



Taking Care of Business

Guidebook for people undertaking, or about to undertake, industrial activities

A guidebook for undertaking industrial activities

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Purpose and introduction

This guidebook is for use by businesses and land developers and/or their consultants who are currently undertaking, or intend to undertake, an industrial activity within the Canterbury region. This is a collaborative project between three sections of Environment Canterbury: Consents; Compliance and Enforcement; and Pollution Prevention.

Environment Canterbury would like to thank Mark Weaver of Calder Stewart, Brigid Casey of Christchurch International Airport Limited, Phil Terry of Fulton Hogan and the Technical Services team at the Christchurch City Council for providing comments on a draft of this guidebook.

The information in this document will guide you through each stage of developing an industrial site, from the initial planning of your development through to achieving compliance with consent conditions and meeting industry standards.

Section One discusses site selection, different industrial activities, and some options you have to mitigate the effects of each activity.

Section Two covers preliminary issues to consider before you progress too far with the development of your proposal and includes helpful references to other documents relating to your proposed activity.

Sections Three, Four and Five cover the most common consent applications associated with your activity and provide you with some guidance on regional plans and consenting requirements.

These sections do not provide details about specific regional rules or why specific activities require a resource consent, but they are meant to direct you to the applicable plans in order to clarify the information requirements and provide some guidance about Environment Canterbury's approach to processing consent applications.

Section Six gives a summary of why we put conditions on a consent and how they are written, and directs you to example conditions that you can download and include in your consent applications. They are written in the format you would eventually see on your official consent documents.

Finally, **Section Seven** aims to help you understand your responsibilities once you have authorisation for the various aspects of your activity and helps you with the implementation of your consent conditions in a practical and realistic way. This section includes information on how your consent(s) will be monitored by Environment Canterbury staff and ways to have a good working relationship with Environment Canterbury's Environmental Protection Officers (EPOs).

Note that this guidebook addresses resource consents from an Environment Canterbury perspective only.

Our requirements are in addition to any corresponding City or District Council requirements. Outside of the Regional and City/District Councils, there may also be requirements from other regulatory authorities, such as the Department of Labour, or regulations under the Hazardous Substances and New Organisms Act 1996 (HSNO) which is administered by the Environmental Risk Management Authority (ERMA). This guidebook talks about consents related to the environment, as opposed to building consents, trade waste permits, subdivision consents, etc. It is your responsibility to be aware of all the requirements associated with your activity.

In summary, the guidebook covers:

- Your responsibilities under the Resource Management Act (RMA)
- Key concerns that Environment Canterbury has for different types of industrial developments
- Notes for preparing consent applications for the activities on your site
- Guidance in liaising with City/District Councils
- Resource consent conditions, including on-going compliance
- Site visits by Environmental Protection Officers and Pollution Prevention Officers
- Long-term plans and goals for the management of your site.

What the guidebook does NOT do:

The guidebook does not tell you everything you need to know relating to specific industrial activities. You will still need to provide additional information relevant to your proposed activity.

It does not provide a detailed interpretation of every regional rule that may be applicable to a particular activity nor does it intend to explain why various activities require a resource consent.

It does not provide a technical review of storage, treatment and disposal systems. It also does not certify or advocate the use of any particular device or system.

It does not tell you exactly what you must do in every situation, as each activity will vary in scale and significance.

It does not tell you what to investigate or assess for the effects of your proposed activity.

The resource consent process

There are several general information booklets available about the resource consent process, including:

- How to apply and the process an application goes through once lodged
- Understanding your resource consent document
- Consent monitoring
- The notification process

Please refer to these booklets for generic consent information. The booklets can be downloaded from the website www.ecan.govt.nz, search using keyword "booklets".

SECTION ONE

Site planning and options

This section is a guide for anyone intending to purchase and/or develop an industrial or commercial site. It covers development of greenfield and brownfield sites, the receiving environments your activities may affect, the typical contaminants generated by industrial activities and options for collection, storage and treatment for a variety of activities.

This section should alert you to some of the key aspects of development that are often left too late or are completely forgotten, but that are important to address at the start of your planning.

Site planning

Undeveloped sites, i.e. greenfield sites

If you are developing a greenfield site, i.e. one that has not been developed previously, there is every reason to plan your development to ensure that the best practicable options can be utilised. You need to consider the impact your activities may have on the environment, including the underlying soils, groundwater, surface water, air quality and your neighbours.

A large site may give you more layout options and also allow you to locate activities that may have odour and noise issues further away from your neighbours. A small site will mean you have to pay more attention to how your site is laid out, what storage, treatment and disposal options are most appropriate, and to ensure isolation of your “riskier” activities.

It may be that the City or District Council offers a connection to the trade waste/sewer system and this may be a good option for you, particularly if you have significant space constraints. Check with your City or District Council as to what can be disposed of into their trade waste/sewer system because most have bylaws or “excluded substances” restrictions in place.

Developed sites, i.e. brownfield sites

Many industrial/commercial developments are undertaken on sites that are currently developed or were used for other activities in the past. Your approach to developing or undertaking a new activity on a brownfield site will differ from a greenfield site given that historical activities and existing infrastructure could affect your options. For example, the site may be fully sealed with asphalt or concrete or covered with buildings that may require demolition. Despite what may have occurred on the site previously, you must consider the effects that your activities may have on the surrounding environment, including the underlying soils, groundwater, surface water, air quality and your neighbours.

The previous owner’s drainage, storage or treatment systems may be appropriate for your site but this should not be assumed. Throughout this document we stress the importance of identifying the activities likely to generate potential contaminants. When designing your site layout, regardless of site size, at best you need to consider isolating your risky activities and mitigating any potential effects.

Site investigations

Empty sites that may resemble an old paddock are not necessarily uncontaminated. Historical market gardens, farms and orchards could have contaminated the land with pesticides, herbicides, fuel storage or sheep dips, without obvious signs of contamination on the surface. Investigating the previous land uses of your proposed site is an important step in determining whether or not any previous activities may have affected your site.

Depending on your site, there might be a high risk that your proposed activities could contaminate the land and/or water around and underneath your site. This potential issue must be approached properly at the design/implementation stage. Identify high-risk activities, (e.g. storage of hazardous substances and discharges of contaminated materials/liquids), then address the risk by separating and isolating work or activity areas and/or installing appropriate treatment. There are long-term consequences for you and

any potential future owners or developers if the land becomes contaminated. Addressing the potential for contamination at the design stage is the best approach, because once a site is contaminated, it is expensive to fix.

Listed Land Use Register

Environment Canterbury maintains the Listed Land Use Register (LLUR). The LLUR is an electronic database used to store specific information about sites likely to have a past or present land use on the Hazardous Activity and Industries List (HAIL). Sites included on the database are assigned a category depending on how much is known about the site. Environment Canterbury may be able to advise you if your site was subject to such activities in the past. However, not all HAIL sites are identified on the LLUR and new sites are added regularly.

Many sites that have been contaminated from previous activities are identified on the LLUR. But even if it is not on the LLUR, there may be a history of HAIL usage on the site. The history of a brownfield site must be fully investigated before you purchase or begin your development project to be sure every environmental issue is understood. A good place to start is by asking Environment Canterbury if and why your site is on the LLUR. You can request this information from Customer Services. Contacting Environment Canterbury is very important because the location and type of contamination might restrict development of the site.

Search the keywords “contaminated land” on the Environment Canterbury website (www.ecan.govt.nz) for more information.

Hazardous Activities and Industries List

One of the bigger risks of industrial activities is the potential for the contamination of land. As such, the HAIL currently forms part of the Proposed Natural Resources Regional Plan Schedule WQL3 and WQL3A in Chapter 4 Water Quality. HAIL sites are of interest to us because past and/or current activities could have or may result in contamination in the underlying or adjacent soils and/or groundwater.

Activities such as landfills, timber treatment sites, market gardens, underground fuel storage tanks, etc, can be found on the HAIL. Identifying and mitigating risks of exposure to potential contamination and prevention of the transport of contamination into air, land, groundwater or surface water is an important component of managing industrial activities.

HAIL sites are often, but not always, found on the LLUR. If you are aware of previous contamination of your site, you might have information such as site investigation reports and remediation records that you can provide with your consent application(s). The Environment Canterbury Contaminated Sites Team may also hold extra information about your site. If we are aware of contamination of your site, this will be identified by the consents section when your application is lodged. Depending on the activity you are proposing and historical information held for your site, Consents Investigating Officers may seek further information from you, the City or District Council and/or the Environment Canterbury Contaminated Sites team about potential contamination.

Types of discharges

Industrial activities will generate pollution in the form of smoke, wastewater, odour, etc. This pollution can contain a variety of contaminants, such as oils, heavy metals and dust, many of which are harmful to the environment and to people. You will need to understand what contaminants are likely to result from your activity.

Stormwater contaminants can include:

- Suspended solids (fine sediment)
- Hydrocarbons (from fuel/oil leaks and spills)
- Nutrients (including nitrogen and phosphorus)
- Heavy metals (can be attached to sediment or other particles in the stormwater or dissolved in the stormwater)
- Micro-organisms (e.g. from animal faeces)
- Hazardous chemicals (stored or handled at the site)
- Organic matter (including leaves and detritus)

Air discharge contaminants can include:

- Suspended solids (dust)
- Particulate matter (PM10)
- Sulphur dioxide, nitrogen oxides, carbon oxides (from combustion)
- Volatile aromatic hydrocarbons (spraypainting, fibreglassing, etc)
- Odour

Contaminants that may be present due to hazardous substance storage include:

- Hydrocarbons, including volatile aromatic hydrocarbons and polyaromatic hydrocarbons
- Heavy metals
- Emulsifiers
- Benzene, toluene, ethylbenzene and xylene (BTEX)
- Pesticides and herbicides

The lists above are not exhaustive and the amounts and types of contaminants will depend on the activities you are undertaking at your site. When investigating treatment and discharge methods, you must consider the types and sizes of catchments and the potential sources of contaminants within those catchments. Often a site can be divided up into different 'levels of risk' or 'dirty vs clean' areas and this should be driving the layout of the site and the types of systems you construct/install.

The affected environment

You must consider where the contaminants generated on your site will eventually end up and the effects they may have there. You may require help from an environmental consultant and/or Environment Canterbury to answer the questions over page. A good starting point will be to use Environment Canterbury's online GIS: www.ecan.govt.nz/ecanmapping/.

General

- Do you or the site you are developing, have any existing or expired resource consents?
- What were the previous land uses of the site?
- Could any of the previous uses (i.e. HAIL) have resulted in contamination of the land?
- Is the site drainage connected to the City or District Council network, i.e. stormwater drainage or trade waste?
- What is the local topography (the shape or slope of the land)?
- What are the underlying soils?
- What is the distance from treatment and disposal systems to property boundaries?

