Date: May 3, 2022

To: Nevada Businesses

Re: Wildfire Health Guidance for Nevada Businesses

Background

Wildfire smoke is known to regularly blanket broad regions of Nevada. The presence of smoke from wildfires directly impacts both indoor and outdoor air quality in regions where smoke is present. Wildfire smoke is composed of small particles suspended in the air that present a health hazard for workers exposed to it. These particles can irritate the lungs and have a range of potentially serious health effects from permanently reduced lung function to heart failure. Air quality is monitored using the Environmental Protection Agency (EPA) Air Quality Index (AQI) which identifies the level of air pollution.

The EPA Air Quality Index categories are separated into 6 levels of concern. They are:

- 0 to 50 – Good  
  - Air quality is satisfactory and poses little or no risk.
- 51 to 100 – Moderate  
  - Air quality is acceptable. There may be a risk for some people who are unusually sensitive to air pollution.
- 101 to 150 – Unhealthy for Sensitive Groups  
  - Members of sensitive groups may experience health effects.
- 151 to 200 – Unhealthy  
  - Some members of the general public may experience health effects. Sensitive groups may experience more serious health effects.
- 201 to 300 – Very Unhealthy  
  - Health alert: The risk of health effects is increased for everyone.
- 301 and higher – Hazardous  
  - Health warning of emergency conditions: Everyone is more likely to be affected.

AQI Trend Report

In previous years, AQI trends in northern Nevada indicate significant patterns of hazardous outdoor air quality, with some localized monitoring stations in and around Reno, Carson City, Stateline, Virginia City, and Minden/Gardnerville showing AQI levels at or above 450. Refer to
historical data available at https://fire.airnow.gov/ for a full list of permanent and temporary air quality monitoring stations and their recent historical data (where available).

Air Quality Index Report
Total Days AQI Unhealthy, Very Unhealthy, and Hazardous.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Clark</td>
<td>23</td>
<td>26</td>
<td>29</td>
<td>49</td>
<td>5</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Douglas</td>
<td>7</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>-</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>Elko</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Lyon</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>-</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Nye</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Washoe</td>
<td>12</td>
<td>7</td>
<td>4</td>
<td>19</td>
<td>-</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>White Pine</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Carson City</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>-</td>
<td>20</td>
<td>28</td>
</tr>
</tbody>
</table>

(Source: Air Quality Index Report | US EPA)

Duties of Employers

In general, outdoor air quality is highly variable depending on location, altitude, and weather conditions. Employers are expected to monitor working conditions at any location where their employees are performing work, to identify hazards that are causing or are likely to cause harm to their employees, and to implement effective methods to control those hazards.

While Nevada OSHA has not set an outdoor air quality standard, if the agency determines that workers are exposed to an uncontrolled hazard based on the outdoor air quality at their workplace, the agency could consider an enforcement action under the Nevada General Duty Clause, NRS 618.375(1).

Recommendations for Businesses

Businesses can take proactive steps to mitigate the effects of wildfire smoke and meet their general duty to protect their employees. Please note that this guidance does not contain new enforceable standards. At this time, neither Nevada OSHA nor the federal OSHA program have promulgated enforceable standards that define outdoor air quality requirements, exposure limits, or work stoppage requirements.

When air quality is impacted by wildfire smoke, employers should consider the following:

- Monitor the EPA Air Quality map at least once daily if working in an area exposed to wildfire smoke. The map is located at this website: https://gispub.epa.gov/airnow/.
- Provide training regarding the hazards of wildfire smoke and encourage employees to report worsening air quality issues and any potential personal health effects resulting from poor air quality.
- Determine when respiratory protection is needed and what type is appropriate based on the Respiratory Protection Standard in 29 CFR 1926.103 and 29 CFR 1910.134.
Consider maintaining a sufficient supply of N95 respirators for voluntary use by employees. Employers that allow employees to voluntarily wear N95 respirators must comply with the voluntary-use provisions of 29 CFR 1910.134.

- Follow the activity level guidance in the EPA’s Air Quality Guide for Particle Pollution for the applicable Air Quality Index as shown in Appendix A.
- Consider increasing the frequency of breaks in an indoor environment with appropriate ventilation and air filtering.
- Establish clear procedures for when work stoppage will occur as a result of current air quality levels.
- Establish and implement a plan to respond to employees reporting symptoms of exposure to wildfire smoke.

Assistance Available from Nevada Safety Consultation and Training Section (SCATS)

SCATS is here to help. SCATS is focused on keeping Nevadans safe and healthy while on the job. SCATS offers resources for employers and employees alike, from training to consultation to safety program review. Air quality is a recognized hazard that should be addressed in each business’s Written Workplace Safety Program (WWSP). SCATS can review and make recommendations on best practices and implementation of an employer’s air quality protocols. If your business has questions or needs onsite training or consultation, please submit a request by calling 877-472-3368 or submitting a consultation request at https://www.4safenv.state.nv.us/contact/.

How to File a Complaint

Employees who feel they have been exposed to a hazardous condition in the workplace, have the right to raise their concerns with their employer or to file a complaint with Nevada OSHA. Such a complaint may trigger an inspection of the workplace. An employee who raises concerns with their employer or files an OSHA complaint is protected against retaliation or discrimination for having done so by NRS 618.445 and section 11(c) of the federal Occupational Safety and Health Act, Pub. L. 91-596, 84 Stat. 1590. If an employee files a complaint with Nevada OSHA, their name and contact information will be held as confidential information pursuant to NRS 618.341(3)(a).

To file a complaint, please visit https://www.osha.gov/workers/file-complaint or call Nevada OSHA at (702) 486-9020 (southern Nevada) or (775) 688-3700 (northern Nevada).

References:

EPA PM Pollution Guidance
- https://www.epa.gov/pm-pollution

EPA Air Quality Index
- https://www.airnow.gov/airnow/aqi/aqi-basics/
- https://gispub.epa.gov/airnow/
- https://fire.airnow.gov/
Respiratory Protection Standards

- https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.103

Appendix A: Air Quality Guide for Particle Pollution
### Air Quality Guide for Particle Pollution

Harmful particle pollution is one of our nation’s most common air pollutants. Use the chart below to help reduce your exposure and protect your health. For your local air quality forecast, visit [www.airnow.gov](http://www.airnow.gov).

<table>
<thead>
<tr>
<th>Air Quality Index</th>
<th>Who Needs to be Concerned?</th>
<th>What Should I Do?</th>
</tr>
</thead>
</table>
| Good (0-50)       | *It’s a great day to be active outside.*
| Moderate (51-100) | *Some people who may be unusually sensitive to particle pollution.*
|                   | **Unusually sensitive people**: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.  
|                   | **Everyone else**: It’s a good day to be active outside. |
| Unhealthy for Sensitive Groups (101-150) | *Sensitive groups include people with heart or lung disease, older adults, children and teenagers.*
|                   | **Sensitive groups**: Reduce prolonged or heavy exertion. It’s OK to be active outside, but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath.  
|                   | **People with asthma** should follow their asthma action plans and keep quick relief medicine handy.  
|                   | **If you have heart disease**: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider. |
| Unhealthy (151-200) | **Everyone**
|                   | **Sensitive groups**: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling.  
|                   | **Everyone else**: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities. |
| Very Unhealthy (201-300) | **Everyone**
|                   | **Sensitive groups**: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better.  
|                   | **Everyone else**: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better. |
| Hazardous (301-500) | **Everyone**
|                   | **Everyone**: Avoid all physical activity outdoors. **Sensitive groups**: Remain indoors and keep activity levels low. Follow tips for keeping particle levels low indoors. |