

4.2 ISSUES

- 4.2.1 Poor air quality can seriously affect human health, **amenity** and the environment. Air pollution in some areas of the Auckland Region is already exceeding acceptable levels for health and **amenity**. At the current rate of growth it is likely that air pollution levels will worsen and the Auckland Regional Air Quality Targets will not be achieved by 2010.
- 4.2.2 Air quality in the Auckland Region is primarily affected by the cumulative impact of discharges into air from a range of individual sources, in particular emissions from motor vehicles and **domestic fires**. These discharges cause adverse effects on human health, **amenity** and the environment, in particular reduced visibility, photochemical smog, brown hazes and secondary aerosols. With continuing population growth in the region the use of motor vehicles and **domestic fires** is increasing and cumulative impacts from these sources is likely to worsen.
- 4.2.3 Individual activities that discharge contaminants into air in the Auckland Region, such as **outdoor burning**, the application of **agrichemicals** and industrial **processes**, if not adequately managed, may cause localised adverse effects on human health, **amenity** and the environment.
- 4.2.4 Adverse effects on air quality can be exacerbated by land use, such as the inappropriate location of activities that are discharging contaminants into air or the inappropriate location of parties sensitive to activities that discharge contaminants into air (**reverse sensitivity**). Population growth within the Auckland Region is intensifying pressure on competing and incompatible land uses.
- 4.2.5 **Mobile sources**, in particular the private motor vehicle, are the Auckland Region's largest contributor to regional air pollution. Ambient levels of particulate, carbon monoxide and nitrogen dioxide due to motor vehicles are already unacceptable. The current rate of growth in vehicle travel and congestion, the age of the vehicle fleet, the lack of requirements to continue to use or maintain air emission reduction equipment on motor vehicles, poor quality diesel fuel, and low passenger transport use mean that the Auckland Regional Air Quality Targets are unlikely to be met by 2010. Discharges of contaminants from motor vehicles also have adverse effects on stormwater quality.
- 4.2.6 **Domestic fires** are the Auckland Region's second largest contributor to regional air pollution causing adverse effects such as brown hazes and secondary aerosols. **Domestic fires**, particularly in urban residential areas, also cause localised adverse effects such as odour and smoke.
- 4.2.7 **Outdoor burning** in the **urban areas** of the Auckland Region causes significant localised nuisance such as odour or smoke. Furthermore, the **outdoor burning** of some types of **waste** anywhere in the region can discharge large quantities of **toxic substances** into the air. **Outdoor**

burning in certain circumstances by particular organisations such as emergency service providers is however necessary to provide for the safety and wellbeing of a community. Other organisations such as Ministry of Agriculture and Forestry, and those who administer the Health Act (1956) may also need to have material destroyed by **outdoor burning**.

- 4.2.8 Activities that discharge contaminants into air such as industrial **processes**, **waste** management activities and **intensive livestock farming** can discharge potentially **hazardous air pollutants** and reduce **amenity**, in particular through odour, dust and visible emissions. Activities such as chemical reactions which may lead to explosive risk or discharge of hazardous pollutants may place people or the environment at considerable risk, while the probability of this occurring is generally low.
- 4.2.9 The discharge of contaminants into air in the Auckland Region impact on national and global air quality. Similarly, global air quality impacts on the Auckland Region. The two major global issues of significance to the Auckland Region are climate change, through the discharge of **greenhouse gases**, and the destruction of the **ozone layer** through the discharge of **ozone depleting substances**.

4.3 OBJECTIVES

- 4.3.1 To maintain air quality in those parts of the Auckland Region that have excellent or good air quality and enhance air quality in those parts of the Region where it is poor or unacceptable.

(This Objective relates to Issues 4.2.1, 4.2.2, 4.2.3 and 4.2.5 to 4.2.8)

- 4.3.2 To avoid, remedy or mitigate significant adverse effects from the discharge of contaminants into air on human health, **amenity** and the environment. In particular:
- To achieve the Auckland Regional Air Quality Targets by 2010 (given in Table 4.2);
 - To maintain or enhance existing **amenity** within the Urban Air Quality Management Areas; and
 - To maintain existing levels of **amenity** within Industrial and Rural Air Quality Management Areas and the Coastal Marine Air Quality Management Area.

(This Objective relates to Issues 4.2.1 to 4.2.8)