

SCRIPT #3 - Open Burning of Brush on Residential Property

Slide 1 – Front DEEP Page

Slide 2 – Title Page

Slide 3 - Module Outline

This module will outline the process in which the local Open Burning Official considers a permit application for the “Open Burning of Brush on Residential Property.”

This module will cover the following:

- The Statutory Authority that allows for the Open Burning of Brush on Residential Property.
- A Model Permitting Process that the local Open Burning Official could use in the performance of their responsibilities when considering an application for such activity.
- The Model Application/Permit Template Form that has been developed by the State of Connecticut’s Department of Energy and Environmental Protection’s Open Burning Program for use by the local Open Burning Official in the administration of their municipality’s Open Burning Program. In this module, the State of Connecticut’s Department of Energy and Environmental Protection will be referred to as the “State Agency”.
- Those specific actions, as found in the granted permit conditions that are to be taken by the Permittee for the time periods - prior to conducting the burn, during the burn and after the burn.
- A discussion on the types of enforcement actions and procedures that can be taken at the local level for violations resulting from authorized and unauthorized open burnings.
- The Take Aways for this module.

Slide 4 – Statutory Authority

Per Chapter 446c of the Connecticut General Statutes Section 22a-174(f), the language provides the statutory authority to conduct open burning of brush on residential property and identifies certain conditions when open burning cannot occur.

Please take the time now to read Connecticut General Statutes Section 22a-174(f).

Connecticut General Statutes Section 22a-174(f) states that no open burning shall occur when the forest fire danger in the area is identified as “extreme”. However, Connecticut General Statutes Section 23-49a prohibits open burning when the forest fire danger level is “high or extreme or during a drought emergency” as declared by the State Forest Fire Warden. The Department of Energy and Environmental Protection’s Division of Forestry issues Forest Fire Danger Ratings for Connecticut which is based on the National Forest Fire Danger system rating. In Connecticut, there are five Forest Fire Danger ratings – low, moderate, high, very high and extreme.

The State Agency’s Bureau of Air Management’s Open Burning Program has developed model Application/Permit Templates for certain open burning activities that can be permitted under Connecticut General Statutes Section 22a-174(f). The State Agency has addressed this inconsistency by choosing to abide by the more stringent prohibition of open burning. For each of the model templates developed and with regard to the forest fire danger, the permit is not valid under the following condition: “When the Forest Fire Danger Level is high, very high or extreme.”

Slide 5 - Authorized Open Burning of Brush on Residential Property

Connecticut General Statutes Section 22a-174(f) allows for the open burning of brush on residential property. Only brush can be burned.

The types of materials that **CANNOT be burned** include, but are not limited to, the following: branches greater than three inches in diameter; organic matter other than brush such as grass, leaves; brush that has been brought onto the site from other properties; tree trunks, root balls/stumps; construction and demolition waste; hazardous waste, tires, oil waste, fuel waste; household waste, animal or vegetable waste; furniture, painted materials, treated wood; and pallets.

Residential property means a one to four family dwelling; the property is used exclusively for residential purposes; and the property has a Certificate of Occupancy. Open burning can be conducted only at the residential address as identified on the permit. This type of permit cannot be issued to businesses, commercial and/or institutional entities – these are not considered residential properties. This type of permit is not suitable for general lot clearing operations of any kind. For example, this permit is not to be used by a resident to clear land so as to prepare the site for construction of a dwelling or an addition. New building construction and changes of land use require more aggressive and more environmentally friendly methods of clearing the land.

This Statute dictates that the burning is to be conducted by the resident of the property or the agent of the resident. This Statute requires that a permit for such burning must be obtained from the local Open Burning Official of the municipality in which the property is located.

Resident means an individual seeking to burn on the property where he or she resides. The **agent of the resident** is an individual who is working on behalf of the resident of the property. The **Resident** is the Applicant.

The **Open Burning Official** means the person who was nominated by the chief executive officer of the municipality in which the Open Burning Official will serve and who was subsequently certified by the State of Connecticut's Department of Energy and Environmental Protection as a local Open Burning Official. The local Open Burning Official is the Regulator.

Connecticut General Statutes Section 22a-174(f) and 23-49a identify certain scenarios when no open burning of brush can occur. These include the following:

- **When national or state ambient air quality standards may be exceeded.**
- **Where a hazardous health condition might be created. Hazardous health conditions could potentially be created for citizens. When the forest fire danger is high, very high or extreme.**
- **Where there is an advisory from the commissioner of any air pollution episode.**
- **Where open burning is prohibited by an ordinance of the municipality.**
- **When the State's Forest Fire Warden declares the following conditions exist within the State: the forest fire danger level is high, very high or extreme or during a drought emergency.**

Slide 6 - Model Residential Burning Permit Process

The State Agency has developed this model permit process for the open burning of brush only on residential property. This model process is intended to provide support to the local Open Burning Official in the carrying out of this type of permitting function. It is up to each municipality to establish their own permitting procedure that works for their municipality.

In Step 1, the process begins when the Resident obtains a permit application from their local Open Burning Official.

