



## AIR

Air quality in the urban parts of Canterbury such as Christchurch and Timaru at times is poor. The air quality issues are centred around domestic fires, industrial activities and congested roads. The air pollutants can cause reduced visibility, dust and odour nuisance and can have negative impacts on human health.

Air quality issues in Canterbury occur at three scales:

- (a) Localised air quality issues associated with odours, dust, smoke, agrichemical spray and other discharges to air from the domestic, transport, commercial, agricultural, horticultural, manufacturing and industrial sectors; and
- (b) Ambient air quality issues related to wintertime air pollution in urban areas, as in Christchurch and Timaru, with its associated health effects and nuisance effects resulting from combustion processes; and
- (c) Global air quality issues connected with the reduction in the ozone layer and with greenhouse gas emissions and consequential global warming.

In Canterbury geography and climate also contribute to the wintertime air pollution problem. In winter temperature inversions occur that can trap air pollution near the ground. This is where cold air is held under layers of warmer air, stopping the tiny particles in smoke from dispersing. Low to non-existent winter wind speeds also prevent the pollutants from blowing away. This creates chronic air pollution problems as seen with Christchurch wintertime smog issues.



## INDUSTRIAL AIR EMISSIONS

A variety of small and medium sized industrial and commercial processes are located in Canterbury (e.g. dry-cleaning, spray painting, abrasive blasting, seed-cleaning, printing processes, timber mills, freezing works and particle board manufacture). These can have a localised impact on air quality, such as on human health and nuisance effects. The release of gases, odour, dust and noxious fumes into the air is regulated by Environment Canterbury.

### Chimney stacks

Environment Canterbury regulates chimney height and discharges to ensure pollutants are discharged to air in a way which minimalises adverse health effects. This helps prevent the build up of harmful contaminants at ground level, particularly in our urban areas.

The height of a chimney stack above the ridge line of surrounding buildings is determined by the processes and volumes involved. It is also important that pollutants are discharged vertically into the air without obstruction. Devices such as rain hats, and wind deflectors direct pollutants towards the ground - and towards your staff and neighbours. These are no longer acceptable.

If you are unsure if the height of your chimney stacks is correct then you should contact Environment Canterbury's Customer Services on (03) 353 9007 and 0800 EC INFO (0800 324 636).

### Air pollution control equipment

Regular physical checks are needed for all air pollution control equipment. This is a requirement of operating this equipment and discharging pollutants to air. You should have procedures for regularly checking your equipment for:

- Gas leaks
- Liquid leaks
- Holes
- Dust
- Rust.

In the event of damage or breakdown repairs must be carried out immediately.

### Accidental air emissions

To reduce your environmental and occupational liability for accidental air emissions you need to:

- Assess your risk
- Reduce your risk
- Think ahead: what you need to do before you have an accidental air emission
- Write your emergency procedure: what to do if you have an accidental air emission
- Train your staff
- Keep up to date.

Your emergency procedure should specify all the steps you need to take to ensure your staff do the right things in an emergency. The checklist will tell you how to do this.

# IN THIS MODULE

	Done	Date
<b>Do you need an air discharge consent?</b>	<input type="checkbox"/>	<input type="text"/>
<b>Air emissions controls</b>	<input type="checkbox"/>	<input type="text"/>
<b>Air pollution control equipment</b>	<input type="checkbox"/>	<input type="text"/>
<b>Operation and maintenance</b>	<input type="checkbox"/>	<input type="text"/>
<b>Accidental emissions</b>	<input type="checkbox"/>	<input type="text"/>
<b>What you need to do to prevent an accidental air emission</b>	<input type="checkbox"/>	<input type="text"/>
<b>Write your emergency procedure</b>	<input type="checkbox"/>	<input type="text"/>
<b>What to do in the event of an accidental air emission</b>	<input type="checkbox"/>	<input type="text"/>
<b>A basic procedure for your emergency air emission kit</b>	<input type="checkbox"/>	<input type="text"/>
<b>Train your staff</b>	<input type="checkbox"/>	<input type="text"/>
<b>Keep up to date</b>	<input type="checkbox"/>	<input type="text"/>
<b>Other</b> (specify) <input type="text"/>	<input type="checkbox"/>	<input type="text"/>
<b>Cross check</b>	<input type="checkbox"/>	<input type="text"/>
<b>Action list</b>	<input type="checkbox"/>	<input type="text"/>

## DO YOU NEED AN AIR DISCHARGE CONSENT?

Do you have any of these processes on your site? (Tick those that apply to your site.)

