

Sevenoaks District Council

Environmental

Purchasing Policy

INTRODUCTION

The purpose of this guide is to inform employees of the Council about some of the environmental issues associated with a variety of commonly used items.

This publication should contribute to the goal of raising general environmental awareness of the Council's Environmental Purchasing Policy. This guide recognises that green purchasing is a developing field and does not seek to promote single definition.

The environmental impact of our modern lifestyle has not gone away. In what is now a more realistic climate, people are once again beginning to question the effect of their purchasing decisions and seek advice on the manufacture, use and disposal of the goods they buy. This guide is intended to help people wishing to follow a more environmentally responsible lifestyle both at work and at home. However, it should not be seen in isolation from other initiatives or it will soon become outdated as work in this field moves on.

This guide is intended to be one part of Sevenoaks District Council's plans to implement AGENDA 21 primarily in its own workplaces (offices, etc), but also by encouraging better practice in the homes and workplaces of residents. Whilst its main function is to set out the areas of major concern when purchasing goods, Environmental Management System, Waste Reduction and Waste Collection are also considered.

This guide, as with other parts of AGENDA 21, will only be effective if all the people concerned want the changes which are necessary and are prepared to educate and encourage their colleagues. Two examples of the way in which the trend for action has been replaced by a considered approach are:

Is it effective to encourage the use of paper from genuine recycled sources if all waste paper then finds its way into the general landfill stream?

Is it effective to sit at a desk made with Forest Stewardship Council-approved timber products and formaldehyde-free resins if unnecessary lights are left burning and the office is overheated?

In today's world, everything that we do impinges on the environment which surrounds us.

Many of these effects are adverse and can only be solved by global action across national boundaries with enforceable legislation. But we can all make a contribution to change. This guide will help you to do that.

LOCAL ISSUES

A major part of Local Agenda 21 is to encourage waste minimisation by a variety of means. As part of this work Sevenoaks District Council has drawn up a set of purchasing principles which now form the basis of purchasing decisions taken by the Council.

SEVENOAKS DISTRICT COUNCIL ENVIRONMENTAL PURCHASING PRINCIPLES

Purchaser's Responsibilities

1. In order to minimise environmental impact, products will not be purchased or specified if practical alternatives or working methods are available.
2. The use of the least environmentally damaging products will be promoted wherever possible, i.e. from sustainable sources. Products capable of being reused, repaired or recycled will be preferred to disposable products and those wholly or partly made from recycled products will be favoured, providing they meet the standard or specification required.
3. Product suitability and performance will recognise value for money objectives throughout the product life cycle.
4. Suppliers/manufacturers will be vetted where appropriate to verify compliance with environmental purchasing principles.
5. Purchasers will seek to encourage the development and marketing of environmentally friendly products and materials through buying preferences.
6. Purchasers will seek to encourage manufacturers and suppliers to eliminate or reduce all unnecessary printing and packaging.

Suppliers Responsibilities

7. Where packaging is necessary to retain integrity of product it shall be reusable or recyclable wherever possible.
8. Manufacturers will be encouraged to supply products where they are prepared to retrieve and recycle used or waste materials.

Councils Responsibilities

9. To promote the purchasing policy in order that external organisations may be encouraged to adopt similar practice.
10. The purchasing policy will be regularly reviewed and updated to ensure compliance with changes in environmental legislation and reflect best environmental practice.

AEROSOLS

- CFC's, which cause ozone depletion, are now outlawed and have disappeared from use as propellants.
- HFC and HCFC propellants are not as bad in terms of ozone depletion but are still greenhouse gases.
- CO₂ and butane propellants do not have any significant effect on ozone depletion but they are both greenhouse gases. Butane is flammable and can cause breathing difficulties.
- Even CFC-free aerosols use non-renewable resources and are not easily recycled or refilled.
- Refillable pump sprays are better.
- Some products need the fine droplet sprays which an aerosol or an industrial compressor can give.

BATTERIES

- All batteries are made of various toxic metals.
- Since 1992 the maximum levels of mercury permitted in batteries has been strictly controlled.
- Mercury and calcium-free long-life batteries are now readily available and are preferable to standard zinc/carbon batteries.
- However, many batteries still contain zinc, lithium and nickel.
- Lead acid batteries are economical to recycle - when disposing, make sure they go to a Council-recognised recycling point.
- Small batteries are often thrown away.
- Rechargeable batteries are better although they should still be disposed of carefully. Rechargeable batteries cost two and a half times more than normal batteries and also need a charging unit. They can be recharged up to 1000 times and therefore, in many cases, they can work out significantly cheaper to use. However, they do not hold their charge as well as disposable batteries.