In Step 2, the Resident of the property must complete and sign the application form and submit the form and any other information that may have been requested by the local Open Burning Official. The local Open Burning Official receives the application and schedules a time to inspect the property and the proposed burn site and the brush pile.

In Step 3, the local Open Burning Official will either approve or deny the application. If the permit is granted, the Applicant is now referred to as the Permittee. The Permittee must adhere to all the conditions as found in their granted permit. If the application is denied, the Open Burning Official must provide reasons for the denial. The Resident can submit another application provided that the reasons for denial have been adequately addressed; the Open Burning Official will then make a determination on the application.

In Step 4, on the day of the proposed burn and prior to conducting the burn, the Permittee must verify that the conditions are suitable for open burning to occur. In this model process, the Permittee must contact the local Open Burning Official or the designated municipal official for verification that the conditions are suitable. Both the State's Predicted Daily Air Quality Index Maximums and the State's Forest Fire Danger Level must indicate that conditions are suitable for open burning to occur.

In Step 5, the local Open Burning Official or the designated municipal official informs the Permittee as to whether or not they can proceed with the open burning.

In Step 6, if conditions are suitable, the Permittee can conduct the burn and must comply with all requirements and conditions found in the permit. The permit must be available on site and the Permittee must stay with the brush pile until it is completely extinguished. The Permittee should contact and notify the designated local official that the burn has been extinguished. The Open Burning Official must retain a copy of the permit per the municipality's Records Retention Schedule.

Slide 7 – The Model Application / Permit

“Written” permits are legally required documentation granting permission to a Resident, or their designated agent, to conduct burning of brush in the open air. Verbal permits are not permissible under any circumstance.

Municipalities may create their own permit application or use the model template - ***Local Open Burning Official - Application and Permit for Open Burning of Brush on Residential Property*** as revised by the State Agency. The revised form has been made available to Connecticut's municipalities. This template form is not write protected and may be edited for a municipality's use.

Regardless if a municipality creates its own form and/or modifies the model Application and Permit Form, the form must abide by and cannot be less stringent than Connecticut General Statutes Section 22a-174(f) and Connecticut General Statutes Section 23-49a and as prescribed by the State Agency's Open Burning Program. There are certain permit conditions and language that cannot be changed, amended, or deleted. Careful consideration should be made before any changes to the model template are made.

The Model Application and Permit Form consist of four major sections.

The first section is the Applicant Information, Applicant Signature and Declaration Statement.

The second section identifies the Permit Conditions. The Permit Conditions are listed under the following major headings: General Statements; Permit Not Valid under Following Conditions; General Conditions which are Applicable to All Permits; and Special Conditions which are applicable if checked by the local Open Burning Official.

The third section is where the local Open Burning Official enters their decision. The box is checked if the application is denied and reasons must be given for denial. The box is checked if the permit is granted.

The fourth section is the Signature, Town and Date Block that is completed by the local Open Burning Official.

Slide 8 - The Application / Permit Form: #1 Signature and Declaration by the Applicant

The Resident, now referred to as the Applicant, must complete this part of the application in full.

The Applicant must print and sign their name, identify the address of the residential property where the proposed burn is to occur, provide contact information home and cell phone numbers and their email. In the case where the resident is not the owner of the property, the Open Burning Official may find it prudent to request written documentation that this individual has been authorized to apply for the permit. Some municipalities require the Applicant to be the owner of the property or must have an owner sign the application along with the Applicant.

The Applicant shall provide any other information as requested and considered necessary by the local Open Burning Official. The Open Burning Official may request the Applicant to provide the following information:

- A description of the purpose of the fire, the nature and quantity of the material to be burned, and the requested dates for the proposed burn to occur.
- A statement providing why practical alternatives are not reasonable.
- Methods that will be used to ignite the fire; considerations made with regard to public safety and environmental protection.
- Methods that will be used by the applicant to control and extinguish the fire.
- A sketch map showing the proposed burn location, property line boundaries, and any other important factors such as nearest roads, adjacent structures and occupied dwellings and distances.

The Applicant must check the box to indicate that they acknowledge and declare that they are the resident of the address as entered onto the form and where the burn is proposed to occur, that the property has a Certificate of Occupancy and that they shall abide by the conditions of the permit as set forth in the permit.

If the permit is issued, the Applicant will be held responsible to the conditions as listed on the permit. As such, it is the responsibility of the Applicant to read through the application and be sure that they will be able to meet and adhere to the conditions.

Slide 9 - Receipt of the Application Form

The local Open Burning Official, who is now in receipt of the application form, must verify that the Applicant has provided the information requested on the form and that the Applicant has checked off the box for the declaration statement. An application can be considered incomplete if any of the following were to be determined: if the application was not signed by the Applicant; the contact information has not been provided; the declaration statement has not been checked; and if the Applicant failed to provide any additional information as requested by the local Open Burning Official.