- |                                                                                                                                           |                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Abrasive blasting inside *                                                                                       | <input type="checkbox"/> Metal work processes *                                                                                          |
| <input type="checkbox"/> Abrasive blasting outside                                                                                        | <input type="checkbox"/> Milk treatment and drying                                                                                       |
| <input type="checkbox"/> Acid production and use                                                                                          | <input type="checkbox"/> Oil refining                                                                                                    |
| <input type="checkbox"/> Adhesives manufacture                                                                                            | <input type="checkbox"/> Oil well flaring                                                                                                |
| <input type="checkbox"/> Agricultural chemical manufacture                                                                                | <input type="checkbox"/> Paint manufacture                                                                                               |
| <input type="checkbox"/> Anodising, galvanising and electroplating                                                                        | <input type="checkbox"/> Paper manufacture                                                                                               |
| <input type="checkbox"/> Asphalt production                                                                                               | <input type="checkbox"/> Particle board and plasterboard production                                                                      |
| <input type="checkbox"/> Brewing of alcoholic beverages                                                                                   | <input type="checkbox"/> Petroleum storage and transfer facilities *                                                                     |
| <input type="checkbox"/> Brickworks                                                                                                       | <input type="checkbox"/> Pharmaceutical product manufacture                                                                              |
| <input type="checkbox"/> Bulk materials (storage and handling?) *                                                                         | <input type="checkbox"/> Powder coating processes (excluding filtered discharge to internal workplace air according to OSH requirements) |
| <input type="checkbox"/> Cement manufacture                                                                                               | <input type="checkbox"/> Printing processes using water-based inks*                                                                      |
| <input type="checkbox"/> Clay firing *                                                                                                    | <input type="checkbox"/> Printing processes using solvent-based inks (check % of organic solvent content by weight)                      |
| <input type="checkbox"/> Commercial composting                                                                                            | <input type="checkbox"/> Radioactive materials production or usage (excluding use for medical purposes)                                  |
| <input type="checkbox"/> Commercial laboratory fume cupboards*                                                                            | <input type="checkbox"/> Rendering of animal matter by application of heat                                                               |
| <input type="checkbox"/> Cooking or processing of animal or plant matter (restrictions on raw material capacity apply)                    | <input type="checkbox"/> Resins, lacquers and plastics manufacture                                                                       |
| <input type="checkbox"/> Cremation                                                                                                        | <input type="checkbox"/> Rubber manufacture                                                                                              |
| <input type="checkbox"/> Discharges of heat, steam and water vapour *                                                                     | <input type="checkbox"/> Seed cleaning plants * (check distance from existing sensitive activities)                                      |
| <input type="checkbox"/> Dry cleaning *                                                                                                   | <input type="checkbox"/> Soap and detergent manufacture                                                                                  |
| <input type="checkbox"/> Enamelling                                                                                                       | <input type="checkbox"/> Small scale spray coating not within/within a spray booth *                                                     |
| <input type="checkbox"/> Fellmongery                                                                                                      | <input type="checkbox"/> Spray painting in a booth, using <2 L/hr                                                                        |
| <input type="checkbox"/> Fertiliser manufacture and bulk handling                                                                         | <input type="checkbox"/> Spray painting in the open using isocyanate-based coatings                                                      |
| <input type="checkbox"/> Fibreglass application > 1kg/hr                                                                                  | <input type="checkbox"/> Stock food production                                                                                           |
| <input type="checkbox"/> Flour milling                                                                                                    | <input type="checkbox"/> Stripping by immersion using hydrocarbon solvents                                                               |
| <input type="checkbox"/> Foam manufacture                                                                                                 | <input type="checkbox"/> Tanning of hides                                                                                                |
| <input type="checkbox"/> Food or animal product cooking and processing *                                                                  | <input type="checkbox"/> Timber drying kilns                                                                                             |
| <input type="checkbox"/> Freezing works                                                                                                   | <input type="checkbox"/> Timber mills and joinery factories discharging wood waste (check distance from existing sensitive activities)   |
| <input type="checkbox"/> Fugitive dust emissions from unconsolidated surfaces *                                                           | <input type="checkbox"/> Tyre buffing                                                                                                    |
| <input type="checkbox"/> Fumigation processes using ethylene dibromide, ethylene oxide, methyl bromide or hydrogen cyanide                | <input type="checkbox"/> Waste Incineration                                                                                              |
| <input type="checkbox"/> Glass manufacture                                                                                                | <input type="checkbox"/> Water blasting *                                                                                                |
| <input type="checkbox"/> Hydrocarbon manufacture, refining or purification                                                                | <input type="checkbox"/> Wood waste generating processes *                                                                               |
| <input type="checkbox"/> Ink and dye manufacture                                                                                          | <input type="checkbox"/> Woollscouring and dag crushing                                                                                  |
| <input type="checkbox"/> Isocyanate-containing materials - production and use (excluding spray coating processes in booths using <2 L/hr) | <input type="checkbox"/> Workplace ventilation *                                                                                         |
| <input type="checkbox"/> Laboratory fume cupboards in educational facilities *                                                            |                                                                                                                                          |
| <input type="checkbox"/> Laminating using adhesives and resins                                                                            |                                                                                                                                          |
| <input type="checkbox"/> Metal melting, including foundries and smelters, but excluding welding and soldering                             |                                                                                                                                          |

