

Site name

Khyber Pass

Address

National Institute of Water and Atmosphere
 269 Khyber Pass Rd
 Newmarket, Auckland

	Easting	Northing	Elevation (m)
NZMG	2668258	6480203	60
NZTM	1757826	5918507	

General site characteristics

Urban

Topography

Khyber Pass slopes down gently W-E; Mountain Rd dips at the junction with Khyber Pass.

Micro met characteristics

Buildings on the southern side of Khyber Pass will shield the intakes from southern flow. The buildings on the southern side and the valley nature of the road may result in some canyon effect.



View east along Khyber Pass Rd towards Newmarket - gas inlet attached to side of building.

Site description and area characteristics

SE corner of Khyber Pass and Mountain Road intersection. Khyber Pass slopes down to the east and Newmarket shopping centre (700m E). The Southern Motorway is approx 250m W-SW from the site. Mixed residential to NW, (older houses -approximately 60% with chimneys)/commercial/light industry. Newmarket shopping precinct <1km E. Lion Nathan brewery is across the road to N; Auckland Domain is 250m to N.

Air Quality Management Area

Urban

Predominant sources

Vehicle

Distance from road and other major sources

Particulate inlet 1.5m E of Mountain Rd and 8m from intersection; gas inlet 3.9m S of Khyber Pass Rd (arterial, aligned WNW-ESE) and 12.5m from intersection. Traffic frequently queues beyond the position of the inlet. 250m W to Southern Motorway (aligned NW-SE).

Vehicle counts

27,027; 7 day average; Khyber Pass Rd, west of Mountain Rd (19/02/2006)

Any nearby features that could affect measurements?

Inlets adjacent to 3 storey NIWA building. The lighted intersection and sloping topography of Mountain Rd (dipping at the intersection) and Khyber Pass Rd will increase average vehicle emissions. Railway line 70m to NW.

AS2922 compliant?

No: but not deemed necessary as site purpose is to monitor peak pollutant levels.

Monitoring commenced

29.10.96

Monitoring ceased

ongoing

Pollutants monitored (current)

CO: 29.10.96 to date
NOx: 15.04.98 to date
PM₁₀ (Partisol): 02.03.98 to date
PM_{2.5} (Partisol): 03.10.02 to date
Benzene and 1,3 Butadiene:
September 2005 to date

Pollutants monitored (past)

Non-Methane Hydrocarbons:
17.07.96 - 31.10.01

Inlet height (m)

3.8 gas
3.0 particulate

Meteorological parameters measured on site

Wind speed, wind direction, ambient temperature, relative humidity, solar radiation.

Mast height (m)

12.8

Data Owner

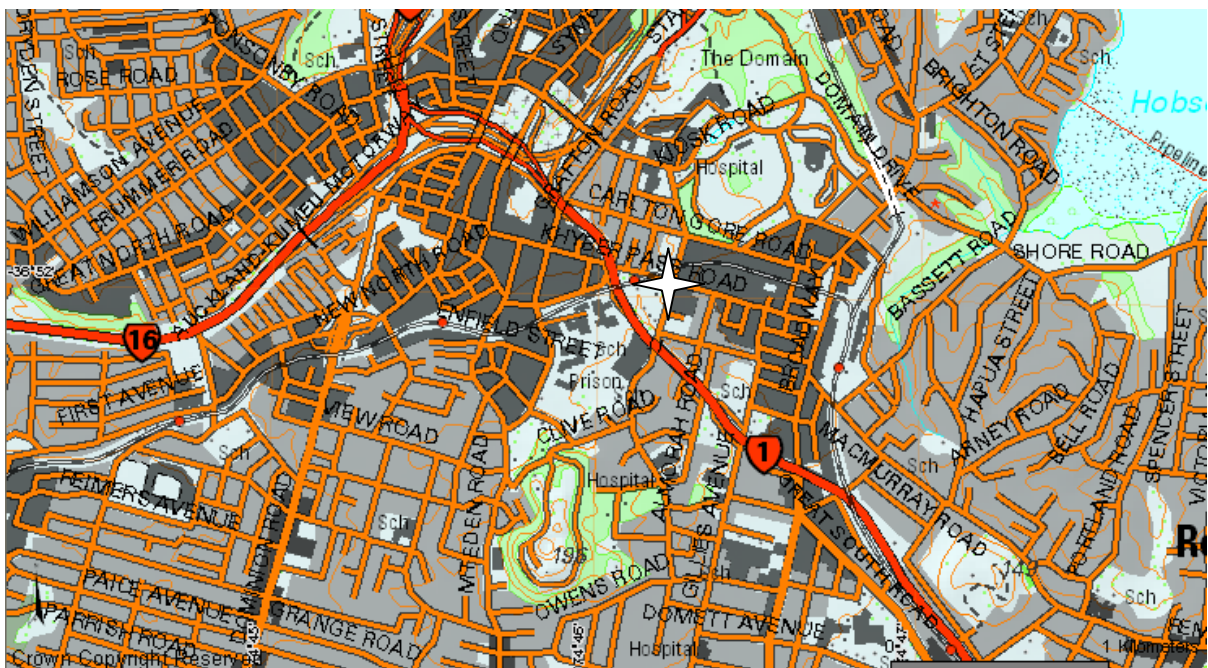
ARC



View from west side of Mountain Road. Partisol inlet attached to power pole.



Site looking up Khyber Pass Rd (inlet out of office window above Eastern HiFi Sign).



Location map.

Map sourced from NZTopoOnline, extracted January 2006, Crown Copyright Reserved.