Before conducting any type of site inspection, the local Open Burning Official must obtain permission from the applicant to enter onto the property. An approach to obtain such permission is via the Open Burning Application itself. The local Open Burning Official should schedule with the Applicant, a date and time when a site inspection can be conducted. While it is not required, this practice is recommended by the Agency. Some municipalities inform the applicant that their signature on the form authorizes the local Open Burning Official to enter upon the subject property without an appointment and without the applicant's attendance for the purpose of processing the application.

Some municipalities include language on their application form indicating that a site inspection may be necessary to obtain essential information in order for the local Open Burning Official to make a decision on the application, and a statement that the applicant may sign granting permission to enter the property. Sample authorizing language can be as follows: "I hereby authorize the Open Burning Official to conduct a site inspection for the purposes of understanding existing property conditions, which may be necessary in order to make a decision on this application. Such site inspection walk will be conducted at reasonable times." The applicant would provide their signature.

A site inspection can verify information that has been submitted by the Applicant in support of their proposed activity. It enables the local Open Burning Official to assess the physical characteristics of the property and assess any potential adverse environmental impacts and public health and safety issues that may result from the open burning taking place at that location.

Slide 10 - Site Inspection

The use of a checklist in the field by the local Open Burning Official could facilitate evaluating and determining if conditions onsite would be appropriate for open burning to occur at that location. It is recommended that the local Open Burning Official develop and use a checklist as a guide during site visits inspections. A checklist could include, but not be limited to, the following:

- Verify that the property is residential and the Applicant resides on the property.
- Verify that the proposed burn pile consists of brush only and that the pile contains ONLY brush with a diameter of 3" or less at the widest point.
- Determine the distance from the proposed burn site to woodland or grassland, and to any other structures or hazards located on the property.

Slide 11 - Site Inspection (Cont)

Continuing on with items that should be included on a checklist:

- Determine the distance of the proposed burn pile to the property line and if there is a potential that the proposed burn could adversely affect neighbors.
- Verify the number of proposed burn piles and that the pile and/or piles are adequately sized to be completely consumed within the one day, 10 am to 5 pm time period.
- Determine if all reasonable safety precautions have been identified and taken, including the clearing of grass and trees in the proposed burn area;
- Determine if the resident or the agent of the resident has the means of controlling the fire on-site, such as a nearby water source, heavy truck equipment such as an excavator or other extinguishing method;
- Determine if the resident or the agent of the resident knows who to call in case the burn gets out of control;
- Determine if the resident or the agent of the resident have considered any alternative to burning such as stockpiling the brush for animal cover, chipping the materials or hauling the materials to a municipal brush disposal area if one is made available to the residents.
- Detection of non-native invasive insects - signs of Asian Longhorned Beetle or the Emerald Ash Borer. The State actively monitors for the presence of these insects and encourages the public to report possible infestations to State authorities. The local Open Burning Program provides a unique opportunity to have more monitors in the field by requesting the assistance of local Open Burning Officials. When conducting site inspections, local Open Burning Officials are being requested by the

State to be aware of the possibility of the presence of these insects and to report any suspected finds to the Connecticut Agricultural Experiment Station.

Slide 12 - Site Inspection (Cont)

A brief discussion concerning the Asian Longhorned Beetle and the Emerald Ash Borer follows.

The State of Connecticut's Department of Energy and Environmental Protection and the Connecticut Agricultural Experiment Station (CAES) have a formalized partnership to address the threat posed by the Asian Longhorned Beetle and the Emerald Ash Borer. As part of this partnership, the two agencies have agreed to work together to closely monitor for the presence of the ALB and EAB in Connecticut and to take steps to eliminate or slow the spread of these insects if they do reach our state.

So far the Asian Longhorned Beetle has been detected in New York and Massachusetts, and may be already present in Connecticut.

In July 2012, the Emerald Ash Borer was detected in four towns, all of which are located in New Haven County. In August 2012, a State quarantine was imposed on all of New Haven County. The quarantine regulates any movement of ash logs, ash materials, ash nursery stock, and hardwood firewood from within New Haven County to any area outside of New Haven County. A Federal quarantine is in effect as well. Through these actions, authorities are seeking to slow the movement of the Emerald Ash Borer into the remaining parts of the State.

Slide 13 - Site Inspection (Cont)

If a local Open Burning Official believes either of these insects to be present in the brush pile, there should be no attempt to move the insect, or to move any wood or other potentially infested material from the site. Instead, photos should be taken and notes should be made as to the location.

The Connecticut Agricultural Experiment Station should be contacted and digital photos should be sent of the suspected Asian Longhorned Beetle, or the Emerald Ash Borer. The Station is very responsive both to phone calls and to email contact, and will follow up on all potential sightings. For current updates and more information on the Emerald Ash Borer please visit their website.

Notification to the Connecticut Agricultural Experiment Station should not cause a significant delay in the processing of the local application to burn brush. Nor will a finding of the Asian Longhorned Beetle, or the Emerald Ash Borer prohibit the burn to occur.

Slide 14 - Site Inspection – Asian Longhorn Beetle (Cont)

This slide provides some background and visuals concerning the Asian Longhorned Beetle.

