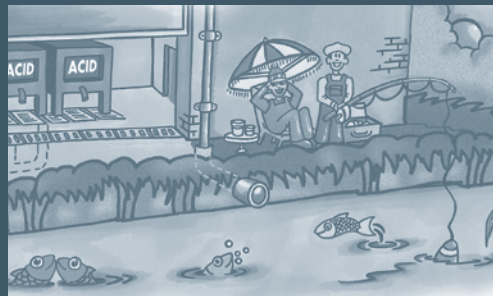


POLLUTION PREVENTION GUIDE:

Housekeeping



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PPG: Housekeeping Module



**Environment
Canterbury**
Your regional council



HOUSEKEEPING

Sloppy work - 'bad housekeeping' - is the most common cause of industrial pollution - and it is easily avoided by establishing better work practises. Clean, tidy and well-managed sites are far less likely to cause pollution than untidy sites.

Good housekeeping prevents pollution and staff accidents. It reduces your environmental liability. It's also great for staff morale and your company's image when your customers visit.

Once you've looked at your drainage plan, material storage and handling on your site, you need to make regular checks to ensure that structures, equipment, procedures and activities also minimise pollution.

As with anything you want done, make it someone's job, and make sure they have the training and the time to do it well.

Bad housekeeping is unsightly, unsafe and environmentally harmful

Typical careless housekeeping practices found on many sites are:

- Drums, storage or waste containers with no lids getting flooded by rain, washing contaminants into storm water and out to the nearest water way
- Sloppy decanting or dripping taps and valves letting material spill onto the ground and find its way into storm water
- Outdoor working areas covered with spills or litter which are not cleaned up, causing pollution every time it rains
- Washdown of 'empty' drums, which may contain small amounts of sometimes very concentrated product, in open yards or even over storm water drains
- Drip trays overflowing onto yards and into storm water
- Leaky containers left outside because they are 'only leaking a little bit', creating a chronic source of pollution.



Good housekeeping makes preventing pollution easy!

- Keep lids securely on outdoor drums and other storage vessels so rain can't get in and lids can't fall off if they are knocked over
- Create a maintenance programme so that all sources or potential sources of pollution are avoided. Good maintenance is part of good housekeeping
- Keep clean all surfaces that rain lands on
- Clean up regularly during the day and have an extra thorough clean at the end of each day and end of each week
- Never leave open taps or valves unattended - always have either an automatic cut-off or a staff member watching at all times.

Use our Housekeeping Checklist to spot areas where you could reduce pollution by tidy practices.

IN THIS MODULE

	Done	Date
Site inspection for bad housekeeping	<input type="checkbox"/>	<input type="text"/>
Loading, unloading and decanting areas	<input type="checkbox"/>	<input type="text"/>
Storage areas	<input type="checkbox"/>	<input type="text"/>
Secondary containment	<input type="checkbox"/>	<input type="text"/>
Refuelling, vehicle maintenance and oil storage areas	<input type="checkbox"/>	<input type="text"/>
Underground/above ground storage tanks	<input type="checkbox"/>	<input type="text"/>
Storm water systems and outfalls	<input type="checkbox"/>	<input type="text"/>
Waste treatment systems	<input type="checkbox"/>	<input type="text"/>
Other (specify)	<input type="checkbox"/>	<input type="text"/>
<input type="text"/>	<input type="checkbox"/>	<input type="text"/>

Urgent action	<input type="checkbox"/>	<input type="text"/>
Cross check	<input type="checkbox"/>	<input type="text"/>
Action list	<input type="checkbox"/>	<input type="text"/>
Create a maintenance programme	<input type="checkbox"/>	<input type="text"/>
Holiday checklist	<input type="checkbox"/>	<input type="text"/>
Signs of success	<input type="checkbox"/>	<input type="text"/>

HOUSEKEEPING

■ SITE INSPECTION FOR BAD HOUSEKEEPING

Walk round your site and look for signs that contaminants have been getting into the storm water system and other signs of bad housekeeping.

Can you see any of these on your site? (Tick those that apply to your site.)

NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	Stains on or corrosion of any surface, including along concrete heading towards or around storm water drains
<input type="checkbox"/>	<input type="checkbox"/>	Marks on or near any storm water drains or storm water cesspit or materials in them indicating that anything other than clean rain water has got into them
<input type="checkbox"/>	<input type="checkbox"/>	Storm water drains that are blocked with solids like grass, plastic, litter, or sediment.
<input type="checkbox"/>	<input type="checkbox"/>	Diesel or oil stains around refuelling areas
<input type="checkbox"/>	<input type="checkbox"/>	Puddles, discolouration, oil or grease or chemicals on the ground
<input type="checkbox"/>	<input type="checkbox"/>	Leaking or corroded equipment, valves, seals, containers or lines
<input type="checkbox"/>	<input type="checkbox"/>	Areas where absorbent materials (kitty litter, sawdust) have been used to clean up a spill but not removed
<input type="checkbox"/>	<input type="checkbox"/>	Outdoor secondary containment where storm water valves have been left open or are not securely locked shut
<input type="checkbox"/>	<input type="checkbox"/>	Litter or waste thrown behind buildings, over fences, or onto river banks
<input type="checkbox"/>	<input type="checkbox"/>	Containers that are stored in the open, for example: - 'empty' containers (unless well washed, these still contain residues that should not get into storm water) - storage tanks or containers showing signs of corrosion or leaks - torn bags
<input type="checkbox"/>	<input type="checkbox"/>	Leaks, overflows or spills from: - tanks or containers left open, with lids off, or unplugged - valves, taps, seals, bungs or fittings which are leaking, not properly closed or damaged - pumps or hose connections - waste containers or compactors - drip trays
<input type="checkbox"/>	<input type="checkbox"/>	Containers unsafely stacked on top of each other
<input type="checkbox"/>	<input type="checkbox"/>	Containers which are not clearly labelled or not labelled at all

If you answered YES to any of the above, you need to:

- trace the source or find out the reason and
- allocate responsibility for management to prevent pollution.

The next sections will also help you identify routine maintenance you need to undertake.

MATERIAL HANDLING AND DECANTING AREAS

1. Do your staff prevent spills by using funnels, drip trays, buckets or other devices to catch decanting losses and to drain pipes after filling and when transferring materials from one container to another?

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

If NO make it someone's job to buy some and ensure they are used.

2. Do you regularly check indoor and outdoor drip trays to ensure:

- They are not overflowing
- They are regularly emptied, either:
 - for re-use of product, or
 - to trade waste (with a consent if one is needed), or
 - into secure containers for regular removal by a waste disposal contractor?

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

3. When filling and transferring materials, do you have clear procedures which are:

- Designed to minimise leaks, spills or overfilling
- Well understood by staff?

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

4. Are all valves, pumps, flanges seals, pipe connection points for bulk tanker deliveries and other connections regularly checked for leaks?

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

STORAGE AREAS

5. Use this list to examine all areas where you store materials and tick which ones you need to look at:

Raw Materials/Supply Stores

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

Hazardous Substances Stores

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Finished Goods Stores

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Other Stores Such As Cleaning Agents, Detergents, Weed Killers

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Secondary Containment Areas

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Waste Storage Areas

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Other: _____

Other: _____

Other: _____

6. Do you regularly check containers of stored materials for:

- Integrity of valves, bungs, taps, lids, seals
- Safety of stacking and access
- Legible and visible labelling?

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

HOUSEKEEPING

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

7. Are metal drums and vessels stored on pallets to prevent corrosion?

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

8. Are containers, bags and drums stored away from passageways to prevent accidental spills or ruptures by passing staff or vehicles?

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

9. If you store hazardous substances are you aware of the Hazardous Substances and New Organisms Act (HSNO) 1996 Regulations, and are all your hazardous substances stored accordingly?

If NO, work through the Storage and Handling module and make someone responsible for finding out about HSNO (Try looking at www.osh.govt.nz/law/hsno.shtml).

Secondary Containment

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

10. Do you regularly inspect and maintain as required:

- Valves
- Locks or other controls on valves
- Stains/leaks inside or around bunds, nib walls and other secondary containments
- Crash barriers
- Pipe work across roofs (like tank vents) to ensure no contaminants get onto the roof and into downpipes and storm water?

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

11. For outdoor secondary containment with storm water valves, do you have:

- Frequent and regular maintenance programmes
- Security on valves against unauthorised use or vandalism
- Designated staff who open the valves only to dispose of uncontaminated storm water
- Specified procedures for environmentally responsible disposal of contaminated liquids from the secondary containment (to sewer or waste operator)
- Specified procedures for identifying the cause of contamination and preventing future contamination from the identified source?

REFUELLING, VEHICLE MAINTENANCE AND OIL STORAGE AREAS

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

12. Are automatic shut-off and other valves frequently inspected and regularly maintained?

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

13. Is waste oil securely stored and regularly removed for recycling/recovery?

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

14. Are radiator fluids disposed of as a trade waste or by a reputable waste disposal contractor?

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

15. Do you do regularly clean (with no wash water getting into storm water) around diesel pumps, refuelling, lube, vehicle maintenance and fuel and oil stores?

16. Are company vehicles (trucks, fork hoists) regularly maintained to minimise oil leaks?

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

UNDERGROUND AND ABOVE GROUND STORAGE TANKS

17. Do your procedures for filling all tanks minimise the risk of overfill, drips and spills?

Overfilling any tank may cause overflows from breather pipes or vents which may discharge in places which are not obvious, for example onto the roof and from there into the storm water system. Make sure you check all these places in your maintenance programme.

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

18. Is equipment relating to storage tanks regularly inspected and maintained?

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

19. Do you regularly check:

- The accuracy of your volume indicators
- Tank vents for leaks or stains, corrosion or faulty connections
- Reconciliation forms (weekly or monthly, depending on volume).

