

# ISLAND SHAKESPEARE FESTIVAL SMOKE PROTOCOL

*This Smoke Protocol draws from that developed by the Oregon Shakespeare Festival.*

When visible/smelled/reported smoke is present, the Smoke Team will track and report conditions for South Whidbey Locations through the EPA at [airnow.gov](http://airnow.gov), [PurpleAir.com](http://PurpleAir.com), and [IQair.com](http://IQair.com).

**The Smoke Team** includes the Executive Artistic Director, Operations Director, Production Manager, Stage Managers, House Manager, and Artist Advocates.

**If a performance is canceled due to smoke, ticket holders will be offered the option to transfer their ticket to another night, receive a refund for their tickets, or donate the cost of their tickets.**

## **CRITERIA FOR DETERMINING PERFORMANCE STATUS**

The criteria and thresholds for performance cancellation and modification is a fluid and evolving matrix of factors, subject to change based on new information on how smoky conditions affect health and well-being, and the specific needs of each season's performers and plays.

In wildfire conditions we refer to the air quality rating system, specifically the PM2.5 value. We use real-time, 1-hour, and 24-hour **US EPA PM 2.5 AQI** and **Raw PM2.5 ( $\mu\text{g}/\text{m}^3$ )** readings and consider them in relation to one another (see tables 1 and 2).

In addition to the air quality rating values, the following factors must also be considered:

- Trending of air quality data - is it getting better or worse?
- Duration of exposure - how long and how severe have conditions been and how long is it predicted to continue?
- Forecast for evening - will winds or other factors bring relief or more smoke?
- Health status and/or sensitivities of collaborators
- Demands of a particular show and possible accommodations for performance to continue.

Due to the myriad factors involved, the scientific data serves as a tool in decision-making. The smoke team will use good judgment to decide whether a performance can go on. Table 2, Decision Matrix, aims to provide tangible guidelines to assist in the process.

## **TIMELINE/PROCEDURES**

- Each smoke night should have an on-call team of three (3) members of the Smoke Team
- On smoky days, the Operations and/or Artistic Director will periodically report air quality readings to the Smoke Team and will call on-site/virtual meetings as needed.

# ISF SMOKE DECISION MAKING AND COMMUNICATIONS PROCEDURES

- Table 2: Smoke Decision Matrix, helps determine when conditions are **SAFE**, must be **CANCELED**, or must be **MONITORED**.

## The "Monitoring" protocol is as follows:

### **11:00 AM:**

- The Smoke Team will discuss the current conditions and forecast.
- If the forecast predicts that conditions will not improve in the evening, the Smoke Team will decide to cancel the performance unless an indoor venue is deemed a viable option.
- If the forecast predicts that conditions will improve, the decision will be deferred to 4pm.
- The Smoke Team will monitor through the day and may decide to cancel any time before 4pm.

### **4:00 PM:**

- If the morning decision was deferred to 4pm, the Smoke Team will meet in the tent and confer with the Stage Managers and House Manager to consider conditions and collaborator health.
- The goal is to make a performance "go" or "no-go" decision by 4:30p.

## **IF THE DECISION IS "GO":**

- The Smoke Team will stay on site to continue to assess situation.
- Actors may wear KN95 masks backstage, onstage, or both.
- Modifications to exertive choreography may be in effect.
- At any time, the Stage Manager may pause the show to get feedback from collaborators, or to consult with the on-site smoke team members.
- If conditions worsen, the performance may be cancelled partway through.

## **READING THE DATA**

The first table describes the color coding of different air quality descriptors. We primarily use the US EPA PM2.5 AQI and Raw PM2.5 ( $\mu\text{g}/\text{m}^3$ ). The second table describes the relationship between those two measurements.

- Raw PM2.5 ( $\mu\text{g}/\text{m}^3$ ) is the vertical axis. This measures the concentration of fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller (most common woodsmoke particulate)
- US EPA PM2.5 AQI is the horizontal axis. This number reflects a standardized measurement of the 24-hour average of raw particulate concentration.

## **WHEN YOU'LL HEAR FROM US**

- On smoky days, we'll email ticket holders and update our social media and website homepage with the current performance status (canceled, safe, or "monitoring") by 11:30AM and 4:30PM.
  - Ticket holders will be made aware of their options for transfer, refund, or donation (we understand some folks have different sensitivities and may not safely attend even if it is safe to perform)

# ISF SMOKE DECISION MAKING AND COMMUNICATIONS PROCEDURES

TABLE 1: AIR QUALITY RATING SYSTEMS AND CATEGORIES

Air Quality Rating	US EPA 2.5PM AQI	Raw PM2.5 ( $\mu\text{g}/\text{m}^3$ )	Visibility (miles)	Cautionary Statements
Good	0 - 50	0 - 38	> 11	None
Moderate	51 - 100	39 - 88	6 - 10	None
Unhealthy for Sensitive Groups	101 - 150	89 - 138	3 - 5	Sensitive Groups (SG) limit prolonged exertion
Unhealthy	151 - 200	139 - 351	1.5 - 3	SG avoid exertion; All limit prolonged outdoor exertion
Very Unhealthy	201 - 300	352 - 526	1 - 1.5	SG limit outdoor activities, everyone avoid outdoor exertion
Hazardous	> 300	> 526	< 1	Everyone <b>avoid</b> outdoor activities

**Sensitive Groups** (SG) include persons with respiratory and/or heart disease, the elderly, and children.

TABLE 2: POOR AIR DECISION MAKING

		If 1-Hr US EPA PM2.5 AQI is..						
		Good < 50	Moderate 51-100	UFSG 101-150	Unhealthy 151-200	Unhealthy 201-300	Hazardous > 301	
If 1-Hr Raw PM2.5 ( $\mu\text{g}/\text{m}^3$ )	0-38	Safe	Safe	Safe	Monitor	Monitor	Cancel	
	39-75							
	76-88		Monitor	Monitor				
	89-110	Monitor	Cancel	Cancel	Cancel	Cancel		
	111-120							
	121-138	Cancel	Cancel	Cancel	Cancel	Cancel		
	>139							