The Asian Longhorned Beetle is a large, shiny, mostly black and very distinctive looking insect. It also tends to spread slowly and to prefer the tops of trees, at least initially. As a result, despite its size, it can be very difficult to spot in the field. This insect infests and kills a number of hardwood species, such as maples, ash, birches, and Elm. Maple is the primary host.

The best indication of the presence of an Asian Longhorned Beetle infestation is the insect itself. The body of the adult female is about 1 inch to 1-½ inches in length and 3/8 to ½ inch in width. The adult male is slightly smaller. Its antennae are very long relative to the body.

Other good indicators that point to the presence of the Asian Longhorned Beetle are:

- Exit holes on the tree bark. Asian Longhorned Beetle exit holes are circular and large – on the order of ¼ to ½ inch in diameter. Exit holes may be anywhere on the tree. It is good to inspect branches that have been pruned or fallen from the tops of trees, as that is where infestations usually begin.

- Pits on the tree bark. These craters chewed into the bark can be any shape from nearly circular to a long trench. Typically, if roughly circular, they will be ½ inch or so in diameter, or about the size of a dime.

Slide 15 - Site Inspection Emerald Ash Borer

This slide provides some background and visuals concerning the Emerald Ash Borer.

The emerald ash borer is a small, green beetle with notable green, iridescent wing covers. Adult emerald ash borer are between 0.3 to 0.55 inches in length.

The Emerald Ash Borer infests and kills ash trees.

Signs or symptoms of infestation include D-shaped holes, bark splits, and crown die back.

White ash trees are most prominent in the northwest corner, the very southwest corner, and east central sections of Connecticut.

Slide 16 - The Application/Permit Form#2: Permit Conditions

Upon completing the site inspection and review of the application and any additional information submitted by the applicant as requested, the local Open Burning Official can now continue to the next steps of the application process. Next steps are reviewing the permit conditions and where appropriate, entering special permit conditions for the proposed activity.

The model Application/Permit Template Form has a number of Permit Conditions listed and include the following headings – General Statements; Permit Not Valid under the following Conditions; General Conditions; and Special Conditions.

Under the heading **General Statements**, the following narrative is putting the applicant on notice that:

- A permit is only valid when signed by the local Open Burning Official.
- The permit does not relieve the Permittee of any legal liability which may be incurred as a result of the fire.
- The failure by the Permittee to adhere to the conditions of the permit may result in penalties and/or other enforcement actions.

Under the heading **Permit Not Valid under the Following Conditions**, the following conditions are listed:

- When national or state ambient air quality standards may be exceeded.
- Where a hazardous health condition might be created.
- When the **Air Quality Index (AQI)** is predicted to be 75 or higher anywhere in the State and as indicated in the Table entitled “Predicted Daily AQI Maximums” for a date specified, as found on the State of Connecticut’s Department of Energy and Environmental Protection website.
- When the **Forest Fire Danger Level** is High, Very High or Extreme, as found on the State of Connecticut’s Department of Energy and Environmental Protection website.
- When there is an advisory from the State of Connecticut’s Department of Energy and Environmental Protection of any air pollution episode.

Slide 17 - The Application/Permit Form # 2: Permit Conditions (Cont)

Under the heading entitled **General Conditions: Applicable to All Permits**, the following conditions are listed:

1. Open burning is limited to the burning of brush only, on residential property upon which the permittee resides. Only brush (defined as shrubs, vegetation or prunings, the diameter of which is not greater than three inches at the widest point) may be burned. Burning on property not zoned or classified as residential is prohibited.
2. Burning must cease if so directed by any member of the Town Fire Marshal's Office, any Officer of the Fire Department, any designated municipal official responsible for enforcing the open burning laws and ordinances, or any Official of the State of Connecticut's Department of Energy and Environmental Protection.
3. During the burn, all reasonable measures to assure complete combustion and reduce excessive smoke are to be taken.
4. At no time during the burn should the fire be left unattended.
5. At the completion of the burn period, all embers and coals must be extinguished and wetted so as to prevent smoldering and fugitive ash emissions.
6. All reasonable safety precautions are to be taken, including the clearing of grass and trees in the burn area, wetting down of the surrounding area, and the placement of fire extinguishers and hose lines.
7. This permit must be immediately available on site during the burn.
8. Burning may only be conducted between the hours of 10:00 A.M. and 5:00 P.M. on a sunny or partly sunny day with the wind speed between 5 and 15 miles per hour. The burn pile must be completely extinguished by 5:00 P.M. and all embers and coals must be extinguished and wetted (see Condition 5 above).
9. Burning may not create a nuisance to nearby properties.

Slide 18 - The Application/Permit Form #2: Permit Conditions (Cont)

Under the heading **Special Conditions: Applicable If Checked**, the local Open Burning Official can impose further conditions as needed. If deemed necessary, the following listed activities may or may not be checked and/or further conditions that may be entered onto the permit conditions by the local Open Burning Official:

- Burning may be initiated only in the presence of the Open Burning Official.
- A fire crew and appropriate apparatus must be stationed at the burning site.
- Burning may not take place when the wind is from a certain direction as identified by the local Open Burning Official.
- Burning must be conducted only on a certain number of days within the listed time period as found in this section of the permit.
- Final verbal approval must also be obtained on the day of and prior to the burning by calling a number as entered onto the permit by the local Open Burning Official.

