

## 2.0 ATMOSPHERIC CONTAMINANT MONITORING

Atmospheric contaminant monitoring is conducted for:-

- Stationary source emission tests;
- Ambient air quality assessments;
- Indoor air quality assessments;
- Occupational hygiene assessments.



LEFT  
Glass furnace emission testing

CENTRE  
PM<sub>10</sub> oil mist testing

RIGHT  
Continuous emission monitoring  
(NO<sub>x</sub>, CO, SO<sub>2</sub>, H<sub>2</sub>S, CO<sub>2</sub>, O<sub>2</sub>)

**A.W.N. (Air Water Noise) Consultants industry classifications include:-**

Agriculture/agricultural products	Glass
Animal by-products/feed	Mining/minerals processing
Automotive	Paint and allied coatings
Ceramics/pottery/bricks/tiles	Petrochemicals/plastics processing
Chemicals	Power generation/heating
Electrical/electronics	Printing
Electroplating/galvanising	Pulp and paper/timber products
Federal/State/Local government instrumentalities	Rubber/rubber products
Ferrous/non-ferrous industries	Textiles/clothing/footwear
Food/tobacco processing	Transport

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**Lists of projects conducted under each industry classification are available for review. A table containing some of the atmospheric contaminants previously monitored follows.**

- Acetic acid, acrolein, acrylamide, aliphatic and aromatic amines, alkanes, alkenes, alkynes, aluminium oxide, ammonia, amorphous silica, antimony, arsenic, asbestos
- Barium sulphate, benzyl chloride, boron, 1, 3-butadiene
- Cadmium, calcium carbide, carbon dioxide, carbon monoxide, cellulose, chlorides, chlorine, chromic acid mist, chromium, cobalt, copper, crystalline silica, cyanides
- 3,3 Dichlorobenzidene, diclofop methyl, di-iso octyl phthalate (DIOP), dimethyl ethyl amine, dinitrobenzene, dinitrotoluene, di-octyl adipate (DOA), di-octyl phthalate (DOP), dioxins, dust (respirable and inspirable)
- Endosulfan, ethanol, ethyl acetate, ethyl acrylate
- Fibrous glass, fluorides, formaldehyde, Freon, furans
- Hexane, hydrocarbons, hydrogen chloride, hydrogen fluoride, hydrogen sulphide
- Inspirable dust, iron, isocyanates, isooctanol, isophorone
- Lead, Legionellae sp.
- Magnesium, MDI, methanol, mercury, methylene chloride, methyl chloroform, methyl ethyl ketone, (MEK) methyl isobutyl ketone (MIBK), methyl methacrylate
- Naphthoquinone, nickel, nitric acid mist, nitrogen oxides, n-methyl pyrrolidine (NMP), nonane
- Odour, oil mist, opacity, organic solvents, oxygen, ozone
- Polychlorinated biphenyls (PCB's), polycyclic aromatic hydrocarbons (PAH's), particle size distribution, particulate matter, particulate matter less than 10 microns (PM<sub>10</sub>), pentane, pesticides (organochlorine and organophosphorus), phenol, phosphine, phosphoric acid mist, plasticisers, polyvinyl chloride (PVC), n-propyl acetate
- Quartz
- Reduced sulphur compounds, resorcinol, respirable dust and fibre, Ringelmann number, rotenone
- Selenium, silica, silver, sodium hydroxide mist, sodium hypochlorite, Solvesso solvents, styrene, sulphide, sulphur dioxide, sulphur trioxide, sulphuric acid mist, synthetic mineral fibres (SMF)
- Talc, tetrabromobisphenol, tin, titanium, toluene diisocyanate (TDI), toluene, total colony forming units (TCFU-bacteria/fungi), total reduced sulphur compounds (TRS), total suspended particulate matter (TSP), 1, 1, 1, trichloroethane, 1, 3, 5 – triglycidylisocyanurate (TGIC)
- Vanadium, vinyl acetate, vinyl chloride monomer (VCM), volatile organic compounds (VOC)
- Welding fume
- Xylenes
- Zinc

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## 2.1 NATA Accreditation

**A.W.N. (Air Water Noise) Consultants holds NATA (National Association of Testing Authorities) laboratory accreditation no.:-**

### 1910 – Melbourne Office

Accreditation No. 1910 has been held since February 1985.

Air quality data submitted to a number of Australian State Government Environmental Authorities are required to be on NATA accredited test documents.

A.W.N. was the first laboratory to obtain accreditation for the sampling of atmospheric contaminants in ambient air, industrial source emissions, indoor air and the workplace environment.

Accreditation of a laboratory by NATA indicates peer recognition of test methods, laboratory practices, staff expertise and quality systems management.

A.W.N. has the most comprehensive NATA accreditation for atmospheric contaminants monitoring of any consultant in Australia. The accreditation covers approximately 200 different compounds.

Accreditation indicates compliance with Australian Standard AS ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration Laboratories". The Standard states that *"laboratories that comply with this International Standard will therefore also operate in accordance with ISO 9001, or ISO 9002"*.