

# Standard Operating Procedures Manual

## **City of Poquoson Fire and Rescue**



### **City of Poquoson Fire and Rescue**

830 Poquoson Ave.  
Poquoson, VA 23662  
757-868-3510  
F757-868-3514

### **GENERAL ADMINISTRATION**

**SOP#:** GA 9.00

**Title:** Training and Weather  
Conditions

**Effective Date:** 01/01/2009

**Revised Date:** 01/01/2009

  
\_\_\_\_\_  
**Fire Chief's Signature**

  
\_\_\_\_\_  
**City Manager's Signature**

### **TRAINING AND WEATHER CONDITIONS**

#### **I. PURPOSE**

To establish guidelines for outside training activities during hot and cold weather months.

This SOP is not all-inclusive and cannot encompass all situations that may be encountered.

#### **II. SCOPE**

The Department encourages safe, continuous fire and EMS training. The Poquoson Fire/Rescue Department (PFD) recognizes the extreme temperatures endemic to this region; therefore, the department has adopted the Heat Stress Index and the Wind Chill-Temperature Index (NFPA 1584) as guidelines for conducting outside training. To assist in preventing environmental and thermal-related stress injuries and illnesses during outside, practical training, guidelines have been established to optimize safety.

### **III. RESPONSIBILITIES**

**Deputy Chief:** Shall be responsible for the overall management and safe operations of company training, recruit training, as well as any Virginia Department of Fire Programs certified training held by PFD.

**Training instructors:** Shall be responsible for evaluating weather conditions and postponing training evolutions if deemed unsafe.

**Company officers:** Shall be responsible for adhering to policies while planning and conducting outside, practical training, as well as the overall safety of their personnel.

**All Personnel:** Shall be responsible for adhering to policies and recommendations to remain safe and healthy during training.

### **IV. PROCEDURES**

#### **Suspension of Outside Training Activities**

- Hot Weather Months –The information concluded from the Heat Stress Index, U.S. Fire Administration, FA-114, Emergency Incident Rehabilitation, is the criteria for determining the times of day when outside training activities are not to be conducted. This resource is also referenced in NFPA 1584 Recommended Practice on the Rehabilitation of Members Operating at Incident Scene Operations and Training Exercises. To use the Heat Stress Index table, determine the approximate outside air temperature and humidity. These readings can be found by using a weather based website or from assessing a weather channel.
- Outside training activities, which require prolonged, considerable physical exertion, shall not be conducted during times of day when the Heat Stress Index exceeds 105°.

- Cold Weather Months – The Information concluded from the NOAA/National Weather Service Wind Chill-Temperature (WCT) Index is the criteria for determining the times of day when outside training activities are not to be conducted. This resource is also reference in NFPA 1584 Recommended Practice on the Rehabilitation of Members Operating at Incident Scene Operations and Training Exercises. To use the WCT Index table, determine the approximate outside air temperature and wind speed. These readings can be found by using a weather based website or from assessing a weather channel.
- Outside training activities, which expose personnel to cold weather elements for extended periods of time, shall not be conducted during times of day when the temperature or the WCT Index drops to 30° Fahrenheit or below.

## HEAT STRESS INDEX

TEMPERATURE °F	RELATIVE HUMIDITY								
	10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	115	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
82	77	79	80	81	84	86	89	91	95
80	75	77	78	79	81	83	85	86	89
78	72	75	77	78	79	80	81	83	85
76	70	72	75	76	77	77	77	78	79
74	68	70	73	74	75	75	75	76	77

**NOTE: Add 10°F when protective clothing is worn and add 10°F when in direct sunlight.**

<b>HUMITURE °F</b>	<b>DANGER CATEGORY</b>	<b>INJURY THREAT</b>
BELOW 60°	NONE	LITTLE OR NO DANGER UNDER NORMAL CIRCUMSTANCES
80° - 90°	CAUTION	FATIGUE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
90° - 105°	EXTREME	HEAT CRAMPS AND HEAT EXHAUSTION CAUTION POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
105° - 130°	DANGER	HEAT CRAMPS OR EXHAUSTION LIKELY, HEAT STROKE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
ABOVE 130°	EXTREME DANGER	HEAT STROKE IMMINENT!

## WIND CHILL INDEX

		TEMPERATURE °F													
		45	40	35	30	25	20	15	10	5	0	-5	-10	-15	-21
WIND SPEED (MPH)	5	43	37	32	27	22	16	11	6	0	-5	-10	-15	-21	
	10	34	28	22	16	10	3	-3	-9	-15	-22	-27	-34	-40	
	15	29	23	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51	
	20	26	19	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60	
	25	23	16	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66	
	30	21	13	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71	
	35	20	12	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-75	
	40	19	11	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76	
	45	18	10	2	-6	-14	-22	-30	-38	-46	-54	-62	-70	-78	
		A	B	C											