- There may be other requirements as found in municipal ordinances that may apply to the proposed burn. The local Open Burning Official will enter onto the form those relevant ordinance sections deemed necessary.
- Violation of the terms and conditions of this permit may cause the forfeiture of the individual's ability to qualify for a permit in the future. It should be noted that municipalities must have in place language in their local open burning ordinance to make this a condition.
- Other conditions that the local Open Burning Official deems necessary can be listed here. For example, some municipalities include conditions such as the following: there are certain time periods during the year when no burning is allowed; the size and number of brush piles are defined; verbal approval is required from the municipality's Fire Marshal's Office on the day of and prior to the burning; the Fire Department dispatch must be notified on the day of and prior to the burning; a permit is nullified if the burn is not conducted on the designated burn date and the individual has to resubmit an application; sufficient tools and equipment necessary to extinguish any fire must be present and readily available and a responsible person, physically capable of using those tools and equipment, must be present and in control of any such fire; the Permittee must have an address house number clearly visible in compliance with the Town House Numbering Ordinance.

Slide 19 - Conditions that may be Imposed at the local level

Municipalities can enact local ordinances for the purpose of controlling and regulating the practice of open burning. These local ordinances must be as, or more, restrictive than the Connecticut General Statutes Section 22a-174(f) or as prescribed by the State of Connecticut's Department of Energy and Environmental Protection.

Only some municipalities have adopted ordinances. The local Open Burning Official is expected to be knowledgeable of their respective local open burning ordinance, as it may require and/or provide the ability to attach additional conditions to the "Special Conditions" section of the Application/Permit Form.

Slide 20 - The Application/Permit Form #3: Decision to Deny or Grant

The local Open Burning Official will make a determination of either to deny the application or grant a permit.

The decision is based upon the information submitted by the Applicant, the local Open Burning Official's knowledge of the State's open burning laws; where adopted, the municipality's ordinances; and information gained by the site inspection. Critical to the decision making is determining if the proposed activity could result in potential negative impacts to air quality and/or to public health and safety, and/or could create a nuisance to the community.

Under the scenario where a determination is made by the local Open Burning Official that the application should be denied, the local Open Burning Official will check the box and provide reasons for denial.

The reasons for a denial can include, but is not limited to, the following:

- The property where the proposed open burning of brush was to occur is not residential and/or the applicant does not reside at the address listed on the application.
- The Applicant indicated that the intent of the burn was for general lot clearing operations. This would be inconsistent with the purpose of this type of permit which is structured to allow for open burning of brush on residential property by the resident of the property (or designated agent) who are in need of disposing of small amounts of brush.
- At the time of the site inspection, the burn pile was not constructed and/or the size and number of the piles were not suitable to the general area so as to prevent any disturbances to neighbors.

Slide 21 - The Application/Permit Form #3: Decision - Application Denied/Reasons

Continuing with reasons for denying an application:

- The burn pile contained brush but the brush was greater than 3 inches in diameter at the widest point; and/or contained other materials such as pallets, household waste, tree trunks, treated wood, and other wastes were present; and/or consisted of material brought onto the site.
- The physical characteristics of the property preclude this type of activity to occur. Examples include: too steep slopes; the distance to a water supply and water availability that would be used to suppress an escaped fire is unacceptable for easy access; access to portions of the property are severely restricted and could impede fire containment and pose a significant public safety issue; the property is located at a low point and one could assume potential impacts upwind to neighboring property owners.
- The proximity of the burn location to the adjacent property line could result in potential adverse impacts to air quality and to public health and create a nuisance to the community. For example, adjacent to the property line could be a school, a senior center, a day care center, and/or other similar structure that could be populated by younger and/or older individuals who are particularly sensitive to smoke.
- Hazards are present where the proposed burn site is located. For example, overhead wires, propane tanks.
- The burn may cause harm to real property, vegetation, or wetlands habitat due to closeness of proximity.
- Conditions exist in the State such that no open burning may occur; for example, the State has issued advisories of poor air quality and/or when the Forest Fire Danger Level is reported to be high to extreme or during a drought emergency as declared by the State's Forest Fire Warden.
- Per a local municipal Open Burning Ordinance, a practical and alternative method for disposal of the material to be burned exists, including but not limited to the following techniques: legal disposal at a permitted municipal solid waste facility; chipping and using onsite; and piling for protective cover for wildlife and
- Other reasons as may be identified in a municipal ordinance.

Slide 22 - The Application/Permit Form #3: Decision - Application Granted

Based on the submitted application and the information that was provided by the Applicant and information that was gained by the site inspection, the local Open Burning Official can make a determination to grant the permit.

The local open Burning Official will check the box which states the following: "This permit is granted".

The Permittee is subject to the permit conditions.