\* an activity that may be permitted under certain conditions

**If you ticked one or more of these processes you may need either an air discharge consent, or you may need to make sure you meet certain operating conditions to be a permitted activity. To find out more contact Customer Services (03) 353 9007 or 0800 EC INFO (0800 324 636) at Environment Canterbury.**

## AIR EMISSION CONTROLS

### Chimney Stacks

1. Are all your stacks the required height above the roof ridge line?

Who \_\_\_\_\_

When \_\_\_\_\_

Completed \_\_\_\_\_

NO	YES	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**If you are unsure if the height of your chimney stacks above the roof ridge line is correct then you should contact Environment Canterbury and talk to a Customer Services Officer (03) 353 9007 and 0800 EC INFO (0800 324 636) for further information or your Pollution Prevention Officer.**

2. Do you have any stacks with devices such as rain hats or wind deflectors that obstruct the vertical discharge of contaminants from your stacks?

NO	YES	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**If YES, you need to remove these devices as they are no longer acceptable.**

## AIR POLLUTION CONTROL EQUIPMENT AND MAINTENANCE

Use the next checklists if you have any of the following:

- |                                       |                                                      |
|---------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Cyclones     | <input type="checkbox"/> Bio-filters                 |
| <input type="checkbox"/> Scrubbers    | <input type="checkbox"/> Electrostatic precipitators |
| <input type="checkbox"/> Afterburners | <input type="checkbox"/> Cardboard/Paper filters     |
| <input type="checkbox"/> Bag filters  | <input type="checkbox"/> Wet wall filter system      |
| <input type="checkbox"/> Sock filters | <input type="checkbox"/> Impaction separators.       |

3. Do you have operational plans and routine maintenance for all air pollution control systems on your site?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO contact a suitably qualified professional if necessary and add to your Maintenance Programme.**

### Cyclones

4. Is your cyclone sealed to the hopper or collection device that material falls into at the base of the cyclone?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, seal the hopper or collection device to your cyclone to reduce risk of potential dust emissions.**

5. Is the collection device on your cyclone emptied on a regular basis and is this task on your Maintenance Programme? (see Housekeeping module)

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, add to maintenance programme or have staff check regularly.**

NO YES

6. Is your system prone to blockages or overflowing?

**If YES, you and your staff should investigate as to why this is happening. You could try either:**

- Put a fill detector on the collection device
- Put a level detector on the cyclone itself and attach an audio visual alarm.

NO YES

7. Is the cyclone free of dents or holes?

**If NO, you need to look at repairing the cyclone to ensure free flow of internal air.**

### Scrubbers

NO YES

8. Do your scrubbers have an adequate liquor flow?

**If NO install flow detectors.**

NO YES

9. Do you monitor your scrubbers for pressure drop? Is this task on your Maintenance Programme?

NO YES

10. Do you regularly change the liquors on all scrubbers when it gets fouled as per the manufacturers guidelines for your process and equipment? Is this task on your Maintenance Programme?