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

If NO make it someone's job to check these and report any anomalies-you could be losing product and causing pollution.

20. If you have a monitoring bore for your underground storage tanks do you check these regularly?

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

STORM WATER SYSTEMS

21. Are yards, car parks and other surfaces that drain to the storm water system maintained in a clean and tidy state?

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

22. Have you used the Pollution Prevention stencils next to storm water drains, soak pits and sewer drains?

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

If No, ask your Pollution Prevention Officer for stencils for your site. There are three available:

- "Rain Only – Drains to Our River" to be used for storm water drains connected to a reticulated system
- "Rain Only- Drains to Our Drinking Water" to be used for storm water drains connected to soak pits, or to label soak pits
- "Process Drain" to label sewer drains.

23. Are stencil labels legible and repainted before they start to fade, or are metal or other storm water drain labels firmly attached and clearly legible?

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

24. Are storm water sumps inspected and cleaned out by a reputable waste disposal contractor:

- Before sediments fill 60% of the area between the cesspit floor and the lower end of the T-outlet, or
- Whenever they are clogged with leaves and other material, or
- At least once a year
- On a regular monthly maintenance checklist?

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

HOUSEKEEPING

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

25. Are oil interceptors, grease traps or other storm water treatment devices inspected on a regular basis?

If your oil interceptor needs to be cleaned out, oil wastes and sediments must be collected by a reputable waste disposal contractor and the interceptor recharged with water after.

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

26. At least once a month do you lift the last manhole lid on the storm water pipes and trade waste lines on your site to check that no unacceptable discharges are occurring?

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

27. Are all liquid or solid spills cleaned up immediately especially in outdoor areas?

If NO, do the Spills module to find out what to do to minimise the risk of spills and be able to cope with them when they happen.

WASTE TREATMENT SYSTEMS

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

28. Are all waste treatment systems regularly inspected and maintained as necessary to ensure they are in a clean and safe condition and function to the required standard?

MORE DETAIL FOR YOUR SITE

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

ITEM: _____

ACTION: _____

ITEM: _____

ACTION: _____

ITEM: _____

ACTION: _____

CROSS CHECK

29. If as a result of your Housekeeping audit, you do any works that effects your drainage system, are they shown on your drainage plan?

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

30. Have you identified areas with a high risk of spills (for example, refuelling points, bulk loading areas, dispensing areas) and provided them with:

- A Pollution Prevention Spill Procedure poster
- A Spill Station (see the Spills module to find out more)

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

31. Are the Pollution Prevention posters, available from your Pollution Prevention Officer, displayed in key areas on your site?

If you would like more copies of any of the posters contact your Pollution Prevention Officer or Customer Services (03) 353 9007 and 0800 EC INFO (0800 324 636) at Environment Canterbury.

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

32. Is Good Housekeeping on the agenda for every staff meeting or briefing on environment, OSH or quality control matters?

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

ACTION LISTS

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

Put all actions on a copy of the ACTION LIST sheet at the end of this module and use these to create an inspection and maintenance schedule.

CREATE A MAINTENANCE PROGRAMME

Now that you have gone through the Housekeeping checklists and determined what actions need to be taken to ensure a tidy and well maintained site, you can develop a housekeeping and maintenance programme. To do this, divide the programme into tasks that should be done daily, weekly, monthly, quarterly, six-monthly and annually.

On bigger sites with large staff numbers, a good way of ensuring that your housekeeping and maintenance programme is followed is to allocate responsibility for each programme (i.e. the daily housekeeping programme, the monthly programme etc.) and have this responsibility written into job descriptions.

By doing this and sending in 6 Month Reports to your Pollution Prevention Officer, you will remain eligible for future Pollution Prevention Guide promotions and benefits.

■ HOLIDAY CHECKLIST

Your site needs to be clean and secure before you head off for your break. Photocopy this checklist and use it before every public holiday-including three-day weekends-to make sure your site is responsibly shut down.

- All liquid and solid wastes have been removed by your contractor or are safely stored
- All outdoor yards and car parks have been dry swept with the sweepings disposed of to your solid waste skip
- All storm water drains and cesspits have been inspected and cleaned out if necessary.
- All valves on storm water control systems or secondary containment are in the correct position and are vandal proof
- All materials or wastes remaining on site are stored indoors or if outdoors safe from rain or vandals
- All lids, bungs, valves, taps and covers are secure and rainproof
- The site is secure and your security firm or next-door neighbours know how to get hold of you in an emergency
- All maintenance programmes have been completed.

Don't let production pressures harm the environment. A tidy site will yield production efficiencies and will take care of the environment for you!

■ SIGNS OF SUCCESS

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

- Your site is maintained in a clean and tidy state at all times
- You have compiled a maintenance programme for your site
- A reliable staff member is responsible for regular inspections and maintenance of storm water drains, loading, storage and refuelling areas, secondary containment and underground tanks are all regularly checked.