The Permit is applicable only for the occasion or the purpose for which it has been obtained.

Slide 23 - The Application/Permit Form: #4 Signature and Date Block

Regardless of the decision, either denial of the application or the granting of the permit, the local Open Burning Official shall sign and date the form.

The local Open Burning Official should adhere to their respective municipality's Records Retention Schedule and retain a copy of all permits (approved, denied, withdrawn) from the date of the decision. The State Agency recommends that the Records Retention period be for a period of four years.

A copy of the document, whether it was denied or granted, must be given to the Applicant and/or the Permittee.

Per the permit conditions, the Permittee must have the permit available on site during the burn.

Slide 24 - Permit is Granted: Day of the Burn

For the day on which the proposed burn is to be conducted, the Permittee must verify both of the following conditions: the State's Predicted Daily Air Quality Index (AQI) Maximums and the State's Forest Fire Danger Level. If EITHER of these conditions is reported as being not suitable for open burning to occur, the burn may not proceed for that day.

If both of these conditions are suitable for open burning to occur, then open burning is allowed provided that the individual possesses a valid open burning permit issued by their local Open Burning Official and that the individual must comply with all requirements and conditions in the open burning permit.

It is noted here that each municipality must have established procedures in place concerning the activation of an issued permit. Municipalities must inform the Permittee with regard to their procedure.

There may be other factors which a municipality may want to consider before allowing a burn to proceed. These factors include Red Flag Warnings issued by the National Weather Service and/or the availability of local emergency response staff to respond to a call in the event that a burn gets out of control.

Slide 25 - Day of the Burn: AQI

Open Burning is prohibited statewide when the AQI is predicted to be 75 or higher anywhere in the State. The State Agency tracks the level of pollutants in the air each day and forecasts the expected air quality. These forecasted numeric values are used to prepare on a daily basis the **State's Predicted Daily Air Quality Index (AQI) Maximums**.

Looking at the two tables as shown on this slide, the Table on the left indicates that per the reported State's Predicted Daily Air Quality Index (AQI) Maximums the conditions may be suitable for open burning to occur pending a check of the Forest Fire Danger Level for that same day. The table on the right indicates that reporting values are not suitable for open burning to occur anywhere in the State.

In the table to the left of the slide, there are green colored highlights in the columns for both Fine Particles and Ozone. The Table indicates numeric values range from 3 to 39 for Fine Particle and 41 to 49 for Ozone. For this reporting day, the **Predicted Daily AQI Maximums** indicated that conditions **were suitable** for open burning for this parameter. The Permittee must also have checked the Forest Fire Danger Level for that day as well.

- If the Forest Fire Danger Level for that same day indicated levels of either low or medium, then conditions **would be suitable** for open burning, and the burn **could proceed provided that Permittee could comply with all requirements and conditions found in the open burning permit.**
- If the Forest Fire Danger Level for that day indicated Forest Fire Danger levels of high, very high, or extreme (all of which would prohibit burning), then conditions would not be suitable for open burning, therefore open burning would be prohibited for that day.

In the Table to the right of the slide, more colors fill in the data fields. There are green colored highlights for Fine Particles but green, yellow and orange colored highlights for Ozone. This table is reporting values ranging

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from 29 to 46 for Fine Particle and 47 to 109 for Ozone. For this reporting day, Ozone had many values of 75 or higher indicating that conditions **were not suitable** for open burning, which in turn resulted in a state-wide prohibition for open burning.

Slide 26 - DEEP Website

The State's Predicted Daily AQI Maximums can be found by going onto the State Agency's website at www.ct.gov/deep/aqi. This slide shows you the face page of the AQI website.

This Table is updated daily and should be checked between the hours of 9:00 am and 10:00 am the morning of the proposed burn activity.

To find this table on the State Agency's website, click on the link and search and locate on the face page the table entitled "**Predicted Daily AQI Maximums**". Depending on the reporting periods for fine particles and for ozone, the table will consist of two and/or three columns. The headings for the columns are – Town, Fine Particles and Ozone. Monitoring stations are located in a number of towns statewide. Some monitoring locations may only report numerical values for Fine Particles, while others only report Ozone. There are a number of monitoring locations that report numerical values for both of these pollutants.

Open burning is prohibited statewide when the AQI is predicted to be 75 or higher as indicated for either pollutant as reported in this Table. Again, when looking at the "**Predicted Daily AQI Maximums**" Table, just one single numerical value of 75 or higher entered anywhere in the Table (that is for either of the pollutants - Fine Particles or Ozone), will prohibit open burning from occurring anywhere in the State.

Slide 27 – Day of the Burn: Forest Fire Danger Level

Per Open Burning Permit conditions, burning is PROHIBITED when the Forest Fire Danger Level is rated High, Very High, or Extreme.

Forest fire danger levels are classified at low, moderate, high, very high or extreme.

Starting in early spring, the State Agency's Forestry Division begins monitoring the weather as it relates to Forest Fire Danger. Connecticut traditionally experiences high forest fire danger in the spring from mid-March through May. Throughout the spring forest fire season, the State Agency sends daily advisories on Forest Fire Danger Levels to State Park Forest field staff, municipalities, fire departments and the media.