CERTIFICATION

- Beware of descriptions stating that product comes from "sustainable sources": it is difficult to verify and is therefore doubtful.

CFC's

- The widespread use of CFC's in new products has largely been phased out in this country. However, there are still a large number of old fridges and freezers around which contain CFC's. As these are disposed of, they should be handed over to the waste collection departments of local councils or other reputable bodies so that the CFC's can be extracted from the equipment.
- Other ozone-depleting gases such as HCFC's and halons (often found in vehicle fire extinguishers) should be disposed of in the same way.
- Halons used in fire extinguishers are the worst ozone depleters of all and are also toxic

CLEANSING MATERIALS

- All detergents sold in this country must be biodegradable (80% in 18 days).
- Powder detergents often contain phosphates. These act as comparatively low-cost water softeners but when they are discharged into slow-running streams and rivers, they can cause the growth of algal blooms and oxygen starvation of the water.
- Wherever possible the use of phosphate powder detergents should be minimised. Also, products containing caustic compounds, which can be harmful to the users and the environment, should be avoided.

COMBINED HEATING AND POWER

- Energy efficient equipment such as a good quality Combined Heating and Power Plant (CHP) may cost more than conventional equipment but can actually save money over the long term
- CHP has the following advantages
 - Less energy is consumed
 - The energy consumed is exempt from Climate Change Levy
 - There is a reduction in emissions
 - There is a reduction in rateable value
 - There is less wear and tear on the rest of the heating plant
- A good quality Combined Heating and Power Scheme can be self financing over a short period

COOKERS

- Energy-saving designs including good insulation of the oven should be looked for.
- Gas is better than electricity. It uses two-thirds less energy than electricity.

CUTLERY

- Plastic disposable cutlery is wasteful of resources and should only be used when washing and reusing more durable cutlery is not possible.

FOOD

- Out of season food from foreign sources is to be avoided, as the energy expended in its transportation and the exportation of food crops from third world countries is undesirable.

EMISSIONS

- Vehicle emissions of toxic gases are currently the largest single cause of air pollution in the UK.
- Pollution that causes a variety of health and environmental problems with particulates and nitrogen dioxide being of particular concern. Indeed a recent study suggests that up to 24,000 people per year die early because of poor air quality
- Fitting a particulate trap and you will reduce particulate emissions, which have been linked to asthma, by up to 95%. With a catalyst, hydrocarbons and carbon monoxide will fall by over 80 %
- The Transport Action Clean Up Campaign from the Energy Saving Trust will pay up to 75% of fitting emissions reduction equipment. Vehicles may qualify for a reduced Vehicle Excise Duty.
- Consequently the fitting of emissions reduction equipment can be self-financing over a short period.
- You could also consider switching to cleaner fuels such as LPG
- The Transport Action Powershift Campaign from the Energy Saving Trust will contribute either to buying a new clean fuel vehicle or converting your existing vehicle.
- LPG is approximately half the price of petrol. Consequently the extra cost of a new LPG vehicle or converting an existing vehicle can be recouped.

ENERGY LABELLING AND ECO LABELLING

- Not necessarily the same but often occur together.
- Energy labelling is now mandatory on domestic washing machines, tumble dryers, refrigerators and freezers.
- Eco labelling (the green flower) is voluntary. It indicates that the product is among the best in its class judged against a wide range of environmental criteria.
- Eco labelling currently applies to washing machines, dishwashers, fridges and freezers.

FRIDGES AND FREEZERS

- Were the largest users of CFC's in both refrigerant and the foam insulation but are now CFC-free.
- Some contain ammonia or lithium but best of all is "Greenfreeze"-isobutane.
- Eco labelling scheme is now mandatory on all new fridges and freezers. The best rate should be selected and even if this involved higher initial cost the savings in this cost of electricity should easily outweigh this in the long term.

FURNITURE AND TIMBER PRODUCTS

- Manufacture - from certified renewable source, using non-hazardous components.
- Components should be recyclable; detachable parts for ease of repair.
- Plywood and chipboard using low formaldehyde resins.

Natural fibres for cushions, padding and upholstery, not polyurethane foam - this is also a fire hazard.

- Avoiding or banning all tropical hardwood products is not feasible. Where countries depend on exports to fund their development, this could lead to rainforests being cleared and the subsequent production of environmentally damaging cash crops.
- Often softwoods and hardwoods from well managed temperate forests can be used but if a heavy use of preservatives is needed, this will be counter-productive.
- Green Heart timber from tropical sources contain its own natural preservative and is still the best material for use in structures which are immersed in water.
- Temperate forests, which are badly managed, are a worse source of supply than tropical forests, which comply with the Forest Stewardship Council.