The following activity-specific questions should also be addressed, depending on what you are proposing to do.

Groundwater – Discharges into land

- How deep is the local groundwater?
- In what direction does groundwater flow?
- Where are the closest wells? What are they used for?
- What is the existing water quality in nearby monitoring wells?
- Where is the closest Community Drinking Water Supply Protection Zone?
- Where is the closest National Environmental Standards human drinking water supply well?
- Is the activity taking place within a Christchurch Groundwater Protection Zone?
- Do nearby surface waters have a hydrological connection with groundwater in the area?
- Where are your secondary flow paths (when the capacity of your system is exceeded)?

Surface water – Discharges into water or onto land where they may enter water

- What water body (i.e. lake or wetland) or watercourse (i.e. stream, river or drain) will be affected?
- What are the habitats, ecological values and existing aquatic life associated with it/them?
- What is the existing water quality?
- Are there water quality standards that should be applied?
- What is the existing flow regime, including base and peak flows?
- What is the local flooding history of your site?
- What other activities are taking place further up the catchment (i.e. upstream)?
- Where are your secondary flow paths (when the capacity of your system is exceeded)?

Air – Discharges into air

- Is your site located within a city, town or other settlement?
- What District or City planning zone is your site located in?
- Are you within or close to a Clean Air Zone?
- How far away are your closest neighbours?
- What is the nature of the surrounding land use, e.g. commercial, residential, industrial?
- What is the distance to any sensitive receptors, e.g. schools, hospitals, houses?
- What other discharges into air occur in your area?
- What is the existing air quality?
- What direction(s) does the wind generally come from?
- Are the discharges likely to be regular or intermittent?
- What types of contaminants are likely to be emitted?
- What is the height of the stack outlet above ground level?
- What is the height of the building at the roof ridge-line?
- What is the fuel you will be burning? What are the specifications of the fuel?
- What is the capacity of your burner?
- What is the local topography, including features that may affect contaminant dispersion?
- Is it likely that through the development of your site, contaminants could be discharged via dust emissions?

Land uses – Hazardous substance storage

- What type of substance is being stored?
 - Petroleum hydrocarbons including those for cooling purposes but excluding liquefied petroleum gas
 - Chlorinated hydrocarbons
 - Agrichemicals
 - Timber preservatives
 - Any other substance containing, arsenic, cadmium, chromium, cyanide, lead, mercury, nickel or selenium
 - Is the hazardous substance classified under HSNO with an ecotoxicity of 9.1A, 9.1B or 9.1C?
- How persistent is the substance in the environment?
- What are the HSNO, Environment Canterbury and City or District plan regulations regarding storage requirements?
- Can it be stored inside a building?
- How deep is the local groundwater and how much does the level fluctuate?
- Is your site located within a Christchurch Groundwater Protection Zone (Sub Zone 1, 1A, 1B, 1C, 1D)?
- What is the distance to the nearest water supply bores? What is the depth and use of these bores?

- What is the distance to surface waterways (including irrigation canals and coastlines) and what are their uses/values?
- What is the permeability and lateral extent of subsurface soils?
- Is the site within an earthquake or other hazard zone?

Resources

The answers to the previous questions may be obtained from a variety of sources. These include:

- Undertaking a site visit
- Discussions with neighbours
- Environment Canterbury's on-line GIS (available via the Environment Canterbury website)
- The City or District Council
- Regional Plans, i.e. NRRP
- District/City Plans
- Consultants, i.e. technical experts

Treatment, storage and disposal options

Stormwater

Drainage from your site is one of the most common ways for contaminants to enter the environment. On most sites there will be two drainage systems; the stormwater drains and sewers (trade waste).

You need to ensure:

- Only stormwater pipes and inlets are connected to the stormwater system;
- All waste pipes connect only to the sanitary sewer; and
- Closed loop systems are properly contained or connected to the trade waste sewers.

All stormwater leaving your site could carry contaminants from a variety of sources such as:

- Hydrocarbons on car parking areas
- Particulates in roof water
- Rainwater coming into contact with uncovered waste storage or work areas
- Sediment that is washed or blown off stock piles and areas of bare ground or tracking from gravelled/unsealed areas
- Faecal matter from stock
- Washdown water, i.e. nutrient from stock trucks, hydrocarbons and metals from vehicles/machinery

You are responsible for ensuring that stormwater running off your site is clean. This may involve treating it

before it can be discharged into the environment. You can:

- Plant unused areas in grass to reduce sediment loading (and improve the appearance of your site!).
- Use stormwater treatment devices to remove sediment and other contaminants (swales, interceptors, detention ponds).
- Prevent oil and diesel getting into stormwater by installing oil interceptors in refuelling or car parking areas.

Some of the more common stormwater systems used on industrial sites, either on their own or as part of a treatment train, are those that remove the most common contaminants, i.e. sediment, hydrocarbons and metals. Depending on the particular contaminants at your site, a combination of stormwater systems may be needed to treat the whole range of contaminants.

Some of the more commonly used stormwater systems are listed below. This information was sourced from the Auckland Regional Council Technical Publication #10 (May 2003):

- Sand filters can be aboveground or underground. Sand filters work by sedimentation and filtration, generally with an inflow point to a sedimentation chamber and an underdrain in a subsequent filtration chamber that discharges filtered stormwater.
- Rain gardens are generally surface depressions with key elements including a grass filter, a sand/loam soil mixture, shallow ponding, plantings and an underdrain.
- Swales and filter strips use vegetation in conjunction with slow and shallow-depth flow for stormwater runoff treatment. Contaminants are removed by the combined effects of filtration, infiltration, adsorption and biological uptake.
- Oil and water separation devices are used for treating stormwater runoff from areas where hydrocarbon products are handled (e.g. petrol stations, airports, storage terminals) or where small spills routinely fall on paved surfaces. Oil and water separators are not primarily designed to remove suspended sediment. Sites that generate both suspended solids and hydrocarbons will need separate treatment systems. Where vehicle refuelling occurs, oil and water separators should hold a minimum of 2500 litres of oil, which is the standard that has been agreed upon by the oil industry.
- Rainwater tanks are primarily water quantity management devices. There are minor water quality benefits, depending on the amount of airborne contaminants in a given area, but their primary function is for quantity management and to supply on-site water use.
- Proprietary systems are underground devices (typically hydrodynamic separation systems) that can remove a significant amount of settling and floating contaminants from stormwater. Most cannot remove dissolved contaminants.

You can make your stormwater treatment system cost-effective by diverting clean stormwater away from your treatment system. You should target your 'hot spots' and reduce the volume of contaminated runoff requiring treatment. Here are some helpful tips:

- Collect and use roof stormwater in your site operation (if possible), to reduce the amount of stormwater running off your site.

- Cover waste storage and regular stockpiling areas to prevent rain coming into contact with waste or sediments, thus contaminating stormwater. Also ensure that surface water does not wash or flow through covered areas.
- Put roofs on outdoor storage areas and other high risk areas (for example, loading and unloading areas).
- Manage stormwater flows on, off and through your site to eliminate contact between stormwater and sources of contamination (including sediments).

Trade waste

Trade waste from manufacturing or industrial processes may be discharged into the sewer with permission from your local Territorial Authority. You should contact the City or District Council for more information. Usually there is a trade waste bylaw which limits what can be discharged into a sewer. If your waste is not suitable for disposal into a sewer, you will need to find a responsible waste operator who will handle it for you at a licensed treatment and/or disposal facility (you may have to pre-treat some wastes). Some waste disposal firms have dedicated sewer lines for their trade waste, and these connect to the area's main sewer.

Liabilities associated with the disposal of waste

If your waste is not appropriately disposed of after leaving your site, you may be liable for any environmental consequence, regardless of how the disposal company disposed of it. Both companies/parties could face fines or prosecution. To safeguard your liability and to ensure your waste is safely disposed of, discuss with your waste contractor how they will dispose of your waste. Check whether they are part of the WasteTRACK programme (for more details see www.wastetrack.co.nz).

You can find a list of Code of Practice certified liquid waste contractors at www.wasteminz.org.nz/sectorgroups/hazardous/LHWOCC.

Air discharges

Many sites use air pollution control equipment, including filters, cyclones, scrubbers or afterburners, to reduce the level of pollutants in their emissions. The performance of this equipment degrades with time and so the equipment requires regular maintenance to work effectively. A programme of testing and preventative maintenance will help to avoid pollution incidents or emergencies. Pollution can impact heavily on local air quality, as well as being dangerous and expensive to correct.

Dust

Discharges of dust (known as “fugitive dust”) or other contaminants are very hard to control, so it is important to have good work practices that minimise the creation of this contaminant. Control at source or avoiding practices that allow contaminants to escape into the environment, are easier than trying to clean up the problem or deal with complaints later.

The Canterbury Erosion and Sediment Control Guidelines 2007 (sections 6.1.1 and 6.1.2) provide some information on the control of dust and these principles can be applied to a variety of activities, not just construction.

Spraying water over a disturbed area or a stockpile binds soil particles reducing their susceptibility to wind erosion and dust generation (detachment, suspension and transportation of fine soil particles by wind or by construction activities and vehicle movements).

Water may be applied to:

- Haul roads and access tracks by the spray boom at the rear of a water cart;
- Stockpiles, batters and other larger areas by a series of side spray fan nozzles or hose or by an irrigation system of pipes and spray nozzles (often set up along constant-use haul routes); or
- Directly by hose to smaller areas during localised excavation and/or loading activities.

Other mitigation measures can reduce fugitive dust from unconsolidated surfaces:

- Establishing “set back” distances of dust generating activities from sensitive areas, such as homes and recreational areas;
- Using water sprayers;
- Minimising drop heights for materials, i.e. gravels;
- Limiting the times when dust-generating activities can occur;
- Cleaning sealed areas regularly;
- Limiting vehicle speeds;
- Sealing roads;
- Limiting heights of stockpiles, locating them below ground level or vegetating them if they are to be present for a long time;
- Planting and maintaining shelter belts;
- Constructing high berms around the perimeter of your site or activity;
- Progressively revegetating exposed areas.

Odour

Many activities, such as waste management, freezing works and abattoirs, cause odour. This can cause significant adverse effects on people’s lives and their well-being. The threshold in the RMA is an “objectionable or offensive” effect, which will depend on the frequency, intensity, duration and offensiveness of the odour. It is important that you have specific measures in place to mitigate this potential effect, as a requirement to achieve best-practice is likely to be included on your consent document.

Some odour control technologies include:

- Targeted odour extraction and treatment;
- Biofilters;
- Scrubbing and adsorption systems;
- Isolating “smelly” activities within buildings and limiting exposure to the environment;
- Good ventilation that directs the odour away from receptors, i.e. neighbours;
- Vertical discharge points to assist dilution and dispersion, i.e. via a stack.