**If NO, add to maintenance programme or have staff check regularly.**

### Chemical Scrubbers

NO YES

11. Do you test your chemical scrubbers regularly to ensure there are adequate levels of active chemicals present?

NO YES

12. Do you always have chemicals available should the equipment need topping up?

NO YES

13. Are these tasks on your Maintenance Programme?

**If NO, have staff check regularly and add to maintenance programme.**

### After Burners

NO YES

14. Do you monitor the temperature continuously and log it on a chart?

**If NO install temperature sensors.**

NO YES

15. Do you monitor O<sub>2</sub> (Oxygen) and opacity continuously and log it on a chart?

16. Do you have a contingency plan to deal with any dramatic changes in temperature?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, develop monitor and report programme and include with contingency plan.**

17. Do you regularly check afterburners for any visible discharges?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

18. Are all these tasks on your Maintenance Programme?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, have staff check regularly and add to maintenance programme.**

## Bag Filters and Sock Filters

19. Do you monitor the pressure drop across the filter and physically check for any signs of visible emissions?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

20. Do you carry out regular preventative maintenance by:

- Checking the bags for holes
- Performing leak tests ensuring the hopper is regularly emptied?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, have staff check regularly and add to maintenance programme.**

## Bio-filters

21. Do you regularly check the consistency of media to ensure that there are no dry patches with cracks and no wet patches with bubbling gas?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, have staff check regularly and add to maintenance programme.**

22. Do you have a temperature gauge on the inlet to ensure equipment does not get too hot? Too much heat will kill the bio-organisms.

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO install a temperature sensor and recorder and add to your maintenance programme.**

23. Do you monitor the system for any change in back-pressure?

This may indicate that media must be removed or replaced.

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

24. Are all the above tasks on your Maintenance Programme?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO, add to maintenance programme.**

## Electrostatic Precipitators

NO YES

25. Do you:
- Keep a log of voltage and currents
  - Watch all warning lights
  - Ensure hoppers are regularly emptied?

**If NO, have staff check regularly and add to maintenance programme.**

## Cardboard/Paper filters

NO YES

26. Do you check the filters regularly to ensure they are not over clogged?

**If NO, add to maintenance programme.**

## Wet wall filter system

NO YES

27. Do you check the filter system regularly to ensure they are not clogged and that there is sufficient water to run the system efficiently?

**If NO, add to your maintenance programme.**

NO YES

28. Have you developed any of the following programmes that your site may need?
- Odour control programme
  - Visible emissions control programme
  - Complaints monitoring and response programme
  - Wind speed and direction monitoring.

**If NO, develop a monitoring system and make staff aware of these systems.**

NO YES

29. Do you have areas of unsealed and unconsolidated ground that could be the source of dust?

NO YES

30. Do you have open containers or stockpiles of fine material that could be the source of dust?

**If YES, the dispersal or deposition of particles should not cause an objectionable or offensive effect beyond your boundary, consider ways to reduce dust originating from your site.**



## FUGITIVE SITE EMISSIONS

### Assess your risk

Walk around your site and look and smell for uncontrolled emissions that may be escaping from your site.

31. Can you smell anything strange or do you get eye, nose or throat irritation when you first enter the work area? These are signs of equipment leaks or faults.

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

32. Can you notice signs of smoke, dust or fumes that indicate fugitive discharges?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

33. Is there any discolouration, residue or corrosion on the roof or around vents or pipes that ventilate work or storage areas?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

34. Is there dust or deposition of particles from site processes or stockpiled materials around the site?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If you answered YES to any of the above four questions, put them on the Action List, trace the source and prevent any recurrence.**

35. Check the Safety Data Sheet (SDS) for high risk substances on your site (large volumes or sensitive location). Do they list any environmental hazard or eco-toxic characteristics and specify emission control or disposal methods?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

36. Do you have emergency procedures for an accidental release of any emission into the air?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

37. Have you looked at past accidents on your site or the sites of similar companies? Evaluate your Inventory Sheets (see Spills module), high-risk areas and identify:

- The most probable accidental air emission
- The most serious potential accidental air emission
- Any requirements you need to handle these.

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If, NO, to both above prepare and/or update site emergency procedure as suggested overleaf.**

### Reduce your risk

38. Evaluate what happened with past air emissions or near misses and look at your high risk areas. Are there any changes you could make to site design or operating practises to reduce the risk of another incident?

NO	YES	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. Have you already looked at the Housekeeping module to help you establish a regular maintenance programme?

