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Art Installation Fires Guidelines

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1 ART INSTALLATION FIRES

At Blazing Swan we love fire and we love art installations that incorporate fire. Whether you plan to build your art installation to burn it to the ground, or you simply what to include some element of fire in its display, the Art Team and Fire Team are here to help you.

There are special requirements for all art installations incorporating fire in any way. The below information is there to help you work out how to include fire in your art safely and how to communicate your plans with the Art Team and Fire Team.

Your Blazing Swan Art Installation Application is important in helping us assess your proposed design and fire plans. The more information you can give us, the better.

If you would like to incorporate fire in your art installation but are not sure how, our teams can advise you and work with you to create the best possible concept and design.

2 ART INSTALLATIONS INCORPORATING FIRE (BUT NOT BEING BURNT)

This section refers to art installations that intend to include some element of fire during the period for which they are displayed at the Blazing Swan event.

If your art installation includes fire during its display AND you intend to burn it at some stage of the event, this section and the following section, Art Installations to be Burnt, apply to you.

2.1 Types of Fire

Your art installation can incorporate fire in one (or several) of the following ways:

- **Wood Burning** – in the form of a burn barrel or some style of container, that holds timber, which is burnt at some stage of the artwork's display.
 - Any wood burning flame effect should consider the Burn Barrels information contained in this Fire Management Plan. However, there is some flexibility and all Art Installation Applications will be individually assessed.
- **Liquid Fuel** – this may be in the form of tiki torches or similar receptacles which hold fuel and have a wick which burns, using the liquid fuel as the fire source.
 - Any liquid fuel flame effects must be legal (according to State and Federal laws) and comply with the Liquid Fuel Flame Effects information contained in this Fire Management Plan.
- **Gas** – in the form of a combustible gas which is somehow emitted from the artwork and ignited when dispersed.
 - Any gas flame effects must be legal (according to State and Federal laws) and comply with the Gas Flame Effects information contained in this Fire Management Plan.

- **Pyrotechnics** – in the form of fireworks (ground or air based) that are set off as part of the artwork.
 - Any pyrotechnics must be legal, operated by a licensed and insured operator, under their own regulator (Department of Mines and Petroleum) issued permit and Risk Management Plan.
- **Other Combustible Materials** – any material that under the right conditions creates a flame or fire e.g. corn starch, saw dust, flammable spores etc.

3 ART INSTALLATION APPLICATION

If you intend for your art installation to incorporate fire in any way, you must submit this information for assessment as part of your Blazing Swan Art Installation Application.

You will be required to submit the following information:

- Diagram of the art installation, showing:
 - Location of flames on the art installation
 - Estimated dimensions for the size of the flames
 - Any “plumbing” associated with the production of the flames e.g. liquid fuel containers and/or fuel supply lines.
 - If combustible material is projected, then showing where it’s projected from and by what mechanism.
- Accelerants you plan to use including accelerant type/name and estimated quantity.
- The location of the ignition points for the flames.
- How the flames are ignited.
- On what days/times do you intend your art installation to incorporate fire e.g. every night between 7 and 9pm etc
- Safety measures you will have in place to prevent event participants being able to access, alter, damage or be injured by your art installation fire.

This above information gives the Art Team and Fire Team an indication of your plans for your art installation. This enables them to assess the feasibility and safety aspects of your proposed flame effects. You may be asked to provide more information to enable a thorough assessment, or you may be asked to alter your design to improve safety aspects. This will be discussed with you at the time of your application.

We strongly advise you DO NOT start building your art installation before your fire plans have been assessed by our teams and you have been given clearance for your design. It’s possible that in the assessment process you may be required to make design or structural modifications to your art installation, to facilitate the safe incorporation of fire.

4 ART INSTALLATIONS TO BE BURNT

Art installations at Blazing Swan can be specifically designed and built to be burnt. Generally, the intention of this process is the complete combustion of the artwork, so as to minimise the amount of debris that remain and need to be cleaned-up.

There are specific criteria that art installations intent for burning must fulfil in order for the burn to be permitted at Blazing Swan. Art installations that don't meet these criteria will not be permitted to burn.

Art installations intended to burn must, in general, be built from burn safe, non-toxic materials, designed to burn and fall in a safe manner and any remains of the art installation after the burn (including coal, ash, metal components and other debris) must be removed from the event site and appropriately (legally) disposed.

4.1 Structural Criteria

The below list outlines the structural criteria for art installations intended to be burnt. You must incorporate these criteria in the design of your artwork.

- Materials must be fully combustible or easily removable after burning.
- If metal components are needed, mild steel is recommended for easy removal by magnet-rake. Aluminium and stainless steel are not recommended, as they can be very difficult to remove from the ashes.
- Paper, cardboard or cloth is discouraged due to high ember production.
- Paint should be kept to a minimum, and preferably latex, tempera, milk or other "less toxic" varieties.
- Paint should be thinned with water, wherever possible, to reduce the amount of non-wood material being burned.
- Structures should be designed for an orderly collapse.
- Top-heavy structures should have weak-points for collapse.
- Avoiding thick vertical beams will result in a quicker collapse.

5 BURN CRITERIA

The below burn criteria will assist you in facilitating a safe burn for your art installation.

If you have read the below information and are not confident about how best to burn your artwork, the Art Team and Fire Team will assist you.

5.1 Accelerants, Fuelling and Lighting

- If accelerants are used to initiate burning, we highly recommend the use of COMBUSTIBLE fuels over FLAMMABLE.
 - Combustible materials catch fire between 37.9°C and 93.3°C (high flash point).
 - Combustible materials burn above working temperatures. This makes them safer to work with and store.
 - Combustible materials are things that are able to catch fire and burn easily.
 - Some options you can use are:
 - adding straw to your structure,
 - cladding your structure in hessian or adding hessian before burning,
 - hanging wax dipped hessian sheets inside your structure to act as giant wicks,
 - coating your structure in wax (did you know this is done to The Man at Burning Man?).