The Ministry for the Environment has also prepared a document about assessing and managing odour. You can obtain this document on their website www.mfe.govt.nz (Good Practice Guide for Assessing and Managing Odour in New Zealand, June 2003, Ref. ME473).

Combustion

Large scale fuel burning devices include any boiler, furnace, engine or other device designed to burn fuel for the primary purpose of energy production, excluding motor vehicles, boats and aircraft. This definition specifically excludes solid fuel burning devices used in dwellings, waste incineration devices and crematoria.

Examples of these range from a 150 kilowatt diesel-fired school furnace to a 20 megawatt coal-fired industrial boiler.

Types of industrial appliances typically include:

- Boilers
- Electricity generators
- Furnaces
- Spray painting bake-ovens

Boilers and furnaces produce discharges from external combustion. Generators and engines produce discharges from internal combustion.

Typical industrial fuels include:

- Biodiesel
- Coal
- Diesel
- Light fuel oil (LFO)
- LPG
- Natural gas
- Oil
- Wood pellets
- Wood chips

Some appliances have resource consents for combustion of more than one type of fuel e.g. diesel and LPG.

The types of emissions depend on the appliance and the fuel type. Discharges from coal external combustion may be high in sulphur dioxide, whereas discharges from diesel internal combustion may be high in particulate matter. Rules in the regional plan recognise that emissions may increase during start-up and refuelling.

Hazardous substance storage

The management of stormwater is a critical issue for the operation of storage tanks, particularly at fill and distribution points where overflowing and spills could occur. Where filling or distribution occurs on hardstand areas (especially concrete), spilt contaminants will be collected in the stormwater system and transported away from the source.

Leaks in storage systems can arise because of age, poor construction or poor design. Underground tanks and underground distribution pipes are especially susceptible because their integrity cannot easily be checked.

Contaminants leaked or spilt into surface water can have adverse effects on the aquatic ecology of the receiving water and downstream users, i.e. recreational, surface water takes, etc. When leaked or spilt into land, the land itself becomes contaminated. This is difficult to clean up and contaminants could leach into groundwater, which in turn could affect drinking water supplies.

Common options used to control or mitigate the risks discussed above include, but are not limited to:

- Secondary containment (also known as “bunding”) to protect the environment from spills or leaks. Secondary containment includes major facilities able to contain all the liquids stored in the vessels inside them, rollover bunds which stop spills from indoor workspaces escaping into yards, and portable palletised containment systems. Secondary containment lets you detect and control any small or slow leaks and will contain spills from sudden ruptures of tanks or drums. It is a second line of defence to prevent leaks and spills from contaminating the environment. The size of a secondary containment depends on the volume of material and the size of the containers stored within it.
- Oil and water separation devices treat stormwater runoff from areas where hydrocarbon products are handled, such as petrol stations, airports and storage terminals or where small spills routinely fall on paved surfaces.
- On-site stormwater storage allows holding of all stormwater for re-use in site processes or allows for containment of spills or contaminated stormwater for testing before being released to the trade waste or stormwater network. (Consult with your City or District Council on their requirements for this option).

The Ministry for the Environment (MFE) and Hazardous Substances and New Organisms Act 1996 (HSNO) guidelines and requirements should be consulted when considering this aspect of your proposal.

Remember to...

- Check all your activities against the rules in the regional plan(s)
- Consider consent requirements before you start
- Check HSNO requirements with ERMA
- Think carefully about the layout options for your site
- Check with Environment Canterbury about HAIL and the LLUR
- Use the Environment Canterbury online GIS programme
- Consult with the City or District Council about their requirements

SECTION TWO

Before you lodge any consent applications

This section directs you to people, programmes and guidelines that may be useful during the planning or development stage of your proposal.

Who can I talk to at Environment Canterbury to help me with my proposal?

Customer Services

Customer Services Advisory Officers (AOs) can be contacted via phone, email or in person. They have a breadth of knowledge regarding consenting requirements and are extremely knowledgeable on many aspects of the consenting process. They should be able to advise you what consents you may require and direct you to the forms and guidance notes associated with different consent applications. AOs can provide you with access to other Environment Canterbury staff who could assist you in preparing your application(s). They can also help set up meetings to ensure you speak to the correct people to get the information you require.

Consents

Consents Investigating Officers (CIOs) are available to provide you with pre-application advice during preparation of resource consent applications for your activity/activities. CIOs offer all applicants up to one hour of advice at no cost. For larger developments, if you would like advice on an ongoing basis, you can set up a consent number before you lodge your application(s). This allows all Environment Canterbury staff, including CIOs and scientists, to dedicate as much time as you need to help answer your questions. All time spent beyond the first hour will be charged to the consent. CIOs can advise you on:

- The types of consents your activity may require;
- The minimum type and amount of information needed for a consent application;
- Expectations about treatment, disposal, storage, etc;
- When you should be communicating with the relevant City or District Council;
- Other sections at Environment Canterbury where you should be seeking assistance; and
- Examples of consent applications for similar types of activities.

Compliance Monitoring and Enforcement

Environmental Protection Officers (EPOs) ensure that the conditions of resource consents are being complied with, ensure that permitted activities are conducted in accordance with regional plans, and respond to any activities that may be having an adverse environmental effect. They offer a unique perspective on the typical issues that industrial sites face and can provide you with invaluable advice. They are familiar with the mitigation that industrial sites use or should use and can offer you practical advice on what may, or may not, work for your proposal. EPOs and CIOs work closely together during the consenting process to ensure that what you propose is likely to work effectively. EPOs monitor consented activities that could have an adverse impact on the environment, ranging from farming and industrial activities to landfills and sewage treatment systems.

Pollution Prevention Officers

A great starting point for you is to make contact with a Pollution Prevention Officer (PPO). They are a knowledgeable liaison between different industries and Environment Canterbury, and can offer helpful information on Environment Canterbury rules relevant to your activity and your site. They have prepared a Pollution Prevention Guide (PPG), which is a generic industrial guide aimed primarily at existing businesses but which also provides guidance on the main concerns and best practice options for established, and existing, industrial activities. PPOs are available to bring the PPG to your site and conduct a ratepayer-funded site assessment (no cost to you) to start the process.

What sorts of activities might require a consent from Environment Canterbury?

There are three types of consents you may require for a particular industrial activity – discharges, land uses and water take. Water takes are not covered in this guidebook.

The types of activities associated with industrial sites that may require discharge or land use permits include, but are not limited to:

- Discharge of stormwater into land
- Discharge of stormwater into surface water
- Discharge of stormwater into the City or District Council network
- Discharge of contaminants into or onto land or into surface water
- Discharge of contaminants into the air
- Discharge of odour
- Discharge of contaminated water during construction
- Use of land to store hazardous substances
- Excavation of land
- Use of land to construct a structure (i.e., basin, outfall, culvert, dam, etc)
- Use of land to undertake works in the bed or banks of a watercourse

Discussing all aspects of your activity with a Pollution Prevention Officer, Environmental Protection Officer and/or a Consents Investigating Officer, prior to undertaking any works should mean that you are aware of, and obtain, all the consents you need before you begin your activity. Not seeking authorisation for your activities or conducting an unauthorised activity is against the law and can result in enforcement action being taken against you.

Consultants

There are qualified consultancy firms that can assist you in the preparation of the consent application(s) needed for your proposed activity. A consultant may also be able to provide you with industry best practice guidelines or requirements, which can assist in the consenting process and help you gain authorisation for your activity.

In summary, Customer Services AOs, EPOs, PPOs and CIOs or a hired consultant, are your best resources for determining the consents required for your activity. If you have hired or are hiring a consultant to help you prepare your applications, ensure they are familiar with your activity so they are able to thoroughly investigate the relevant plans/regulations and provide advice on writing and submitting your consent requirements.

Assessments of Environmental Effects

The Ministry for the Environment has prepared a guideline, A Guide to Preparing a Basic Assessment of Environmental Effects (AEE), which can assist you in writing the AEE required as part of your consent application(s). It can be accessed on the MfE website www.mfe.govt.nz. Below are some key points from the guideline.

Your AEE should include the following, as set out in section 88 and the Fourth Schedule of the RMA:

1. A description of your proposed activity.
2. An assessment of the actual and potential effects on the environment of your activity.
3. A description of available alternatives.
4. A discussion of the risk to the environment from hazardous substances and installations, etc.
5. For contaminants, an assessment of the nature of the discharge and sensitivity of the receiving environment to the adverse effects and any possible alternative methods of discharge, including discharge into any other receiving environment.
6. A description of how the adverse effects may be avoided, remedied or mitigated.
7. Identification of the persons affected by the proposal, the consultation undertaken, if any and any response to the views of any person consulted.
8. Where an effect needs to be controlled, a discussion of how it can be controlled and whether it needs to be monitored. Where appropriate, a description of how this will be done and by whom.

The comprehensiveness of your AEE should be proportional to the potential effects of your proposed activity. It does not need to be exhaustive, but should provide enough information for Environment Canterbury to evaluate the potential effects. Environment Canterbury staff will be able to provide guidance, but we cannot prepare the AEE for you, as this is your responsibility.

Environment Canterbury will not accept your consent application unless it is accompanied by an adequate AEE.

An inadequate AEE:

- Could result in your application being returned to you;
- Could create the need for changes to your proposal;
- Could increase processing costs;
- Could potentially cause delays as further information is sought;
- Increases the chance of the application being notified or requiring written approvals from affected persons; and
- Reduces the chance of the council granting consent.

Regional plans

The next three sections for this guidebook will refer to regional plans, both operative and proposed. There are many operative and proposed plans for resource management within the Canterbury region. You can view these plans at <http://ecan.govt.nz/our-responsibilities/regional-plans/Pages/rps-regional-plans.aspx>.

The location of your activity will determine which plans are applicable. The two most widely applicable plans are the Transitional Regional Plan for Canterbury (excluding Kaikoura), referred to as the TRP and the Natural Resources Regional Plan, referred to as the NRRP.

The TRP is a compilation of bylaws from 1991, includes general authorisations for activities such as effluent disposal, stormwater, and bylaws that were managed by the Catchment Boards.

The NRRP consists of eight chapters focussing on the main environmental issues within the region, as determined by the public, including air quality, water quality, water quantity, etc. Each chapter has associated issues, objectives and policies which are implemented by the rules contained within it. Rules specify conditions within which a particular activity can be undertaken.

Sections Three, Four and Five of this guidebook provide an overview of the plans that could be applicable to your activity. It will be up to you to determine which are relevant. You may wish to seek help from Environment Canterbury's Customer Services or Consents sections.

