# **Odour Checklist**

### Acute Response

Our sense of smell is a valuable source of information about chemicals in the environment. For some chemicals, the fact that we can smell them is a warning to move away from the source, hence protecting ourselves from further exposure. For the vast majority of chemicals we can smell them before toxicological effects, including irritation, occurs.

#### **Suggested Actions**

In the unlikely event of significant health effects due to odour exposure then an immediate response is necessary:

- Removal from source of exposure by eliminating source
  - Is the source of the odour known?
  - If known can it be removed?
- Interrupting the exposure pathway
  - Open windows (if the odour is inside)
  - Close windows (if the odour is outside)
- Removing receptor
  - Evacuate at risk individuals to location away from odour source
  - o Advise affected individuals to seek medical advice
  - Inform local GP or hospital emergency department of possible presentation of those affected

#### **Post Incident Investigation**

• Effects on health may be a matter of concern; the local population should be closely involved in any investigations at an early stage and should be kept as fully informed of developments as possible

#### Detailed Questions in Relation to Odour (not all may be required)

#### Source and Nature of the Odour

- Describe the odour, what does it smell like? What is the strength of the odour (intensity), is it a faint, mild, strong or a very strong odour?
- Does the odour strength/intensity vary?
- Is the odour perceived to be pleasant, mildly pleasant, strongly unpleasant or very strongly unpleasant?
- When was the odour first noticed?
- Is the odour persistent or intermittent?
- Is there any temporal/seasonal variation in the odour?
- Has there been a chemical spill, accident?

- Can the source be identified? If so, where is it coming from?
- Is the odour inside/outside the building?
- Describe the environmental setting. Is it residential, industrial, commercial, a landfill site?
- Is the source a regulated activity?
  - If so, what is the activity e.g. wastewater treatment, landfill, incinerator, dry cleaners, animal renderers and who are the regulators?

## Pathway

- Who first noticed the odour?
- Can everyone smell the odour?
- Where do they live in relation to the odour? Consider wind direction.
- How many people are potentially exposed to the odour?
- What are the age(s) and sex of those exposed?
- Have "at risk" groups been identified including those in schools, hospitals, residential and nursing homes etc.?
- Has any environmental sampling taken place?
  - Who is taking the samples?
  - Is there appropriate quality control?
  - Are duplicate samples being taken and analysed by an independent organisation?
  - What are the samples being tested for, which chemicals?
- Are there any sampling results available?
  - What chemicals have been detected?
  - At what levels/concentrations?
- Is there a possibility of biological odours as well as chemical?
- Has any environmental modelling taken place?
  - Has any dispersion modelling taken place?

#### Receptors

- Are there any reported health symptoms in relation to the odour?
- What symptoms have been reported?
  - sore throats
  - coughing/sneezing
  - eye irritation/watering
  - nausea/vomiting
  - o headaches
  - breathing difficulties
  - o if other symptoms, please specify
- Have any health professionals been contacted e.g. GPs. If so, by whom and who has been contacted?

• Have there been any health effects that require medical attention?

# Useful resources

- Please see <u>Air Guidance Note 5 (AG5) Odour Impact Assessment Guidance for EPA</u> <u>Licensed Sites</u> as a key national guidance document
- Another helpful guidance document was developed by the New Zealand Ministry for the Environment in 2016. Appendix 2 is especially useful in dealing with any odour incidents. <u>Good Practice Guide for Assessing and Managing Odour. Wellington:</u> <u>Ministry for the Environment, 2016</u>.