During the Spring Fire Season and at other times of the year when the fire danger is high, very high or extreme, the State Agency broadcasts daily predictions for fire danger. After the Spring Fire Season, the State Agency continues to monitor the weather as it relates to Forest Fire Danger and the Forest Fire Danger website is updated with any changed conditions.

The State Agency's Forest Fire Danger Level can be accessed at www.ct.gov/deep/forestfiredanger

Looking at the slide, the **Forest Fire Danger Report Level for that day was reported to be moderate, which indicates that for this parameter, conditions are suitable for open burning**. However, the Permittee would also have to check the State Agency website for the Table entitled "Predicted Daily AQI Maximums" for that day as well. If the "Predicted Daily AQI Maximums" also indicated that for this parameter conditions were suitable for open burning, then the permitted burn **could proceed**. If the "Predicted Daily AQI Maximums" for that day indicated that conditions **were not** suitable for open burning, then the burn **could not proceed**.

Again, both the State's "Predicted Daily AQI Maximums" and the State's Forest Fire Danger Level must be checked to determine if conditions are suitable to conduct a burn. If either one indicates that conditions are not suitable, then open burning is prohibited.

Slide 28 - Other Useful Information - Red Flag Warnings

Even with an approved Permit, weather conditions are an important part of whether or not a burn can proceed.

In addition to the State's Predicted Daily AQI Maximums and the State's Forest Fire Danger Level rating, Red Flag Warnings should be considered prior to conducting a burn. Red Flag Warnings are issued by the National Weather Service. Connecticut is divided between three different National Weather Service stations. Predictions for Hartford, Tolland and Windham counties are made in Tauton, MA; predictions for Litchfield County are made in Albany, NY; and predictions for Fairfield, New Haven, Middlesex and New London counties are made in Brookhaven, NY.

A Red Flag Warning is a warning to the fire fighting community and the public that if there is a fire, the weather conditions can be expected to cause erratic fire behavior. When a Red Flag Warning is issued, the National Weather Service will recommend against outdoor burns because of dry conditions, low relative humidity and high winds.

Red Flag Warnings are:

- Not a fire danger rating and they are not synonymous with High, Very High or Extreme fire danger; and
- Issued when winds will be sustained or there will be frequent gusts above a certain threshold (normally 25 mph).

One of the General Conditions applicable to all permits on a locally issued Open Burning Permit restricts open burning when the wind speed exceeds fifteen miles per hour. As noted above, the wind conditions in a Red Flag Warning would exceed the maximum wind speed in a locally issued permit. A Red Flag Warning proves to be a critical indicator that permit conditions would be exceeded and the Permittee should not burn.

In the Spring of 2012, there were a number of Red Flag Warning days and unfortunately, there were a number of authorized burns in which the Permittee went ahead and conducted their burn which quickly got out of control. In one incident that occurred in the northwest part of the State, the Permittee conducted their open burning of brush but the fire escaped and consumed about 20 acres. Twelve fire departments from three states and the State of Connecticut's Department of Energy and Environmental Protection responded to fight the escaped fire. The fire threatened neighboring properties and preparations were made to move possessions and pets as the fire advanced. The fire was eventually contained and fortunately there was no loss of life. This poorly executed burn of a residential brush pile resulted in a significant fire fighting response and 20 acres of environmental degradation and poor air quality.

Slide 29 - Enforcement

Enforcement action can be taken against those violating the State's open burning laws.

Connecticut General Statutes and municipal ordinances regulate open burning.

At the State level, the State's open burning laws are found in the Sections 22a-174(f), 23-48, and 23-49a of the Connecticut General Statutes.

Connecticut General Statutes Section 22a-174(f) provides for the control of open burning.

Connecticut General Statutes Section 23-48 makes it a misdemeanor offense to conduct open burning without express authorization under state or local law.

Connecticut General Statutes Section 23-49a identifies additional prohibitions on open burning when the forest fire danger is declared to be high to extreme. Under this statute, it is a misdemeanor offense.

For misdemeanor offenses, the open burning laws of the State or municipality must be enforced by a peace officer. The Peace Officer would use Connecticut General Statutes Sections 23-48 and 23-49a.

Slide 30 - Enforcement (Cont)

Municipalities have the discretion to choose the municipal officer(s) or employee(s) best able to fulfill the enforcement roles and responsibilities pursuant to State laws and local ordinances. Resources within the municipality may dictate who can most effectively serve in this capacity. In some municipalities, the designated official(s) that is responsible for enforcing and ensuring compliance of the open burning laws and ordinances could be the: Fire Marshal; Fire officials; Member; Open Burning Official; Police Officer; Peace Officer; or the Health officials.

At the municipal level, local Ordinances and enforcement policies can be an important tool in regulating open burning. By having both a local Ordinance and an Enforcement Policy in place, municipalities are better positioned to take timely and effective enforcement actions against violators. It ensures that consistent procedures are applied in the administration of enforcement matters and actions.