What industry practice guidelines can help you?

Environment Canterbury

1. Pollution Prevention Guide

The Pollution Prevention Guide (PPG) is a tool that aims to help businesses prevent pollution. It is a simple set of checklists to help you carry out an environmental audit of your site. Environment Canterbury's PPG provides you with guidance on drainage, storage and handling, spills, air, housekeeping and waste. Further information can be found on the Environment Canterbury website, www.ecan.govt.nz, by searching the keywords "pollution prevention".

2. Erosion and Sediment Control Guidelines

These give a range of detailed measures for earthworks, including residential and commercial subdivisions, roading, some forestry works, quarries, cleanfills and landfills, stream works and installation of utility services. The principles are applied specifically to the Canterbury environment and specific practices and procedures are discussed to guide you during project design, construction, maintenance and decommissioning. Further information can be found on the Environment Canterbury website, www.ecan.govt.nz, by searching the keywords "erosion and sediment control".

3. Guidebooks and application forms for preparing consent applications

To assist with the preparation of resource consents, Environment Canterbury has prepared a variety of guidebooks and application forms to guide you through the consent process for a number of different activities. Each guidebook contains a simplified discussion of the likely effects of the activity, the legal and

planning matters that must be considered, application forms, guidance notes to preparing Assessments of Environmental Effects (AEEs) and standard conditions (if applicable). Application forms will lead you through all the information we require for an activity. Further information can be found on the Environment Canterbury website, www.ecan.govt.nz, by searching the keywords “forms and booklets”.

City and District Councils

There may also be information packs or documents available at your local District or City Council that can provide you with more details on their consenting requirements. This may include information about building requirements or trade waste permits. Contact the relevant council's Customer Service centre or visit their website to determine what information is available and who must be contacted.

Ministry for the Environment

The Ministry for the Environment has published a variety of guidelines that may be applicable to your proposed activity. Visit their website, www.mfe.govt.nz and click on the 'Publications' tab at the top. The following are some guidelines that we refer to regularly at Environment Canterbury.

1. Contaminated land management guidelines

The contaminated land management guideline series has been developed in partnership with regional councils and unitary authorities. Their main purpose is to introduce consistency in contaminated land assessment and management throughout the country.

2. Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand

These are guidelines for the owners and managers of petroleum industry sites on how to ensure water discharges will not cause significant adverse effects on the environment. They deal with sites at which the principal products stored are petrol, kerosene, diesel, lubricating oil and fuel oil. The guidelines do not deal with petroleum refineries or oil recycling sites, but do address the issue of waste oil collected at service stations.

3. Guidelines for assessing and managing petroleum hydrocarbon contaminated sites in New Zealand

This provides information on the assessment and management of sites contaminated with petroleum hydrocarbons.

4. Best practice guides and guidelines for discharges into air, including odour, dust and ambient air quality

Do I need to consult with the District or City Council about my proposed activity?

You should be consulting with your local Territorial Authority prior to and during, the resource consent process. You are likely to require a building or land use consent from the City or District Council to undertake your proposed activity at a particular location. The District and City Plans as well as Council staff will guide you as to the requirements for a particular site.

You may wish to connect to a District or City Council network, either to dispose of liquid waste into the sewer/trade waste system or to transport stormwater through the drainage network. In both of these situations you will require their written acceptance. CIOs communicate regularly with the City and District Councils for each consent application and they will often require you to provide written evidence from the appropriate person, usually the Asset Manager, that the discharges are acceptable to the Council. Without this written acceptance, a resource consent from Environment Canterbury cannot be granted.

Remember to...

- Meet with the appropriate Environment Canterbury staff
- Consult with the City or District Council about their requirements
- Ask experts who can help you and use guidelines to help select the most appropriate options for your site

The next three sections of this guidebook highlight activity-specific requirements for discharges into land, water and air; and land uses.

SECTION THREE

Consenting requirements

Discharges into surface water and into land

Note: Seeking help from either a qualified consultant or Environment Canterbury Customer Services or Consents staff is recommended unless you are familiar with the proposed and operative plans for the region, how to apply the different rule conditions and how to address the status of your activity.

The purpose of this section is to discuss briefly the most common discharges into land and surface water that industrial activities generate in relation to the legislation and requirements for consent applications.

Discharges that may enter surface water or groundwater are covered under Section 15 of the Resource Management Act 1991. Unless the relevant proposed and operative plans expressly allow the discharges, you'll need a resource consent. In the simplest terms, if the plans say you can do something (permitted) and you can meet the conditions stated in the rule/s, consent is not required. If your specific discharges are not permitted or the plans do not refer to them, you need to obtain resource consent.

Stormwater

Note: *This section should be read in conjunction with the two “The Calm Before the Storm” booklets that have been written to assist with the preparation of consent applications for the discharge of stormwater into land and into surface water. This section will endeavour not to repeat all the information in the stormwater booklets, but will focus on issues most relevant to industrial sites.*

Introduction

Impervious areas, such as the roofs of buildings and sealed driveways and roads, do not allow rain to soak into the ground. The runoff generated is called stormwater. Generally, the amount of runoff generated from rainfall at an undeveloped site is much less than the stormwater volumes generated at a site with lots of impervious areas.

At industrial sites, activities often result in contaminants collecting on impervious areas. These contaminants are carried into stormwater when it rains. All stormwater leaving your site has the potential to carry contaminants and you are responsible for making sure stormwater from your site is clean. If stormwater becomes contaminated it may need to be treated prior to discharge or even removed as a waste.

Stormwater systems typically collect rainfall in drains and use pipes to carry the runoff to a nearby surface water body such as a river, the sea or to another system that discharges into groundwater. Any contaminants in the stormwater will therefore end up in our rivers, harbours or aquifers. For this reason, a treatment system is usually installed between the drains and the pipes or outfalls into other systems to capture the contaminants before they end up in the environment.

Because of the connection between the stormwater system and the environment, there is a risk it will become a pathway for pollution if spills and leaks occur on site. It is important to design your site and stormwater system to ensure that only clean uncontaminated rainwater or fully treated stormwater is discharged off your site.

Hazardous substance storage

If you cannot roof your storage areas or drums, then grade the floor towards a collection sump and drain. Fit a drainage valve to the sump and keep it closed and locked until you need to drain away accumulated water. Before unlocking and opening the valve, you will need to make sure the water is clean so that it will not pollute stormwater or soil. As part of this, consider reviewing the volumes of hazardous substances on your site, as this may lead to reduced storage requirements and fewer areas requiring roofs. Review your site processes and the storage volumes and ask yourself whether you can reduce the size of the containers you purchase or hold, or if you can alter your batch production size to make sure that all hazardous substances get used, rather than storing leftovers.

Refuelling

Vehicle refuelling can cause widespread soil contamination and hydrocarbon pollution of stormwater. You must prevent these contaminants from entering soil or water. Just one litre of oil can contaminate 1 million litres of drinking water, coat birds and poison other wildlife and create a barrier preventing essential oxygen from getting into surface water. Any staining around refuelling areas is evidence that leaks and spills are occurring. Some simple measures can prevent this from happening, including, but not limited to, the following:

- All tanks are fitted with secondary containment;
- Pipes, valves, fill points and gauges are within the secondary containment;
- Tank and refuelling pads are isolated from the stormwater drainage system;
- A refuelling procedure is in place and staff are trained in its use;
- A spill kit station is located nearby and staff know how to use it; and
- Pumps are fitted with automatic cut-off switches.

Wastewater

There are many different contaminants associated with wastewater, including, but not limited to:

- Sediment
- Hydrocarbons from oil, fuel, asphalt
- Metals
- Paints
- Cleaners, such as acid, solvent, detergents or degreasers
- Nutrients and faecal matter from stock trucks and rendering plants
- Concrete particles
- Organic matter

Wastewater must be collected for proper treatment within a designated system and disposed of properly.

Some types of businesses where wastewater is typically generated include:

- Concrete batching plants
- Manufacturing plants
- Meat, vegetable, milk and skin/hide processing facilities
- Wineries
- Vehicle and equipment repair facilities
- Condensate water from air conditioning units, compressors and coolstores
- Commercial vehicle washing facilities
- Metal treatment or coating facilities

Plans and rules assessments

Discharges into land and into surface water are subject to the provisions of operative and proposed regional plans. Depending on where you are in Canterbury, the plans you must assess your activity against will vary.

The following plans are relevant:

- The Nelson-Marlborough Transitional Regional Plan (TRP-K) and the Canterbury Transitional Regional Plan (TRP) are operative plans and relate to the Kaikoura District and the rest of Canterbury, respectively.
- The Regional Coastal Environment Plan (RCEP) is a fully operative plan which relates to the Coastal Marine Area.
- The Proposed Natural Resources Regional Plan (PNRRP) Chapter 4 Water Quality covers the entire region and is not yet operative.
- For the Waimakariri River catchment, the operative plan is the Waimakariri River Regional Plan (WRRP).
- For the Opihi River catchment, the operative plan is the Opihi River Regional Plan (ORRP).

Stormwater

Regional Plan (operative and proposed)	What it covers
TRP-K	General Authorisation 10 authorises stormwater discharges into natural water but not into land.
TRP	General Authorisation 8 does not authorise discharges from commercial or industrial sites.
Chapter 7 of the RCEP	Authorises the discharge of contaminants into or onto land where it may enter, the Coastal Marine Area (CMA) provided certain water quality standards are met.
Chapter 4 of the PNRRP	Rules relating specifically to the discharge of stormwater into land or into surface water. Variation 6 of the PNRRP came into effect in July 2007 and has a focus on protection of Christchurch groundwater.
Chapter 6 of the WRRP	Authorises the discharge of contaminants into or onto land where it may enter the Waimakariri River, or its tributaries, provided certain water quality standards are met.
Chapter 6 of the ORRP	Authorises the discharge of contaminants into or onto land where it may enter, the Opihi River or its tributaries, provided certain water quality standards are met.

Wastewater

The TRP-K does not contain any specific General Authorisations related to (any other) discharges from industrial activities.

General Authorisation 7 in the TRP authorises cooling water discharges into land and into surface water.

In Chapter 4 of the PNRRP, the following types of rules relate to the discharges of contaminants into land or into surface water. You will need to assess your activity closely to determine which rule(s) are most applicable:

- Point source discharges into land or into surface water
- Discharges onto and into land from industrial or trade premises
- Discharges into land and into surface water.

Chapter 6 of the WRRP and ORRP and Chapter 7 of the RCEP are also relevant (see table on previous page for details).

Information requirements and preparing Assessments of Environmental Effects (AEEs)

Schedule 4 of the RMA 1991 lists the information required in any resource consent application. This forms the basis of the initial check of all incoming applications. If all components are not included, you are likely to have your application returned. See also Section Two “Assessments of Environmental Effects”.

