

Wildfire Smoke Safety Program

The City has evaluated the risk to wildfire smoke exposure for our outdoor workers and has determined that an exposure to potentially hazardous levels of wildfire smoke exists. The evaluation included reviewing recent historic data on PM_{2.5} pollution levels for the areas where our employees work outdoors. We have determined it is likely that our employees working outdoors may be exposed to hazardous levels of wildfire smoke pollution while fulfilling their job duties. Due to this exposure, the City is implementing a wildfire smoke safety program.

The intentions of the program are as follows:

1. Identify employee groups and departments who are potentially affected by exposure to wildfire smoke in their assigned work duties while outdoors
2. Determine the method of PM_{2.5} pollution measurement the City will use, and establish an assignment for regularly checking PM_{2.5} pollutant levels
3. Establish or identify methods of two-way communication available to field employees
4. Develop and deploy training for affected workers and supervisors
5. Respond appropriately to workers who may experience health impacts from wildfire smoke exposure
6. Identify and prepare controls to implement when wildfire smoke action levels are met or exceeded
7. Implement a voluntary respiratory program for affected employees

Affected employees and workgroups

The City has reviewed the job descriptions and work duties of all employees to determine which employees, work groups, and departments have potential exposure to wildfire smoke. The wildfire smoke program addresses outdoor exposures; therefore, employees who do not work outdoors will not be impacted by this program and are exempt from trainings and all other obligations here presented. Furthermore, the following workplaces and operations are exempt from this program:

- Employees working in enclosed buildings and structures where windows, doors, and bays remained shut except for entry/exit
- Employees working in enclosed vehicles with air filters in the cabin and windows/doors closed
- Employees exposed to a smokey environment above action level for less than one hour per shift

Based on the City's review, and considering the exemptions noted above, the following departments will be covered by this wildfire smoke safety program.

Covered departments:

- Parks and Recreation
- Public Works

PM_{2.5} pollution level monitoring

The City's safety controls are triggered when PM_{2.5} pollution levels meet or exceed the action level as determined by state safety rules. Wildfire smoke pollution is a mixture of tiny solids or liquid droplets; these particles can include smoke, soot, and dust in the air. PM_{2.5} pollution is particulate matter with particulate size less than 2.5 micrometers (µm).

During every annual fire season – July through September – and in times of potential exposure outside this schedule, the City will monitor air quality for PM_{2.5} ahead of every shift for affected employees. Air quality will be checked throughout shifts as well. The frequency of checks will depend on the stability of the weather; checks will be more frequent with quickly changing weather or smoke levels. The City's Fire Chief will be responsible for checking the air quality. When PM_{2.5} levels reach the action level (20.5µg/m³), the Fire Chief will alert managers of departments who have affected employees to alert them of the need to initiate controls and voluntary respiratory protection.

The City will use air quality reporting from the EPA's Air Now air quality index (AQI): airnow.gov. The assigned monitor, as well as other employees, may obtain the information from the following sources: airnow.gov.

Two-way communication plan

For the City to reliably be able to implement controls in response to in-shift air quality changes, and for employees to be able to report changing weather in work locations, reliable two-way communication systems are necessary.

To ensure communication, all remote workers or work groups will be accessible for communication via cellular devices.

Employee training

Before the start of each fire season, affected employees will receive training on wildfire smoke safety. If new employees begin work in-season, they will receive training before working outdoors on days where the PM_{2.5} action level has been exceeded. Employee training will be the responsibility of each department manager. Those conducting trainings will take attendance and will note trainer will submit training records to Human Resources.

