

# **MINISTRY OF MANPOWER**

## **GUIDELINES FOR OUTDOOR WORK DURING A HAZE**

1. The Ministry advises employers to ensure that appropriate precautionary measures are taken to safeguard the health and safety of their workers especially those who have to work outdoors during the haze. Outdoor workers are those who are required to work outside buildings **regularly or most of the time**. It does not include those who commute to and from work.

The issue of the guidelines is part of the overall Haze Task Force Action Plan. The PSI levels refer to the 24-hour average.

### **Respirators**

2. Employers should provide suitable respirators to workers who need to use them for outdoor work as part of the safety and health requirements for the protection of the health of their workers. They should ensure a sufficient stock of respirators for their workers.

3. The correct type of particulate respirator which is capable of filtering out about 95% of very fine particles should be provided. Disposable respirators, such as N95 masks, are preferable as they are more comfortable to wear.

4. Outdoor workers are advised to use respirators when the PSI levels exceed 200 and they must use respirators when the PSI levels exceed 300.

### **Susceptible Workers**

5. Workers with existing heart or respiratory ailments are more susceptible to the effects of the haze. When the PSI levels exceed 100, outdoor workers with existing heart or respiratory ailments are advised to consult their doctors on their fitness to work outdoors and to use respirators. If they experience difficulty working outdoors, employers should deploy them to indoor work. At higher PSI levels (>200), they should be deployed to indoor work which is not physically strenuous.

### **Work Restriction**

6. When the PSI levels exceed 300, outdoor work should not be carried out unless workers are adequately protected (eg with suitable respirators). Those who have difficulty with using respirators and working outdoors should be deployed to indoor work. In addition, outdoor work which involves strenuous physical activity should be minimised.

7. For safety reasons, when the PSI levels exceed 300, outdoor work with a risk of falling from heights should not be allowed (unless precautions have been taken to reduce this risk). All crane operations must stop when visibility falls below 150 m.

8. When the PSI levels exceed 400, no outdoor work should be allowed except emergency and essential services.

**MOM'S GUIDELINES FOR THE PROTECTION OF OUTDOOR WORKERS  
AGAINST THE EFFECTS OF THE HAZE**

<b>24-Hour PSI Reading</b>	<b>General Health Effects</b>	<b>MOM's Advice for Outdoor Workers and Employers</b>
101-200 (unhealthy)	Mild aggravation of symptoms among susceptible people, with irritation symptoms in the healthy population.	<ul style="list-style-type: none"> <li>i) Outdoor workers with existing heart or respiratory ailments are advised to consult their doctors on their fitness to work outdoors and to use respirators. Employers are advised to provide the respirators.</li> <li>ii) If these workers have difficulty working outdoors, employers should deploy them to indoor work.</li> </ul>
201-300 (very unhealthy)	Significant aggravation of symptoms and decreased tolerance in persons with heart or lung disease; widespread symptoms in healthy population.	<ul style="list-style-type: none"> <li>i) All outdoor workers are advised to use respirators. Employers should provide suitable respirators.</li> <li>ii) Workers with existing heart or respiratory ailments or older workers (&gt;55) should be deployed to indoor work which is not physically strenuous.</li> </ul>
301-400 (hazardous )	Early onset of certain diseases in addition to significant aggravation of symptoms and decreased exercise tolerance in healthy persons.	<ul style="list-style-type: none"> <li>i) All outdoor workers must wear respirators. Employers must provide suitable respirators.</li> <li>ii) Workers with existing heart or respiratory ailments or who are older (&gt;55) should remain indoors and avoid strenuous work.</li> <li>iii) Outdoor work which involves strenuous physical activity should be minimised.</li> <li>iv) Outdoor work with a risk of falling from heights should not be allowed.</li> <li>v) All crane operations must stop when visibility falls below 150 m.</li> </ul>
>400 (hazardous )	May be life threatening to ill and elderly persons. Healthy people experience adverse symptoms that affect normal activity.	No outdoor work allowed except emergency and essential services. Workers involved must wear suitable respirators.