PNRRP Chapter 4, Sections 4.7.1 and 4.7.2 give a detailed description of the information needed to satisfy the requirements of all incoming applications. This information has been used in the creation of checklists for many different activities to ensure that only complete applications are accepted. Deficient applications are returned to applicants outlining the missing information.

Nature of the discharge

You should include a detailed description of the nature of the discharges, particularly the types and amounts of all the likely contaminants expected from the site. See Section One of this guidebook.

Receiving environment

A complete application should include the responses to the questions about the affected environments “groundwater” and “surface water” in Section One of this guidebook.

Summary

Essentially, your proposal should include, but not be limited to:

- a) A detailed description of all the activities being undertaken on your site;
- b) A detailed description of the immediate receiving environment for the discharges;
- c) The nature of the discharge and method(s) of discharging;
- d) Assessments against the relevant plan rules and policies;
- e) Design plans and supporting capacity calculations for drainage and treatment systems;
- f) Estimated levels of contaminants in the discharge and reaching the environment;
- h) A full assessment of the effects of your discharges, including possible cumulative effects;
- i) A specific statement on whether the effects of the contaminants are considered to be less than minor or not;
- j) Long-term maintenance proposals; and
- k) The consent duration that is being sought.

Application forms and guidance notes

Forms, Guidebooks, Example Conditions and Guidance Notes are available on the Environment Canterbury website, at www.ecan.govt.nz, by searching keywords within our Publications section.

Note that there are many items related to the discharge of stormwater.

Some activities have specific consent application forms and associated guidance notes that can be used to prepare your application. We strongly recommend that you use these consent-specific forms where available, as they clearly set out the information we require in order to fully understand and process your application. Using these forms, rather than simply referring to an attached document, should allow for faster processing and is likely to reduce the need for us to seek further information.

Even if there is not a specific form for your particular discharge, for example for wash water spray-irrigated onto land, you can use other similar application forms to guide you as to the type of information we need to process your consent. The forms are generally laid out in a similar fashion and will show you how detailed the information should be.

Remember to...

- Keep stormwater drains isolated and stormwater as clean as possible
- Discharge wastewater to the sewer (if available)
- Check if approval is required from a City or District Council for discharges into their network
- Check all your activities against the rules in the Regional Plan(s)
- Check the Environment Canterbury website for guidance on how to apply for resource consents and to obtain application forms

SECTION FOUR

Consenting requirements

Discharges into air

Note: *Seeking help from either a qualified consultant or Environment Canterbury Customer Services or Consents staff is recommended unless you are familiar with the proposed and operative plans for the region, how to apply the different rule conditions and how to address the status of your activity.*

The purpose of this section is to discuss briefly the most common discharges into air that industrial activities generate in relation to the legislation and the requirements for consent applications.

Discharges into air from Industrial or Trade Premises are covered under Section 15(1) of the Resource Management Act 1991 (RMA). Unless the relevant proposed and operative plans and the National Environmental Standards (NES) expressly allow the discharges, you will need a resource consent. That is, if the plans say you can do it (permitted), a consent is not required. If your specific discharges are not permitted or the plan does not refer to them, you need to obtain resource consent.

Discharges into air from all other activities are covered under Section 15(2) of the RMA. However, for these, unless you contravene the rule(s) in the relevant plans or the NES, you do not need to get consent.

Introduction

Emissions from a wide range of industrial and commercial processes, including transport, can affect air quality, resulting in public nuisance and/or adverse health effects. Contaminants in the air can cause reduced visibility, dust and odour nuisance, and can have negative impacts on human health. Environment Canterbury is responsible for regulating the release of gases, odour, dust and noxious fumes into the air.

Air discharges include: dust from gravel extraction, screening, storage, transportation and construction; products of combustion; solvents from spray-painting; particles from abrasive blasting, seed cleaning and fibreglassing; and odour from a variety of activities.

Air quality issues from industrial activities can be classed as:

1. Localised issues associated with odours, dust, smoke, agrichemical spray and other discharges to air. These may be from the transport, commercial, agricultural, horticultural, manufacturing or industrial sectors;
2. Ambient air quality issues resulting mostly from combustion processes; or
3. Global issues connected with greenhouse gas emissions and consequential climate change.

To address the air emissions from your site you should ensure:

- Any chimney stacks are an optimum height and unobstructed; and
- Air pollution control systems are properly installed and regularly maintained.

Combustion processes

A range of fuel-burning equipment is used by industries, businesses and institutions to generate heat or electricity.

Boilers and furnaces may burn a variety of fuels, including liquefied petroleum gas (LPG), kerosene (rarely), diesel oil, light fuel oil (LFO), re-refined oil, waste oil, coal or wood. Generators and other internal combustion engines are usually fired by diesel oil.

There is significant variation in the type and rate of contaminant emissions, depending on the fuel type and the design of the combustion appliance.

Combustion of all the above fuels results in the discharge of carbon oxides (CO and CO₂), water vapour, nitrogen oxides (NO and NO₂), particulate matter (PM₁₀) and unburned volatile organic compounds (VOCs). Depending on the sulphur content of the fuel, sulphur dioxide (SO₂) may also be emitted. Other contaminants will also be emitted in trace amounts, including metals, polyaromatic hydrocarbons (PAHs), dioxins and furans.

Combustion products are usually discharged via a stack to achieve adequate dispersion and dilution of contaminants. Dispersion of the stack is influenced by: the height of the stack relative to the ground and nearby buildings, the vertical emission velocity, the temperature of the discharge and the local meteorological conditions. Stack heights and nearby building heights should be provided in your consent application. In most cases good practice requires that stacks extend at least 3 metres above the roof ridgeline of your building and of nearby buildings and have an unrestricted vertical discharge (no rain hats).

Odour

As described in Section One, many industrial activities generate odour. Individuals will perceive odour in different ways and circumstances will influence whether or not it is acceptable or objectionable and offensive.

Some of the more common activities that generate odour to a level that requires a resource consent include:

- Rendering plants
- Spreading of effluent
- Intensive farming
- Composting
- Food/milk processing

Please see Section One, page 14, for some options on minimising odour.

Construction phase

Comparatively dry summers compounded by strong, dry, north-west winds and light-textured soils make many parts of Canterbury vulnerable to wind erosion. Unless controlled, windblown sediments (dust) can be a significant form of air pollution from earthworks. Detachment and transport of soil by wind mainly depends on soil particle size, as follows:

- Larger soil particles are too heavy to be raised by the wind, so they roll or slide along the soil surface.
- Medium-sized particles skip or bounce along the surface, detaching more particles every time they land.
- Fine particles of silt, clay and decomposed organic matter are lifted and carried away as dust.

Spraying water over a disturbed area binds soil particles together, reducing their susceptibility to wind erosion and dust generation. If water is applied, once an area is wet enough to prevent wind erosion or dust generation, you should maintain watering at a rate that replaces moisture lost through evaporation, especially in windy and/or very hot weather.

Bear in mind that:

- Some types of soil, such as dry fine clay, silt or topsoil, are particularly vulnerable during construction activities because they are prone to wind erosion.
- Over-application of water could cause erosion and/or water pollution by sediment-contaminated runoff.
- It can be windy during weekends, holidays and outside of normal working hours, but dust control needs to be maintained at all times.
- Vehicles can track sediment onto roads and create secondary dust issues.
- Dust emissions need to be monitored every day.

Dust from unconsolidated surfaces

As described previously in “Construction phase discharges”, dust discharges can arise from unconsolidated or exposed areas. This includes areas of industrial activities, such as quarrying, gravel extraction, gravel crushing, material transportation, etc. In addition to using water sprayers to dampen down soils, roads and stockpiles, the following measures could be put in place to address the nuisance issue:

- Are there any proposed “set back” distances for dust-generating activities and sensitive areas? What are they? Where are they?
- Is there any proposed extraction mitigation? Water sprays? Minimising drop heights? Cleaning sealed areas?
- Is there any proposed transportation mitigation? Limiting truck speeds? Preventing overloading? Sealed roads?
- Is there any proposed stockpiling mitigation? Limiting heights? Locating in quarry pit? Maintaining shelter trees? Constructing berms? Planting vegetation on piles of material if they are to stay there for a long time?
- Progressive quarrying?
- Progressive rehabilitation?

Plans and rules assessments

Discharges into air are subject to the provisions in the operative regional plan. The Natural Resources Regional Plan (NRRP) Chapter 3 Air Quality, is almost through the appeals process and has only some rules which are not fully operative.

In Chapter 3 of the NRRP, the following types of rules relate to the discharges of contaminants into the air. You will need to assess your activity closely to determine which rule(s) are most applicable.

- Small scale fuel-burning devices
- Large scale fuel-burning devices
- Outdoor burning
- Discharges from industrial or trade or waste management processes
- Small and large scale fuel-burning devices in Rangiora, Kaiapoi or Ashburton, Clean Air Zones 1 and 2.

The National Environmental Standard (NES) for air discharges came into effect on 1 September 2005. In particular, s17(1) of the regulations refer to ambient air quality standards and places limits on the concentrations of PM₁₀ in a particular air-shed. The Rangiora, Kaiapoi, Christchurch, Ashburton, Geraldine, Timaru and Waimate air-sheds already breach the standard. This NES should be taken into account when preparing your Assessment of Environmental Effects (AEE).

Information requirements and preparing Assessments of Environmental Effects (AEEs)

Schedule 4 of the RMA 1991 lists the information required in any application for resource consent. This is used as a basis for the initial check of all incoming applications and if all components are not included, will likely result in your application being returned. See also Section Two “Assessments of Environmental Effects”.

PNRRP, Chapter 3, Sections 3.4.3, 3.4.5, 3.4.6 and 3.4.7 give a detailed description of the information needed to satisfy the requirements of all incoming applications for different types of activities. This information has been used in the creation of checklists for many different activities to ensure that only complete applications are accepted. Deficient applications are returned to applicants, outlining the missing information.

Nature of the discharge

You should also include a detailed description of the nature of the discharges, particularly the types and amounts of all the likely contaminants expected from the site. See Section One of this guidebook.

Receiving environment

A complete application should include the responses to the questions about “Air” in Section One of this guidebook.

Large scale burners

The main activity resulting in air discharges requiring resource consent are large-scale burners. Some of the key pieces of information about your proposal that Environment Canterbury staff will need in order to determine the effects of this activity include:

- What is the type of combustion, i.e. internal such as an engine or external such as a boiler?
- What is the fuel?
- What are the specifications of the fuel?
- What is the capacity of the appliance?
- What is the maximum hourly fuel burning rate?
- How is the fuel burning rate to be recorded?
- How is the appliance to be serviced etc?
- For large appliances, is any stack testing proposed?
- What is the height of the stack outlet above ground level?
- What is the height of the building at the roof ridge-line?
- What are the dimensions of any surrounding buildings, especially heights?
- What types of contaminants are likely to be emitted?
- What are the effects of contaminants likely to be at ground level?
- For large appliances, dispersion modelling may be necessary.