The following training elements will be provided to all affected employees:

- Know potential health impacts of smoke exposure, and those who might be most sensitive to them
- Be aware of how air quality is monitored, and how you can watch it as well (websites, mobile apps)
- Understand what controls will be implemented by the City when wildfire smoke becomes hazardous
- Know how voluntary respiratory protection plans work, and where to access filtering facepiece respirators
- Familiarize workers with the City's 2-way communication plan
- Encourage employees to report any potential health symptom as they work in environments with hazardous wildfire smoke levels (above action level)

Supervisors must receive this training, as well as any additional training needed to know the following:

- Signs and symptoms of wildfire smoke exposure, and how to assist exposed workers and report exposures
- Duties and obligations when enacting identified controls and voluntary respiratory protection
- When and how to send workers to an emergency medical services provided, if necessary

Training resources will be reviewed annually before employee and supervisor trainings to ensure that all identified controls and other information are up to date. Human Resources, Fire Chief, or designee will be responsible for this annual review. Additional brief trainings will be provided to affected employees if controls or other program elements change during a fire season.

Responding to employee exposure and symptoms

The City's clear priority with this program is to keep workers with wildfire smoke pollution exposure safe. When employees who have been exposed to wildfire smoke do exhibit signs or symptoms of excessive smoke exposure, supervisors and managers will act to ensure to worker receives appropriate medical care and the rest/break needed to recover from such exposure.

Supervisors and affected employees will be trained on the signs and symptoms of wildfire smoke exposure. During times when the action level is exceeded, supervisors will be obligated to check-in with workers at least every three (3) hours to see if they are experiencing any health impacts from the smoke. If an employee does show health impacts, the supervisor and employees will discuss what the appropriate response will be. Supervisors will communicate with managers as needed when making such determinations. Some response options are as follows:

- Provide an additional or extended rest break for the employee indoors or in a controlled environment free of smoke
- Offer a filtering facepiece respirator if not already wearing one
- Seek medical attention for symptoms

In cases where such response is required, the employee and supervisor will fill out an exposure report form so the circumstances of the exposure and the program may be evaluation by department management, the program administrator, and the safety committee.

Exposure controls

When the wildfire smoke pollution action level is met or exceeded ($20.5\mu\text{g}/\text{m}^3$), the City will initiate our identified exposure controls. When exposure controls are implemented, department managers will determine what controls will be initiated. This information will be provided to supervisors, who will inform their work groups via the established communication system noted in this program. Employees will be trained on any exposure control before it is implemented under this program so they know how it works, and their associated duties, if any.

Engineering controls:

Engineering controls are devices, equipment, or technology that provide physical barriers between a worker and a hazard. The following engineering controls have been identified for use when wildfire smoke pollution reaches or exceeds action levels:

- Provide enclosed buildings, structures, or vehicles with filtered air.
- Provide respirators, such as an N95.

Administrative controls:

Administrative controls are rules or guidelines the City can issue to direct how work is done, and how exposed employees are. The following administrative controls have been identified for use when wildfire smoke pollution reaches or exceeds action levels:

- Reschedule work for a time with less smoke pollution.
- Relocate work to less smoky areas.
- Avoid work that creates dust, fumes, or smoke.
- Reduce work intensity.
- Provide additional rest periods.

Respiratory protection

When $\text{PM}_{2.5}$ concentrations exceed $20.5\mu\text{g}/\text{m}^3$, the City will make filtering facepiece respirators (FFR) available to affected employees on a voluntary basis for use at their discretion. Proper use, fit, and disposal of respirators will be covered in employee training under this program.

Employees will not be permitted to use other face coverings such as surgical masks, gaiters, and bandanas. These face coverings are not acceptable substitutes for respirators in smokey situations because we do not know the expected protection that such devices can deliver, and we cannot assume they are providing proper respiratory protection to the wearer.

Voluntary respiratory protection program rules established in WAC 296-842 will be followed here for those employees not already covered due to other exposures at work. For voluntary protection programs, the City will make N95 respirators available to employees when the action level air quality is reached. Employees will not be mandated to wear the masks; the City's duty is to provide the masks and train employees on how to properly use them. The City will not allow employees to use higher-level respirators as such use triggers medical evaluation and fit-testing requirements not in the voluntary program.

Employees will be able to access an N95 FFR at the following locations:

- Clean Water Facility
- Fire Stations
- Public Works