For those municipalities that have enacted local Open Burning Ordinances, penalties and fines can be assessed at the local level. These are infractions and can be issued by the designated municipal official responsible for enforcing the open burning laws and ordinances. First offenses range from a written notification to monetary penalties. Some examples are provided:

- A maximum of one written warning shall be allowed to the homeowner, resident or responsible person(s) for violation of the ordinance; after the first written warning in the calendar year, the homeowner, resident or responsible person(s) shall be fined \$100 for each additional warning and this process shall continue up to the third written warning. If the violations continue after the third warning, the Open Burning Official or Fire Marshal shall seek an order from the court system for a cease and desist order of the open burning that the previous written warning were issued for.
- Failure to comply with the ordinance, \$200 for each separate violation and each day of continued violation; the Open Burning Official may, when appropriate, seek enforcement of the provisions of the ordinance by injunction and, in such event, the violator shall pay, as damages, reasonable attorney's fees in prosecuting said action.
- After a third violation of the ordinance, the applicant shall not be issued a burning permit for a period of one year from the third violation date.

If a municipality has an Enforcement Policy that outlines the enforcement process going forward, the **types and range of enforcement actions** may include, but not be limited to, the following:

- In those cases where the fire does not pose significant harm and/or could result in damage to property, the individual conducting the burn could be directed to extinguish the fire and to not repeat the violation;
- Verbal or written warning can be given if the ordinance allows for it;
- Issuance of an infraction for an ordinance;
- Fine and/or imprisonment date; or
- Referral to the State Agency if the violation was egregious.

Slide 31- Enforcement (Cont)

When a permit has been granted by the local Open Burning Official, the Permittee must abide by the conditions as found on the issued permit. The Permittee who is in possession of a valid permit must be certain that all the

conditions on their permit have or can be met prior to conducting a burn, during the burn and at the completion of the burn period. The Permittee must conduct their burn within the time period that is shown on the permit. Municipalities allow for a certain amount of days. Depending on the municipality, the time period window could be days, weeks or months. If the Permittee cannot conduct their authorized burn within the indicated window time period, the permit will become null and void and the individual must re-apply for a permit.

Failure to adhere to the conditions of the permit may result in penalties and/or enforcement actions. Further, some local Open Burning Ordinance lay out that violations of the terms and conditions of the permit may cause forfeiture of a Permittee's ability to qualify for a permit in the future.

The types of violations that do occur under this type of activity can include, but are not limited to, the following:

- The resident fails to obtain a permit.
- The resident obtains a permit but fails to obey conditions of the permit.
- The Permittee burns material other than brush.
- The designated enforcement official receives a complaint in regards to the burn, and will conduct an inspection and finds that the burn is creating a nuisance to nearby properties.

Slide 32 – Take Aways

The Take Away's for this module include the following:

Except for actions on state-owned property, municipalities have the authority to regulate or ban the open burning of brush for any purpose within their boundaries. If open burning is not banned, the local Open Burning Official can issue permits for the open burning of brush on residential property.

A Model Application/Permit Template for "Open Burning of Brush Only on Residential Property" has been developed and made available for local Open Burning Officials. The Template can be modified by the local Open Burning Official but cannot be less stringent than CGS Section 22a-174(f).

The Applicant is the resident of the property and the property should have a Certificate of Occupancy. The material to be burned must be brush only, not larger than three inches in diameter. Once the activity has been permitted, the Applicant is now termed the Permittee. The burn can be conducted by the resident of the property or the agent of the resident. All conditions on the permit must be adhered to; failure to do so may result in enforcement action.

The State of Connecticut's Department of Energy and Environmental Protection's Open Burning Program strongly recommends that the local Open Burning Official conduct a site inspection as part of their fact finding process when considering a permit application.

Slide 33 Take Aways

Each municipality must establish a procedure whereby a Permittee can gain the information needed to determine if conditions are suitable to conduct their permitted open burning activity. Both the State's Predicted Daily AQI Maximums AND the State's Forest Fire Danger Level must be checked to determine if conditions are suitable to conduct a burn. If EITHER the State's Predicted Daily AQI Maximums or the State's Forest Fire Danger Level indicate that conditions are not suitable, then no burn can occur for that day. The model Application/Permit Template has website links for these two criteria.

The local Open Burning Official can add special conditions to the permit. For example, some municipalities require the Permittee to obtain verbal approval from the Fire Marshal's Office on the day of and prior to the burning; and/or provide notice to the local Fire Department's Dispatch on the day of and prior to the burning.

This type of contact is helpful when a Red Flag Warning may in effect for the State and appropriate action can be taken by the Permittee.

In addition, where local Open Burning Ordinances have been adopted, violation of the terms and conditions of the permit may cause forfeiture of the individual's ability to qualify for a permit in the future.

Slide 34 - Acknowledgements

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- The Connecticut Agricultural Experiment Station
- The Town of Ellington, Connecticut - Open Burning Program Information, Regulations and Permit Application Material

Slide 35 - DEEP End Page