Summary

Essentially, your proposal should include, but not be limited to:

- a) A detailed description of all the activities being undertaken on your site;
- b) A detailed description of the immediate receiving environment for the discharges;
- c) The nature of the discharge and method(s) of discharging;
- d) Assessments against the relevant plan rules and policies;
- e) Modelling results, if undertaken, including assumptions and input data;
- f) Estimated levels of contaminants in the discharge and reaching the environment;
- h) A full assessment of the effects of your discharges, including possible cumulative effects;
- i) A specific statement on whether the effects of the contaminants are considered to be less than minor or not;
- j) Long-term maintenance proposals; and
- k) The consent duration that is being sought.

Do not forget that storing large volumes of hydrocarbon-based fuels may require a land use consent as well (see Section Five of this guidebook).

Application forms and guidance notes

Forms, Guidebooks, Example Conditions and Guidance Notes are available on the Environment Canterbury website www.ecan.govt.nz, by searching keywords within Publications. There will not necessarily be a form created for every type of discharge.

Some activities have specific consent application forms and associated guidance notes that can be used to prepare your application. Environment Canterbury strongly recommends that you use the forms if they are available, as they clearly specify the information we require in order to fully understand and process your application. Using the forms, rather than simply referring to an attached document, should allow for faster processing and is likely to reduce the need for us to seek further information.

Remember to...

- Consider Canterbury's variety of air quality issues
- Locate messier and smellier activities away from sensitive areas
- Check all your activities against the rules in the regional plan(s)
- Check the Environment Canterbury website for guidance on how to apply for resource consents and to obtain application forms

SECTION FIVE

Consenting requirements

Land uses

Note: Seeking help from either a qualified consultant or Environment Canterbury Customer Services or Consents staff is recommended unless you are familiar with the proposed and operative plans for the region, how to apply the different rule conditions and how to address the status of your activity.

The purpose of this section is to discuss briefly the most common land uses for industrial activities in relation to legislation and the requirements for consent applications.

Land uses are covered under Section 9 of the Resource Management Act 1991. Generally, you will only require a consent if your activity contravenes the rules in the relevant plans.

Introduction

Land use activities could include storage of hazardous substances, excavation of land, deposition of material, building or placement of structures or undertaking works in a watercourse. Typically the main land use consent required for an industrial site is for storage of hazardous substances.

If you store materials on site, such as raw materials, process chemicals, fuels, oils, paints, solvents, cleaners or even foodstuffs, good storage is vital to prevent pollution. Improving the way materials are stored will often be as simple as labelling containers and storing materials inside buildings or under roofs to reduce the risk of pollution.

Where filling or distribution occurs on hardstand/impervious areas, especially on concrete, spilt contaminants may be carried into stormwater and flow wherever the stormwater system takes them. Contaminants will be transported away from the source and discharged into land or surface water.

Secondary containment means storing your bulk containers to protect the environment from spills or leaks. Secondary containment can range from facilities able to contain all the liquids stored in the vessels inside them, to rollover bunds which stop spills from indoor workspaces escaping. Secondary containment lets you detect and control any small or slow leaks and will contain spills from sudden ruptures of tanks or drums.

If you are storing hazardous substances, you need to check any secondary containment requirements under the Hazardous Substance and New Organisms Act 1996 (HSNO) and local City or District Plans. As well as making sure your containment facility has enough capacity, it needs careful operation and regular inspection and maintenance to remain effective.

Underground storage tanks (UST) are used to store a variety of hazardous substances including petrol, diesel, oil, kerosene and industrial solvents. Leaks from USTs present a major threat to groundwater quality and can contaminate surrounding land, affecting its use. In Christchurch and in many other parts of Canterbury, groundwater from underlying aquifers is the sole source of public drinking water and serious water pollution can result if there are any leaks into these aquifers.

Land use consents from Environment Canterbury will be in addition to any requirements of:

- The City Council
- The District Council
- HSNO

Consent requirements will be dependent on three main things:

1. The type of substance stored;
2. The volume of substance stored; and
3. The location of your site.

Some of the key pieces of information about your proposal that Environment Canterbury staff will need in order to determine the effects of this activity include:

- Environmental Risk Management Authority (ERMA) classification of the substances stored;
- The proposed secondary containment;
- The proposed design and a statement that it meets HSNO regulations;
- If the site is within the Christchurch Groundwater Protection Zones; and
- Earthquake and flooding risks.

Stormwater control of secondary containment areas

Ideally you should roof these areas to keep out rainwater and protect the materials and equipment they contain. If you cannot roof all of them, you need to establish procedures for emptying the stormwater contained within them. Valves must remain closed and locked so you can ensure the stormwater is uncontaminated before it is released. If the water within the secondary containment is contaminated, it needs to be discharged into the trade waste system or collected by an authorised contractor for disposal.

Most land use consents for storage tanks will also require a consent for the discharge of stormwater. You should also check with your local District or City Council on their consent requirements for roofing such areas.

Stockpiles

Stockpiles exposed to rain will contaminate stormwater running off your site. Some of the common stockpiled materials that can contaminate stormwater are:

- Treated timber, which can contain copper, chromium, arsenic or boron
- Metal dumps, which may contain oil
- Bare soils or sediments, which can smother stream life
- Compost, which uses up oxygen when washed into waterways
- Sawdust

Plans and rules assessments

Land uses are subject to the provisions in both the operative and proposed regional plans.

The following plans are relevant:

- The Nelson-Marlborough Transitional Regional Plan (TRP-K) and the Canterbury Transitional Regional Plan (TRP) are operative plans and relate to the Kaikoura District and the rest of Canterbury, respectively.
- The Regional Coastal Environment Plan (RCEP) is the fully operative plan which relates to the Coastal Marine Area.
- The Proposed Natural Resources Regional Plan (PNRRP) Chapter 4 Water Quality and Chapter 6 Beds and Margins of Lakes and Rivers cover the entire region and are not yet operative.
- For the Waimakariri River catchment, the operative plan is the Waimakariri River Regional Plan (WRRP).

- The Land and Vegetation Management Regional Plan (LVMRP) is operative and there are two parts relevant to land uses: Part I – Kaikoura East Coast and Part II – Port Hills.

Regional Plan (operative and proposed)	What it covers
TRP-K	Only land use authorised is damming.
TRP	Authorises diversions/damming and contains bylaws from the North and South Canterbury Catchment Board Bylaws that cover a variety of activities including works in watercourses, building of structures, etc.
Chapter 8 of the RCEP	The effects on the Coastal Marine Area (CMA) itself are considered for placing structures, undertaking works, etc.
Chapter 4 of the PNRRP	<p>Rules relating to:</p> <ul style="list-style-type: none"> • Excavation of land and deposition of materials • Stock holding pads • Storing waste • Above ground and below ground storage containers • Storage of hazardous substances <p>Variation 6 of the PNRRP came into effect in July 2007 and has a focus on protection of Christchurch groundwater. There are several specific rules found in Variation 6 relating to above ground and below ground storage containers and storage of hazardous substances.</p>
Chapter 6 of the PNRRP	<p>Rules relating to:</p> <ul style="list-style-type: none"> • Structures • Excavations • Disturbances
Chapter 7 of the WRRP	Land uses or activities that may impact on the Waimakariri River or its tributaries.
LVMRP	Schedules relating to earthworks and vegetation clearance in the Port Hills and Kaikoura East Coast.

Information requirements and preparing Assessments of Environmental Effects (AEEs)

Schedule 4 of the RMA lists the information required in any application for resource consent. This is used as a basis for the initial check of all incoming applications and if all components are not included, will probably result in your application being returned. See also Section Two “Assessments of Environmental Effects” in this guidebook.

PNRRP Chapter 4, Sections 4.7.4 and 4.7.5.3 and Chapter 6, Sections 6.7.2 and 6.7.3 give a detailed description of the information needed to satisfy the requirements of all incoming applications. This information has been used in the creation of checklists for many different activities to ensure that only complete applications are accepted. Deficient applications are returned to applicants outlining the missing information.

Storage

A complete application should include the responses to the questions under “Land Uses’ in Section One of this guidebook.

Other land uses

Excavation

- What is the location, depth and extent of the excavation?
- What machinery will be used?
- What volume of material will be excavated?
- How deep is groundwater?
- Will groundwater be intercepted?
- Is your site located within the Christchurch Groundwater Protection Zone?
- How close is the excavation to a waterway?
- Where will stockpiles be located?
- Where will refuelling (if applicable) take place?
- What is the previous use of the site?
- If within a coastal confined gravel aquifer system, is there less than 1 metre of undisturbed sediment between the base of the excavation and aquifer 1?
- Is the site of significance to Ngai Tahu/silent file area/archaeological site?

Structures

- What waterway will be affected?
- When will works be carried out?
- Where will the works take place?
- What is the design of the structure?
- What maintenance will be required?
- How long will the works take?
- Are there any other structures nearby?
- The width and depth of the waterway?
- Flow variation within the waterway?
- Values associated with the waterway?

Summary

Essentially, your proposal should include, but not be limited to:

- (a) A detailed description of all the activities being undertaken on your site;
- (b) A detailed description of the immediate receiving environment;
- (c) Details of method(s) used;
- (d) Assessments against the relevant plan rules and policies;
- (e) A full assessment of the effects of your activities, including possible cumulative effects;
- (f) A specific statement on whether the effects of the contaminants are considered to be less than minor or not;
- (g) Long-term maintenance proposals; and
- (h) The consent duration that is being sought.

Application forms and guidance notes

Forms, Guidebooks, Example Conditions and Guidance Notes are available on the Environment Canterbury website www.ecan.govt.nz, by searching keywords within Publications. There will not necessarily be a form created for every type of land use.

Some activities have specific consent application forms and associated guidance notes that can be used to prepare your application. Environment Canterbury strongly recommends that you use the forms if they are available, as they clearly specify the information we require in order to fully understand and process your application. Using the forms, rather than simply referring to an attached document, should allow for faster processing and is likely to reduce the need for us to seek further information.

Remember to...

- Check HSN0 and City/District Council requirements for the storage of hazardous substances
- Check for the less obvious land use consents required in association with your larger activities
- Check all your activities against the rules in the regional plan(s)
- Check the Environment Canterbury website for guidance on how to apply for resource consents and to obtain application forms

SECTION SIX

Consent conditions

The purpose of this section is to briefly discuss consent conditions.