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

**If NO – Use the SDS for the hazardous substance and the information in this guide to create an accidental air emission procedure.**

## WHAT YOU NEED TO DO IN THE EVENT OF AN ACCIDENTAL AIR EMISSION

Think ahead about what you need to:

### Know

### Do

### Have available.

In the event of an accidental air emission so you will be able to cope.

NO YES

40. Have you filled out the emergency telephone contact sheet at the end of this module and posted it by the phone in high risk places?

NO YES

41. Have you identified sensitive environments that could be affected by an incident at your site, such as schools, rest homes or residential areas?

NO YES

42. Do you have supplies of material and equipment suitable for controlling, cleaning up and disposing of:

- The most probable emission
- The most serious potential emission?

**If NO, Consider the need for things such as brooms for sweeping up air discharge fallout and tarpalins to cover any loose material.**

NO YES

43. Do you have personal protective equipment to protect the health and safety of your staff?

**If NO, Consider the need for things like gloves, respirators, first aid and emergency treatment.**

NO YES

44. In your highest risk spots or by an accessible telephone, have you put on the wall copies of:

- The completed emergency telephone contact list, AND
- A 1-page version of your emergency procedure, or
- A copy of the brief accidental air emission procedure overleaf?

NO YES

45. Do you have your SDS data sheets readily accessible?

**If NO, to the two questions above put them on the Action List and appoint a staff member to develop procedures and regularly review these and ensure SDS are accessible.**

## ■ WRITE YOUR EMERGENCY PROCEDURE/EVACUATION PLAN

### What to do if you have an accidental air emission

You must have an accidental air emission procedure. It could form part of your Emergency Response Plan or other Health and Safety procedures. A good procedure will have the steps outlined below.

<p>46. Does your procedure instruct staff how to be safe?</p> <p>Such measures include:</p> <ul style="list-style-type: none"> <li>• If a hazardous chemical is discharged, will staff know which way is upwind?</li> <li>• Wearing personal protective equipment.</li> </ul>	<p>NO YES</p> <p><input type="checkbox"/> <input type="checkbox"/></p>
<p>47. Does your procedure instruct staff to stop the source?</p> <p>Instructions could include:</p> <ul style="list-style-type: none"> <li>• Shutting down the relevant part of the plant or factory</li> <li>• Turn off the tap or valve, plug the leak.</li> </ul>	<p>NO YES</p> <p><input type="checkbox"/> <input type="checkbox"/></p>
<p>48. Does your procedure have steps for identifying the source?</p> <p>Steps could include:</p> <ul style="list-style-type: none"> <li>• Walk around the plant and find out where the emission is coming from. If you have been on site you will have become desensitised to the smell and it may not appear strong to you. Ask around</li> <li>• If the emission is minor, contact the site engineer and fix at the end of the shift</li> <li>• If the problem is located within the site boundaries and is hazardous fix it immediately</li> <li>• If the emission is causing a nuisance beyond the site boundary, fix it immediately</li> <li>• Check that you are complying with all air discharge consent conditions</li> <li>• Action your site emergency drill if necessary</li> <li>• Prepare an evacuation plan for your staff as well as your neighbours.</li> </ul>	<p>NO YES</p> <p><input type="checkbox"/> <input type="checkbox"/></p>
<p>49. Does your procedure provide instruction on who to notify?</p> <p>Contacts should include:</p> <ul style="list-style-type: none"> <li>• Your supervisor</li> <li>• The New Zealand Fire Service and the Police if it is a discharge of toxic fumes</li> <li>• Environment Canterbury, the licensing authority that issued your consent</li> <li>• People in homes, schools or businesses downwind of you and anyone else on your emergency phone list.</li> </ul>	<p>NO YES</p> <p><input type="checkbox"/> <input type="checkbox"/></p>

NO YES

50. Does your procedure cover the clean up?

Clean-up instructions could include the following:

- Clean up the area
- Water used to wash down any fallout will be contaminated, so stop wash waters or sweepings getting into storm water grates.

NO YES

51. Does your procedure instruct staff to dispose responsibly?

Instructions could cover:

- Do not tip wastes down storm water drain
- Removal of problem dust
- Ensure disposal of any liquids, solids or sludge's is done using an approved waste disposal company and licensed facility.

NO YES

52. Does your procedure provide for the restock and review of equipment?

Provisions should include:

- Replace any containment equipment or protective gear immediately
- Do an incident report immediately to find out how and why the spill happened
- Check your procedure: do you need to update it to be better prepared?