HORTICULTURE AND GARDENING

- Many pesticides and herbicides previously on the market have now been withdrawn, as they are deemed excessively hazardous to the user and to the environment. Use only currently certified products.
- Use peat-free compost ideally made from household waste
- Wherever possible use chemical-free weeding techniques such as burning.

LIGHTING

- Low energy light "bulbs" (or compact fluorescent lamps) use one-fifth of the electricity of a conventional filament lamp and last eight times longer.
- Energy and money can be saved by fitting these new lamps.
- Normal bulbs appear to cost less but only last one-eighth of the time.
- When designing new buildings or refurbishing existing ones, specify either fluorescent tubes or fittings which will accept them.
- Only switch on lighting which is needed. Do not leave on unnecessarily.

MOTOR VEHICLES

The mass production of vehicles uses large quantities of raw materials including metal, plastic, paint, and toxic chemicals.

Vehicle emissions also contribute to pollution problems including global warming, acid rain and respiratory problems.

The disposal and scrapping of vehicles can also cause environmental problems.

Catalytic converters on the exhaust system reduce the emission of nitrous oxides and sulphur dioxide. However, carbon dioxide, a greenhouse gas, is still present.

- Diesel: emits less carbon dioxide but gives out small particles, which cause respiratory problems like asthma etc.
- It is better for the environment if people walk to work, cycle, use public transport or share cars.
- The engines of vehicles should be regularly maintained to keep maximum efficiency.
- Small engines use less fuel than larger ones.

PACKAGING

- There is a lot of waste from paper, plastics and glass.
- 25% of the waste stream in the United Kingdom is packaging.
- There is a consumption of limited resources which are non-renewable and a creation of waste.
- Where possible, use refillable packaging and packaging using recycled materials.

PAINTS AND VARNISHES

- May contain toxic ingredients such as lead and white spirit.
- Water-based paints and natural pigments are better.
- Use of plant oils such as linseed is better.
- Solvents and thinners are bad.

PAPER LABELLING SYSTEMS

- Labelling is slowly becoming more informative and accurately describing sources of paper and whether it is from post-consumer waste or mill-broker or other pre-consumer sources.
- Blue Angel or NAPM scheme.

PEAT ALTERNATIVES

- Digging peat from wetlands in Yorkshire, Somerset and Lancashire destroys important habitats.
- Alternatives: cocoa fibre, composted bark, composted household waste

PAPER

- Paper made from virgin pulp is often described as coming from sustainable forests. However, often 'replanting' means replacing natural mixed forest with a monoculture of trees, which is not good for wildlife.
- Pulping: Much energy is used and sulphur dioxide is produced. Bleaching the pulp may use chlorine, which is a direct pollutant and will deplete the ozone layer.
- Recycled paper causes less environmental damage to forests; less energy is used in its production, there is less pollution and less landfill waste.
- Recycled paper helps reduce the bill for the importation of pulp.
- Where possible, use paper which comes from 100% Post Consumer Waste but where a 'higher grade' of paper is required, look for paper which contains a high level of PCW even if it is mixed with virgin pulp.
- Environmentally-friendly papers use virgin pulp but no chlorine bleach or they may use waste fibres from straw or sugar cane.
- Tropical hardwoods are NOT used for paper production but in some countries (egg, Brazil and Indonesia), rainforests have been cut down to make way for plantations of eucalyptus and acacia which are used for paper manufacture.

PENCILS AND PENS

- Fully disposable pens like ballpoints are less desirable.
- Pencils made from wood are better.
- Refillable pens are better.

PESTICIDES

- Products containing atrazine and simazine should not be used as they have been found to pollute watercourses and other water supplies.
- Avoid timber preservatives containing pentachlorophenol or tributyltin oxide.
- Avoid products which are on the Ministry of Agriculture and Rural Development Red List.

PRINTERS AND PHOTOCOPIERS

- Use machines which will work with recycled paper and print double-sided copies.
- Use ones which are low energy consumers.
- Use refillable toner cartridges
- Avoid copiers which do not do double-sided copies easily.
- Only produce the number of copies needed.
- Use low weight papers, ie 80gm not 100gm.

SWIMMING POOL CHEMICALS

- Some chemicals contain mercury or copper for algae control - these are environmentally damaging.
- Ammonia-based chemicals are less harmful.