What are conditions and why do we have them?

Section 108 of the RMA gives councils the ability to impose conditions considered necessary for the mitigation, avoidance or remedy of any effects of a particular activity. That means we can limit the extent of your activity so that the effects on the environment are minor, negligible or acceptable.

We cannot put just anything into a set of conditions. There are specific criteria that must be met for a condition to be legally placed on any consent document. Each condition has to serve a purpose directly related to the activity it is consenting. The Ministry for the Environment has prepared a document on the writing of effective and enforceable consent conditions, which can be downloaded from their website www.mfe.govt.nz.

Writing consent conditions

To be valid, conditions can be only for the following purposes:

- To define the scope of the consent;
- To avoid, mitigate or remedy potential effects; and
- Administration.

We apply the following criteria to every condition:

- Defensible: Has a purpose, mitigates an effect relevant to the consent.
- Intra-vires: Legal, does not unlawfully delegate or defer matters essential to the consent itself.
- Certain: Valid, understandable.
- Enforceable: Can be monitored.

Often Consents Investigating Officers (CIOs) will seek input from Environmental Protection Officers (EPOs) when preparing conditions because the EPOs will be enforcing compliance with the conditions. The set of conditions that we prepare is based on both the information you have provided in your application and the standard conditions that Environment Canterbury uses for a variety of purposes. The set of recommended conditions will be sent to you for review before they are finalised. You should find that all of the conditions are clearly written and related to the activity. This is the best time for you to indicate if there are any conditions you cannot comply with or if there are errors. Sometimes there are mistakes made in the translation of information you have provided into the correctly worded condition.

You will sign off on the final set of conditions and these will form the basis for the official consent document you receive. By signing off you are committing to the responsibilities contained within the consent. When you get your documents in hand, there should be no surprises.

For some activities, example conditions can be downloaded for use from the Environment Canterbury website, www.ecan.govt.nz, via a search of the keywords “conditions” or “forms and booklets”.

What do I do with my consent documents?

Many applicants, when they become consent holders, simply file away their official documents because they assume that their involvement/relationship with Environment Canterbury is over. You have your resource consent(s), so that's it. It is important to remember that the consent conditions require active management. You may want to keep a copy visible at your site to keep your staff aware of your responsibilities.

The conditions of your consent are usually valid for 35 years. Your diligence is needed to ensure that the conditions can be complied with over that entire time. Because your name or the name of your company, is on the consent document, you are liable for any non-compliances with conditions. Even just a single non-compliance could result in significant effects on the environment and these unauthorised activities are subject to action by the courts.

Once a consent has been granted, a notice is sent to the Environmental Protection team and the consent will be allocated to an officer. This EPO will regularly visit your site and prepare Compliance Monitoring Reports that go through each condition detailing whether or not you are meeting the full requirements. A copy of that report is filed and also sent to you. Generally you, or your asset manager, will have an ongoing relationship with the EPO responsible for monitoring your site.

Consent compliance monitoring is discussed in more detail in the next section.

Where can I view example consent conditions?

Example Conditions are available on the Environment Canterbury website www.ecan.govt.nz, by searching keywords within Publications.

Remember to...

- Read your draft consent conditions carefully before signing off
- Keep a copy of your consent visible at your business as a great way to remind you and your staff of your responsibilities

SECTION SEVEN

Long-term operations

The purpose of this section is to briefly discuss how consents are monitored and to outline good practices for long-term operations at your site.

Implementing consent conditions

As discussed in the previous section, you are provided with an opportunity to review and comment on the recommended conditions that are likely to end up on your consent documents. Therefore, what you have to do to implement the conditions you agreed to should come as no surprise once your consent has been granted and you have the documents in your hand. You will have committed to meeting certain design standards, undertaking maintenance and operating your site in a particular way. Environment Canterbury will be checking to be sure you do all of these.

You will enter into a relationship with Environment Canterbury compliance staff once an Environmental Protection Officer (EPO) is assigned responsibility for monitoring your consents. They will work with you to ensure you meet your obligations, as discussed below.

Consent monitoring

Environment Canterbury monitors resource consents to ensure consent holders are complying with the conditions of their consents.

Consent monitoring frequency is based on:

- The scale of the activity
- The sensitivity of the receiving environment
- The overall environmental risks of non-compliance
- Compliance history
- Public interest
- Receipt of complaints

In many cases the frequency of monitoring relates to the performance of the consent holder. Those who comply consistently are rewarded with less frequent monitoring than those consent holders who do not fully comply. This means that while there are target frequencies of monitoring for categories of consents, these are modified for individual consents depending on the actions of the consent holders.

Site visits

Monitoring of many consents may involve a series of site visits. These visits are usually unannounced to ensure we see the normal, day-to-day operation under which the authorised activities are carried out. Site visits can involve on-site measurements and follow-up work, such as laboratory analysis of effluent discharge or water samples.

Pollution Prevention Officers may also undertake site visits once you have obtained your consent(s). See page 54-55 .

Where non-compliance is noted, most consent holders work with us to achieve full compliance, without the need for more formal enforcement action. This approach has proven to be successful in most cases.

Below are examples of the types of things EPOs will look for during a site visit related to the most common types of consents: discharges into land/water, discharges into air and land uses.

Stormwater consent monitoring

During construction phase

EPOs will check earthworks at a development site to ensure that the risk of sediment discharging into waterways is being managed responsibly. You need to have an Erosion and Sediment Control Plan and you need to follow it. As different stages of a site are developed, the necessary sediment and erosion control measures may need to change. Your plan must set out how changes on the site will be managed over time.

Storage of contaminants including hazardous substances

EPOs will check your site to make sure that you are managing appropriately any materials that could pollute groundwater or streams by contaminating stormwater. EPOs will check compliance of the limits on the amount of hazardous substances you are allowed to store. Where materials are being stored in a risky fashion, the EPO will advise you to take preventative action to reduce the potential for unlawful discharges. If the EPO identifies that contaminants are being discharged into land or streams and this is not allowed, Environment Canterbury will require you to fix the problem urgently.

Swales / Basins

EPOs will check that stormwater basins or swales are:

- Well maintained
- Vegetated evenly with the correct type of plants
- Not being compacted or covered by equipment, machinery or rubbish

Interceptors

EPOs will make sure that interceptors are being properly maintained by checking the:

- Thickness of hydrocarbons in the chambers
- Depth of sludge in the bottom of the interceptor
- Strip drains to ensure they are clear of debris that could stop them working properly

Boulder Holes / Soakage Chambers / Soak Pits

EPOs will make sure that boulder holes/soakage chambers are being looked after by checking that:

- Litter is being removed
- Soil testing is being carried out as required
- Contaminated material is being removed (if applicable)

Maintenance records

EPOs will check that you are keeping records of inspections, maintenance and monitoring, such as:

- Servicing of sumps / interceptors / other devices
- Inspections of all components of the stormwater system
- Mowing swales and basins
- Infiltration testing records for basins and swales
- Water quality testing of the discharge (if applicable)

Certificates of construction

EPOs will check that correct certificates are provided to Environment Canterbury to ensure that stormwater systems are installed as specified in the original plans. If the installed system varies from the details in the consent conditions or design plans, you will be required to install the system correctly. Failure to do so could result in a requirement to seek a variation to the resource consent or even apply for a new one. Both of these options can be costly and can be avoided.

Environment Canterbury prefers that consent holders avoid the additional costs and delays that will arise if you are required to take any of the above steps, by installing systems as they were consented.

Air discharge consent monitoring

EPOs will check operations at your site to ensure they are all within the limits required by the consent and that they are not causing unacceptable nuisance effects on surrounding land or your neighbours.

For example, if your company will be spray-coating paint or varnish, the EPOs will check that no more paint and thinners are being used on the site than the consent allows, that filters are being replaced or maintained regularly and that the spray-coating is happening in the right place so that neighbours are not unreasonably affected.

Likewise, if your business creates wood waste, we will check that wood shavings and dust are not creating a nuisance for your neighbours or getting into waterways.

If you are going to use a boiler, our EPOs will check that the boiler is the correct capacity, that the fuel being used is of the right standard and that no more is being used than allowed. The EPO will check that the boiler is being maintained to the right standard and, where required, that emission testing is carried out to accepted standards.

If your operation could create dust, an EPO will check that your company is taking appropriate steps to ensure that neither mechanical processes nor bare surfaces result in large dust discharges. You will need to make sure offensive dust is not discharged, including outside your normal working hours.

Land use and hazardous substance storage consent monitoring

EPOs will make sure hazardous substances are stored appropriately. For example, this could mean checking that the allowed volumes of substances are being stored in appropriately designed tanks and that the total volume of small containers of hazardous substances is acceptable. EPOs will also check that fuel dispensers are locked or controlled when not in use, secondary containment areas are secure and effectively contain spills from any tanks and stormwater release taps are closed.

Compliance monitoring reports

A compliance monitoring report is a detailed documentation of and grading of, compliance with each individual condition set out in a resource consent. Environment Canterbury may use a compliance monitoring report as a non-statutory written notice to request that certain actions be taken to achieve compliance with RMA legislation or to protect the environment. Failure to act in accordance with a compliance monitoring report may result in further enforcement action.

All compliance grading is made in accordance with the grading system set out below. The compliance grade will dictate the level of response:

Grade	Description	Action	Examples
1	Full compliance.	None.	
2	Minor non-compliance (no or minor short term adverse environmental effects).	Action by the consent holder with a routine follow-up by Environment Canterbury staff.	Failure to supply information and to keep adequate records. Failure to have adequate maintenance carried out. First time breach of consent condition where there has been no adverse impact. Occasionally minor exceedence of discharge quantities.
3	Significant non-compliance or repeated minor non-compliance. (Adverse environmental effects – actual or potential – moderate).	Requires immediate action by the consent holder with a non-routine follow-up by Environment Canterbury staff.	Repeated grade 2 breach of same condition and failure to respond to requests for compliance. Breach of quality limit of discharge. Continued failure to provide information such as a management plan.
4	Major and/or persistent non-compliance. (Adverse environmental effects – actual or potential – serious or persistent).	Requires immediate action by the consent holder and non-routine follow-up, with legal action if no improvement.	Persistent grade 3 breach of same condition and failure to respond to requests for compliance. Unconsented discharge from consented site where adverse impact is significant. Persistent long-term failure to provide information. The discharge results in actual or potential immediate risk to the environment and/or human health.
5	Not monitored or unable to determine compliance.	None – May require consent holder to confirm compliance.	Condition may require that maintenance be carried out at specified intervals. This may have been unable to be monitored while the Environmental Protection Officer was on site and so records may be requested to confirm compliance.
6	Not Operational.	None – May require consent holder to confirm compliance.	A permit authorising the discharge of contaminants to air may allow two or more discharges, for example from a spray booth and diesel boiler. At the time of the Environmental Protection Officer's visit the spray booth may not be operating so all conditions relating to the discharge from the non-operating booth will be graded Non-Operational.
7	Not Given Effect To.	Reminder given to consent holder of lapsing period for resource consent.	When activity consented has not commenced.
8	Not Being Exercised.	None – consent can be cancelled after consent has not been exercised for a period of 5 years or more.	When consent is consistently not exercised the Environmental Protection Officer can track the time period and effect cancellation if appropriate. Also applied where the resource consent has previously been exercised but has not been used recently.