**Write down a step-by-step procedure of how you would deal with an accidental air emission on your site covering all the above points. Sites that have a number of different potential emission sources may need several procedures covering the risks associated with each emission. For small sites the basic procedure overleaf could be used.**

### ■ TRAIN YOUR STAFF

Remember that new staff need to know how to cope with an accidental air emission, while more experienced staff will need regular refresher training.

Look at the 'Train your Staff' section in the Spills module and identify your training needs.

### ■ KEEP UP TO DATE

NO YES

53. Do you keep written reports on accidental air emissions or complaints and review data to look for trends or reoccurrences and develop ideas on how to stop these happening again?

**If NO start doing so. You may want to use the Incident Report form at the end of the Spills module, or you could modify any Health and Safety incident forms you are currently using.**

NO YES

54. Have you made provision for regular review of your emergency procedure and staff training?

## MORE DETAIL FOR YOUR SITE

As you walk around your site and make new observations, there may be extra things you see that you want to add. If so, add them here.

ITEM: \_\_\_\_\_

**ACTION:** \_\_\_\_\_

\_\_\_\_\_

ITEM: \_\_\_\_\_

**ACTION:** \_\_\_\_\_

\_\_\_\_\_

ITEM: \_\_\_\_\_

**ACTION:** \_\_\_\_\_

\_\_\_\_\_

## CROSS CHECK

55. Can you make links to related programmes such as:

- Ventilation
- Industrial Hygiene
- Noise
- Maintenance.

NO	YES
<input type="checkbox"/>	<input type="checkbox"/>

## ACTION LISTS

If you ticked a  (highlighted box) then this is an action you need to take.

Put all actions on a copy of the ACTION LIST at the back of this module.

## SIGNS OF SUCCESS

By the time you have gone through the AIR checklists you should have achieved these key successes:

- You have a recording system for all events and look at data to come up with ways of stopping events happening in the future
- Your chimney stacks are the required height above your roof ridge lines and do not have devices fitted that cause vertical obstruction of contaminants
- Your air pollution control systems are all properly installed and regularly inspected and maintained
- You have a written emergency procedure for accidental air emissions and your staff regularly practise and review your emergency drill.

## A BASIC PROCEDURE FOR YOUR EMERGENCY AIR EMISSION KIT

Photocopy, laminate and put this near your spill kit for staff to read when they use it.

# ACCIDENTAL AIR EMISSIONS WHAT TO DO

## 1 BE SAFE

- What is it?
- Do you need safety gear?
- Assemble in an agreed location

## 2 STOP THE SOURCE

- Turn off the tap or valve - if it is safe to do so
- Designate and train specific staff to do this

## 3 FIND THE SOURCE

- Repair if possible

### IF UNKNOWN

- Shut down plant if necessary
- Action site emergency drill if necessary
- Evacuate

## 4 NOTIFY

- Tell your supervisor
- Call the Fire Service and the Police if necessary
- Environment Canterbury
- Tell your neighbours if necessary
- See your Air Pollution Emergency Telephone Contact Sheet.

## 5 CLEAN UP

- Stop wash water or sweepings getting into stormwater grates or soil
- Clean contaminated clothing or equipment
- Clean up within the contained area

## 6 DISPOSE RESPONSIBLY

- Call your approved waste disposal contractor to take away contaminated materials and clean up gear or clothing

## 7 RESTOCK AND REVIEW

- Replace materials and equipment
- Review the incident – what can be learnt?



■ Fill in the numbers, photocopy and put this list next to phones and spill stations.

# AIR POLLUTION ALERT!

Who must you call when you have an air pollution incident?

## SERIOUS ALERTS

<b>111</b>	<b>Fire, Police, Ambulance</b>
	<b>Your Supervisor or Company</b>
	<b>Your council's dangerous goods inspector or environmental health officer</b>
<b>03 474 7000</b>	<b>National Poisons and Hazardous Chemicals Information Centre, Dunedin - Urgent Line</b>
	<b>Your firm's approved waste disposal services contractor</b>

### Identified Sensitive Environments:


### ALL ALERTS

Call Environment Canterbury's 24-Hour Pollution Hotline:

Christchurch (03) 366 4663  
Timaru (03) 688 3320

Call us **IMMEDIATELY**  
We can give you advice and help.



