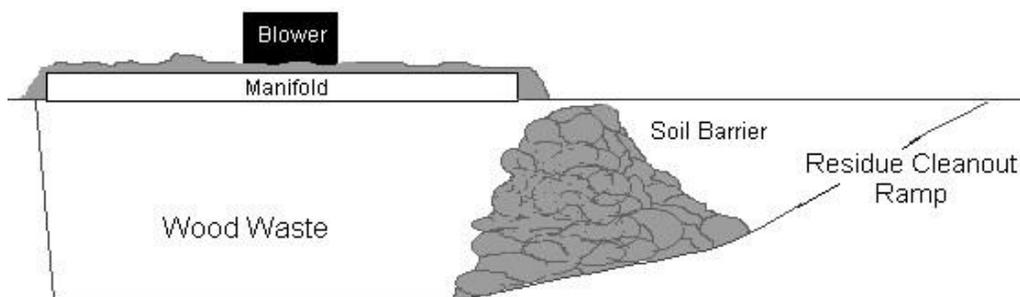
**CAUTION: Do Not Use Tires or Highly Volatile Solvents Such as Gasoline, Mineral Spirits, Etc., for Ignition.**

*Note 1:* Only wood waste consisting of trees, logs, large brush, stumps, relatively free of soil and lumber may be burned.

*Note 2:* Leaves, sawdust, other densely packed wood wastes, paper (any type) , or chemically treated, coated, or impregnated wood **CANNOT** be burned

### **Step 5 - Loading Procedures**

Once the fire reaches full intensity, additional wood waste may be added. The intervals between pit refill may be determined by observing the burning rate. Generally, if the fire is kept at its maximum intensity, it will keep one (1) man, operating a front -end loader, constantly busy. Also, the material should be loaded toward the rear of the pit under the air curtain. The pit should not be overloaded; that is, the material should not be piled up so high that it would protrude above the air curtain. Also, no material should extend outside the boundaries of the pit and air curtain.



### **Step 6 - Maintenance and Safety Requirements**

Ash removal is required in order to maintain efficient and proper combustion. Ashes should not be allowed to build up higher than 1/3 the pit depth, or below the point where they begin to impede combustion and are blown out of the pit. If spalling, "cave off", of the pit walls occurs during operations, a new pit must be constructed and the existing pit filled with soil.

**Note:** Each new pit will require an inspection by the fire department.