Grade	Description	Action	Examples
9	Enforcement Action Recommended.	None.	Graded when enforcement action has been recommended to management for approval.
10	Enforcement Action Taken.	Action to be undertaken as directed by type of enforcement pursued: Abatement Notice, Infringement Notice, Enforcement Order, Interim Enforcement Order or Prosecution.	Enforcement action is not taken lightly but will be pursued for high culpability, high adverse environmental effect or repeated non-compliance. This grading applies when recommended enforcement action (Grade 9) has been approved by management.

Time spent checking compliance with resource consent conditions is charged to the resource consent holder. Consent holders are able to minimise costs by consistently complying fully with the conditions of their resource consent, thereby reducing the frequency of visits.

Good housekeeping

Our EPOs will walk around your site with you and your staff and help identify practices or activities that may harm the environment. For significant issues, immediate action will be required. For less serious practices or activities, the EPOs will ask you to put together an action plan to reduce the risks of the activity or to cease it.

EPOs also promote the use of the Pollution Prevention Guide. The guide is to help businesses in Canterbury identify whether activities on their sites could harm the environment and suggests ways to reduce those risks. Environment Canterbury's Pollution Prevention Officers will be able to give you advice, without cost, on solving problems and will head you in the right direction. EPOs may suggest that your company works with a Pollution Prevention Officer to address potential issues constructively, if you have not done this earlier on in the process.

For more specific information about your business and how to avoid compliance problems, EPOs are available to give you advice and are happy to help you.

Environmental management plan

To help with long-term site operations and maintenance of treatment and disposal systems, many consent holders will prepare an Environmental Management Plan (EMP) for their site. Sometimes this is a consent requirement specified in the conditions, but often it will form part of your application and/or AEE. We recommend that you prepare an EMP even if we have not asked you to. A document such as this can be a very important place to store information that your employees and contractors need to know to ensure that you (as the consent holder responsible for compliance) meet the requirements of your consent.

Typical EMPs include the following information:

- Regular long-term maintenance
- Contingency plans
- Schedules
- Check sheets

Consent administration

Remember that consents:

- Lapse, in accordance with the RMA, if not started within the time period specified in the consent, which is typically after five years of non-exercise of the consent.
- Can be cancelled by Environment Canterbury if you do not start your activity before the lapse date.
- Can be changed if you apply for a change or deletion of conditions, but the expiry date cannot be extended.
- Can be reviewed by Environment Canterbury for the reasons specified in the consent, which typically include unexpected adverse effects, inaccuracies in the consent application, changes to plans or the setting of new National Environmental Standards.
- Should be transferred at the time of the sale of the property they apply to.
- Can be surrendered by the consent holder if no longer required.
- Will expire on the date stated on your consent documents. Environment Canterbury procedures include reminding the consent holder well in advance of this date.
- Will incur ongoing costs.

Pollution Prevention Programme

What is the Pollution Prevention Programme?

Environment Canterbury's Pollution Prevention Programme offers rate-payer funded assistance to businesses to help them improve their environmental performance and prevent pollution events. The programme has a Pollution Prevention Guide (PPG), along with posters and action sheets to help with staff training and awareness. They are available online or from our pollution prevention officers.

Businesses that adopt the PPG will be minimising their environmental risk by developing an Environmental Management System (EMS) or Environmental Management Plan (EMP) that ensures they comply with relevant environmental regulations. The PPG covers six areas: drainage, storage and handling, spills, air, housekeeping and waste and provides a set of checklists for each of these areas. Having an EMS or EMP or working with the Pollution Prevention Programme is good information to supply in your consent application.

Further information is available via the Environment Canterbury website www.ecan.govt.nz/ppg .

What are the benefits of the Pollution Prevention Programme?

Site resources

There are a range of site posters and action sheets that you can use at your site, including generic spill procedures and spill management sheets, graphic posters that illustrate good practice and stencils that can be used to identify the various drainage networks.

Six-month progress reports

You will be sent 'blank' progress reports every six months which can be used to provide feedback on your use of the PPG. These allow us to keep up-to-date with your progress and help you to maintain your pollution prevention programme on site. There is an envelope provided so the reports can be returned at no cost to you. Providing the PPOs with six-month progress reports qualifies your business for benefits, such as:

1. Reduced compliance costs for consent holders if:

- You are consistently compliant with your consent conditions;
- No environmental incidents have been reported; and
- We have received four consecutive six-month progress reports.

2. PPG Spill Kit Discount Card

To help you develop spill kits and maintain them, Environment Canterbury, in conjunction with a number of suppliers, has developed the Pollution Prevention Guide Spill Kit Discount Card. The card entitles you to a 15% discount on spill kits and spill kit refill materials at any participating supplier. The card is valid for two years and can be used multiple times.

Details of participating suppliers have been posted on the Environment Canterbury website at www.ecan.govt.nz. Search using the keywords "spill kit discount card".

3. Advertising PPG participants

Environment Canterbury advertises the PPG participants on the Environment Canterbury website and in other publications. All participants who address their identified actions are eligible for this promotion if:

- They have provided four consecutive six-month progress reports; and
- If no environmental incidents have been reported during this time.

What does a PPO do on-site?

PPOs will do an on-site assessment designed to gain a clear understanding of the activities undertaken by your company and to identify any environmental risks that may be associated with these.

Before getting started, the PPOs will explain what will happen while on-site and what you can expect from them, as well as answer any questions you may have and find out more details about your operations. During a standard on-site assessment a PPO will:

- Walk around your site;
- Discuss the activities or systems used;
- Take photos and if needed, collect samples; and/or
- Discuss any identified sources of land, water or air contamination.

If PPOs are unsure of anything found during an on-site assessment they will follow it up and come back to you or seek further details from you.

Some common areas for improvement that are discussed during an on-site assessment include:

- If hazardous substances are held on site, installing spill kit equipment and developing spill procedures and ensuring staff know what to do in the event of a spill incident.
- Developing or updating the site drainage plan, particularly if a site stores or uses large volumes of hazardous substances.
- Preventing discharges of process liquids to stormwater catchments, including isolation of work areas and investigating possible crossed drainage connections.
- Ensuring drainage systems are managed and monitoring programmes are in place.
- Ensuring adequate containment and isolation of wastes and waste bins.
- Providing details on waste reduction through separation and recycling.
- Secondary containment of hazardous substances which may include rationalisation of substances to reduce the need for containment.
- Activities that may require a resource consent. This includes providing details of the applicable rule(s) and some guidance on mitigation measures or modifications you could undertake to negate the need for it/them.

At the completion of the on-site assessment, the PPOs will summarise the issues, findings and any outstanding matters. You will be provided with a free copy of the PPG or you will be informed how to obtain an electronic version from our website. PPOs will guide you on its use, which leads you through each module to the development of an Action List. This list will highlight issues or activities on your site that require improvement. They will work with you to set up the short-term and long-term actions that you intend to undertake to address the issues. PPOs will put timeframes on these “next steps” or actions that will depend on the potential environmental impact of a particular issue. Some significant issues may require a larger investment of both time and money and with a commitment from you to address them, the timeframes for completion can be extended accordingly. Before the PPOs leave your site is the best opportunity for further questions and discussion.

Within two weeks of the on-site assessment, you will receive a report letter from the PPOs detailing the issues and actions required, as discussed with you. Although Environment Canterbury will be able to provide some suggestions on ways to resolve issues, the ultimate responsibility to rectify problems lies with you and your company.

The PPOs will make a follow up visit to your site within an agreed timeframe to check on your progress in addressing the issues from the Action List. Further assistance can be provided if needed and another report letter, including outstanding issues and further action required, will be sent to you within two weeks.

The relationship you have with Environment Canterbury PPOs continues from this point with:

- Six monthly progress reports;
- Two yearly site visits; and
- Contacting them any time you have questions or matters that you want assistance with.

Good industry practices

The Pollution Prevention Guide (PPG) has useful information on good practices and regular maintenance for the long-term operation of your site.

Good environmental initiatives on-site can be quickly undone through a lack of maintenance or sloppy work practices. The following aspects should be considered when developing a maintenance programme:

1. Loading, unloading and material handling are high-risk activities. You should be minimising spills through regular activity area checks, collection of drips, draining pipes, emptying collection devices and training your staff.
2. Storage areas, tanks and secondary containment need regular checking and maintenance to ensure there is no damage or loss of integrity. You should have established specific areas for storing materials.
3. Refuelling, vehicle maintenance and washdown areas need to be managed to avoid oil, petrol and chemical releases. This can be achieved through regularly cleaning, secure storage and keeping washdown water separate from stormwater. Establishing procedures for operations and staff training are other cost-effective measures.
4. The stormwater system is the most likely pathway for pollution when spills and leaks do occur on site. Keeping your yard or stormwater collection catchment clean, inspecting and maintaining the stormwater system and cleaning up spills quickly and thoroughly will minimise the risks to stormwater.
5. Create an incident and maintenance register. When you inspect the yard, tank bunds, refuelling areas, etc, make a record of any material that has been spilled, when it may have happened, when it was first noticed and when the clean-up will be completed.
6. Regularly check filtration devices on discharge stacks, have a maintenance plan in place for fans and motors, record fuel usage and have paint or chemical admixture programmes for processes or system operation (cooling water treatment, scrubbers). Make sure that you have an evacuation plan in place for pressurised substances in the event of a tank rupture or system leak.

Changes in your business practices

There are many scenarios in which the activities being undertaken on your site might change, for example:

- You sell the land and/or business to another owner
- There are advancements in technology
- Your business changes due to economic or personal reasons

It is important during these changes to ensure any consents you hold for the site/activity are changed accordingly. This may include transferring the consent to another consent holder or varying your consent. If you are unsure what needs to be done, you can contact the Environmental Protection Officer who monitors your consents or speak with Environment Canterbury's Customer Services or Consents sections.

Remember that...

- Environment Canterbury will check to make sure you are complying with your consent conditions
- Environment Canterbury's Pollution Prevention Programme is available to assist you
- Environmental Management Plans are a great place to store important information for you and your staff about consent compliance
- If your business is changing, your consents may also need to change



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