- Flammable materials catch fire below 37.9°C (low flash point)
- Flammable materials catch fire at normal working temperatures. This makes them more dangerous to work with and store.
- Flammable materials, like combustible materials, catch fire and burn easily, however they either create more debris (like paper) or are more toxic (like diesel).
- 100% Petrol or White Gas is NOT RECOMMENDED.
- A huge fire can be lit with careful lighting and just 10 litres of accelerant. If you think you need more, you should be re-evaluating how your structure will burn.
- Artists are expected to provide the necessary accelerants for their installation.
- The recommended lighting instrument is a 2.5 metre wooden pole with Kevlar wick or a flare securely attached.
- The Blazing Swan Fire Lead can advise you on the choice of accelerant and lighting method, but **procurement of these is the artist's responsibility**.
- The artist may light the structure themselves, or ask for assistance from the DFES Lead, Fire Lead or Art Lead. In all cases, these 3 parties have discretion on who may light the structure and may override in cases such as; fuel-contaminated clothing, or intoxication.
- Individuals involved in fueling the art installation cannot also light the installation.

5.2 Perimeter

- It is the responsibility of the artist to put in place a burn perimeter for their art installation prior to the burn. This is best achieved using star pickets and rope or flagging tape.
- It is the responsibility of the artist to supply the materials necessary to create the burn perimeter.
- The **minimum** “inner perimeter” beyond which *no one* should enter during burning should be 1.5x the height of the art installation, measured from the edge of the structure. The actual safe inner perimeter dimensions may change based on the type of structure, effects in use, and weather conditions. This can be determined on site, on the day of the burn.
- The **minimum** “outer perimeter” beyond which *no spectators* should enter during burning should be 2.0x the height of the art installation, measured from the edge of the structure. The actual safe outer perimeter dimensions may change based on the type of structure, effects in use, and weather conditions. This can be determined on site, on the day of the burn.
- Blazing Swan provides Rangers to assist with maintaining the burn perimeter during the burning of the art installation. The artist may also be asked to provide additional personnel to assist the Rangers.
- DFES personnel may be required for perimeter control, where deemed necessary.
- The number of Rangers, DFES personnel and artists own volunteers will be determined in the planning stages of the burn and finalised on site, on the day of the burn, by the DFES Lead, Ranger Lead and Fire Lead.
- Perimeter personnel are required to span the entire circumference of the perimeter at 3 metre intervals.

5.3 Safety Measures

- Necessary site protection during burning will be advised by the Department of Fire and Emergency (DFES) service personnel whom will be present at the event, in coordination with the Blazing Swan Art Lead and Blazing Swan Fire Lead.
- Necessary site protection will be evaluated pre-event during the burn planning process, but will only be finalised on site, on the day of the burn, based on weather conditions at the time.
- You are not permitted to burn your art installation without the necessary safety measures in place and either the DFES Lead, Art Lead or Fire Lead present and authorising the burn on the day.

5.4 Clean-up

- It is the artist's responsibility to mind the final burn pile, raking regularly to ensure complete combustion of all wood. Careful tending will result in a dramatically easier clean-up.
- Burn site clean-up is the artist's responsibility.
- All unburnt materials, coal, ash, metal and any other debris must be removed from the event site. This is in alignment with the Blazing Swan principle of Leave No Trace.

5.5 Art Installation Application

If you intend for your art installation to be burnt at some stage during the Blazing Swan event, you must submit this information for assessment as part of your Blazing Swan Art Installation Application. This information must come in the form of a Burn Plan.

6 BURN PLAN

The artist must produce a Burn Plan which details the information necessary to facilitate a safe burn of their art installation.

The Burn Plan **Outline** must be written and submitted as part of the Art Installation Application. The Burn Plan **Detail** must be written once an art installation is accepted for installation at Blazing Swan.

We strongly advise you DO NOT start building your art installation before your Burn Plan has been assessed by the Fire Lead, as you may be required to make design or structural modifications to your art installation to facilitate a safe burn.

6.1 Burn Plan Outline

Your Burn Plan Outline must contain the following minimum information:

- Preferred day and time for the burn of the art installation.
- Diagram of the art installation showing;
 - Maximum height, plus length and width or diameter of the structure.
 - The inner perimeter dimensions (1.5x the height of the structure, measured from the base).
 - The outer perimeter dimensions (2.0x the height of the structure, measured from the base)

- Accelerants you plan to use in the burn, including accelerant type/name and estimated quantity.
- The location of the ignition points for the structure.

6.2 Burn Plan Detail

All of the information included in the Burn Plan Outline, plus the below information:

- Team list, including;
 - Who will be preparing the structure for burning.
 - Who will apply fuel to the structure.
 - Who is lighting the structure.
 - Who is managing the burn-down of the ashes and clean-up.
- Any specific actions/processes needed to prepare the art installation for burning e.g. removing lights or electrical wiring, moving parts of the installation for a better burn, weakening the structural supports, adding combustible materials etc.
- Timeline for the burn, starting from the time the art installation is closed to the public, through to clean-up of all post-burn debris.

NOTE: Exact timing will get worked out in consultation with the Fire Lead, Art Lead, DFES Lead and Ranger Lead. The intent of the artist's timeline is to capture all of the actions needed, put them in order, and assign a time estimate.

6.3 Fuel and Hazardous Materials Storage

Storage of hazardous or combustible materials, associated with an art installation, is the artist's responsibility. Please refer to the Fuel and Hazardous Material Storage information earlier in this Fire Management Plan Manual for full details.