TIMBER

- Look for timber which comes from a certifiable scheme such as Forest Stewardship Council (FSC).

SYMBOLS

The "Mobius"Loop

- This is of the most widely used and misunderstood symbols found on products. It has no legal or formal authority. It can be used to suggest or claim that a product contains proportion of recycled material. Alternatively it is now often used to indicate that the packaging concerned can be put back into the waste chain and recycled. Often there will be additional letters or numbers with the symbol which show what the packaging is made of. If it has been used for food, drink or items for personal consumption then the material is almost certainly not itself recycled.

Blue Angel Award

- Germany's Blue Angel is the world's established eco-labelling scheme, started in 1978 by the Federal German Government. The mark is in widespread use in Germany but few UK products qualify. Recycled papers must be 100% recycled and must contain at least 51% low/medium grade waste papers.

The European Ecolabel (The Green Flower)

- This Symbol is intended to become the Europe wide approved symbol to indicate that a product is among the best in its class judged against a wide range of environmental criteria. Its introduction is a gradual process and depends on specific standards being established for a particular type of product. It can already be found on fridges, freezers, washing machines, tumble dryers and dishwashers especially when linked to the now obligatory energy labels on these products. It is intended that the Ecolabel will be extended to a much wider range of products and should soon start to appear on approved brands of toilet paper and paper towels.

The Energy Label

- This was first introduced to the United Kingdom on 1 January 1995 and it is now obligatory that all washing machines, tumble dryers, fridges, freezers and dishwashers must carry a relevant label for the particular model. Unlike the Ecolabel the Energy Label does not guarantee the environmental credentials of a product. Instead it shows how that product has performed in a sense of carefully controlled tests. This could mean that a washing machine could be offered for sale carrying an Energy Label which in fact shows that it has not performed well in the appropriate tests. A copy of the leaflet on Energy Labelling can be obtained from the Procurement Manager.

WASHING MACHINES

- Energy efficiency - look for the new Energy/Eco label and select the most efficient.
- Wherever possible, use low temperature wash cycle.
- Wash full loads.
- Minimise water consumption by aiming for machines which state that they use less than 100 litres of water per load and less washing powder.

COMPLETING THE CYCLE

Recycling

Recycling conserves natural materials, saves energy, reduces pollution, saves landfill space.

- Ultimately recycling only works if there is a demand for products containing recycled materials.
- Try to establish and support waste collection schemes in the workplace and at home. Try to sort out waste so that different types go to the right locations. It is possible to 'contaminate' waste by mixing two otherwise recyclable substances together.

WHAT DOES IT ALL MEAN?

Agenda 21

At the Earth Summit in Rio de Janeiro in 1992 world leaders signed a global environment and development action plan called Agenda 21. Over two thirds of this plan cannot be put into effect without the commitment of local government throughout the world. Each local authority has been encouraged to adopt its own Local Agenda 21. This should set out its own sustainable development strategy at the local level often working with local businesses, community and voluntary organisations.

CFC or Chlorofluoro Carbons

These are volatile liquids whose comparative low toxicity and inert nature made them apparently ideal for refrigerants and propellants in aerosols. Unfortunately one of the few substances they did react with was ozone and so having floated up through the atmosphere without reacting with anything else along the way they encountered the ozone layer which they have busily set about depleting and therefore created a hole through which harmful ultra violet rays could pass.

CO₂

Carbon Dioxide is a gas produced by natural respiration in plants and animals and also by combustion of organic material - wood, coal, natural gas and petrol. It is not in itself toxic but if placed in a confined space with no circulation of air - then the levels of oxygen needed for respiration will be used up and the levels of "useless" Carbon Dioxide will rise a first symptom of this may well be headaches.

One of today's greatest concerns is that the level of Carbon Dioxide (CO₂) in the atmosphere is rising faster than plants make use of it in photosynthesis - which releases more oxygen back into the atmosphere.

This leads to the greenhouse effect, when heat from the sun enters the earth's atmosphere and is trapped by the higher levels of CO₂ - rather than being radiated back into outer space. This has led to a series of effects on the weather, ocean currents and the polar ice cap.

Phosphates

Are in fact often essential constituents for healthy plant and animal life. However levels of phosphate containing compounds can rise to excess levels in rivers and lakes. Blue green algae will flourish and smother all other life forms in the watercourse by depriving them of the oxygen, which is so vital for their existence.

ADVICE IS AT HAND

Although this guide should provide information on what to look for when trying to make a "green" buying decision there may be times when you need more advice. Please contact the Procurement Manager.