

# How to Organise a LEAMS Survey

## 1. Introduction

The purpose of a litter survey is to gain an accurate picture of levels of cleanliness and the environmental quality of your school. The methodology shown below has been adapted from the Local Environmental Audit and Management System (LEAMS) used by local authorities across Scotland to meet their cleanliness obligations.

Using this methodology will allow you to carry out a structured survey, the results of which will allow you to:

- compare how you are doing with other schools and against the national statistics
- identify areas that are in need of special attention
- help you plan further action
- monitor improvements
- meet your requirements as set out in the Environmental Protection Act 1990

### Environmental Protection Act 1990 - Part IV Provisions relating to litter

Under the Environmental Protection Act (EPA) 1990 part IV schools are defined as 'Duty Bodies' which means that they have a legal responsibility to keep all areas under their control free from litter and refuse as far as reasonably practicable and within reason.

In basic terms this means that when schools grounds become littered, hard surfaced areas must be returned to a litter free state within 24 hours and grassed areas should be returned to a predominantly litter free state (some small items allowed) within 24 hours.

It is worth noting that while the grassed areas may be litter picked by grounds maintenance prior to grass cutting they have no responsibility to do this at any other time. **Therefore if there is no regular maintenance programme for grassed areas the school is breaking the law and can be liable for large fines.**

## **2. Tools needed to undertake a litter survey**

- A working group to co-ordinate all activities
- A team of enthusiastic volunteers
- Map of your school
- Clipboard
- Survey results forms
- Pencil
- Camera

## **3. Survey preparation**

First of all you need to decide where to survey. If your school grounds are small you could survey them all, which would provide you with some really useful data. If, however, you have large grounds you should aim to sample a percentage of the ground - do not make it too big or you will be out for several days surveying.

To help with this you can define zones around the school. Most schools can be split into at least three zones e.g. hard surfaces, grassed surfaces and car parking. You may want to break it down further e.g. playing field, rough ground, public accessed land, school garden etc.

## **4. Survey methodology**

Use a map of your school grounds to identify the areas to be surveyed, ensuring that they are representative of all your grounds. The actual areas of study are called transects. A transect will be about 50 meters long and approximately 2 meters wide however, these may vary according to the area being surveyed. Your transects will traditionally follow the line of a wall or path, however, if you are surveying a site without a defined boundary e.g. football pitches each transect should be 50 meters long by 2 meters wide around the perimeter of the site.

Try to make your survey transects as fair as possible - perhaps you can use the toss of a coin or dice to help select the sectors to be surveyed.

The survey is carried out by simply walking through the transect looking at the ground for litter and the surrounding area for other 'nasties' such as graffiti and vandalism. Results are recorded on the survey record sheet.

## 5. Observations within each transect

Each sector should be graded using the grading system which is outlined in the Code of Practice on Litter and Refuse, in Part IV of the Environmental Protection Act 1990. This grading system is used by every Scottish Council to allow them to assess their cleanliness levels.

**Remember...**

**Use your overall impression and allocate the grade only once you have completed your walk through the entire sector/transect.**

### Grades of Cleanliness

#### **Grade A (Absence of Litter)**

Litter free.

#### **Grade B (Bitty)**

Mainly litter free, some small items (cigarette ends, bus tickets).

#### **Grade C (Crummy)**

Many small items and some larger ones (cans, fast food packaging).

#### **Grade D (Disgusting)**

Heavily littered with large and small items, accumulations along the boundaries.

### **'The Nasties': Adverse Environmental Quality Indicators (AEQIs)**

AEQIs are used as indicators of how untidy/dirty an area is. These are recorded by simply ticking the relevant box. These include:

Dog Fouling  
Weeds

Vandalism  
Detritus

Graffiti

## **Definitions**

- **Dog fouling**

Dog fouling should be noted if it is present within the sector. Dog fouling is classed as refuse, therefore a sector free from litter and refuse but containing dog fouling cannot attain a Grade A. It may be present where the cleanliness of the area has fallen to grade B, C or D and must be considered alongside other litter and refuse.

- **Vandalism**

This is defined as deliberate and thoughtless damage of property often owned by the Council or other public authorities, which lowers the quality of the life for local people and spoils the environment. Examples of vandalism include wall-mounted bins pulled off, windows smashed, or broken furniture. Please note that this does not alter the cleanliness grade of the sector.

- **Graffiti**

This is defined as unauthorised drawing or writing on surrounding buildings or street furniture such as benches, litter bins, etc. Please note that this does not alter the cleanliness grade of the sector.

- **Weeds**

This is unsightly vegetation located within a sector, which is of low botanical importance. Weeds are only recorded with reference to hard surfaces/pavements etc. Please note that this does not alter the cleanliness grade of the sector.

- **Detritus**

Accumulations of dust, mud, soil, leaf and blossom fall. Please note that this does not alter the cleanliness grade of the sector.

### *Additional items to be observed within each sector*

Litter bins - litter bins are defined as school bins provided for use by pupils. Do not count wheelie bins used by the school for the disposal of refuse. Count the total number of bins that occur in every transect surveyed and then record the number which are overflowing. In the comments section note problems with bins such as bin required, lid required, bin damaged etc.

### *Types of litter*

The presence of the four most commonly found types of litter should be recorded. These are normally:

**Code 1: Smoking related** e.g. cigarette ends, matches, matchboxes, cigarette packaging.

**Code 2: Drinks related** e.g. cans and bottles, cups, straws and lids.

**Code 3: Sweet wrappers** including chewing gum wrappers and crisp packets.

**Code 4: Fast food packaging** e.g. fish and chip wrappers, polystyrene cartons, burger wrappers, plastic cutlery.

You can choose more appropriate categories for your school e.g. chewing gum if this will make the results more useful to you.

### *Sources of litter*

Each transect containing litter should have the sources of litter identified. A transect may contain more than one source of litter. If a litter item does not fit into one of the first three categories below, the 'other' category should be circled and a description made in the comments section.

**Code 1 - Pupil:** e.g. drinks cans, straws, confectionery wrappers, fast food packaging.

**Code 2 – Public:** litter that is more likely to have been dropped by members of the public e.g. cigarettes, alcohol cans and bottles and dog fouling.

**Code 3 – Refuse:** large waste items not dropped by pedestrians e.g. black bin bags, cardboard boxes

**Code 4 – Other:** any other litter that does not fit into the above categories

If a B, C or D grade is given to a transect then at least one source of litter **must** be identified. If a grade A is achieved no sources of litter should be identified.

### Comments -

The comments section can be used to add any details not already covered. In particular you can highlight problems with certain types or sources of litter, and can add comments about bins being required or needing to be re-sited.

## **6. Completing the survey form**

On every survey form you need to fill in the following information:

- School name and location
- Surveyors names/initials
- Date and Day
- Sheet Number
- Location of Sector/ Transect
- Time
- Transect number
- Film and Photo Number
- Dog Fouling (✓ if present)
- Vandalism (✓ if present)
- Graffiti (✓ if present)
- Weeds (✓ if present)
- Detritus (✓ if present)
- Number of Bins
- Number of Overflowing Bins
- Grade (A,B,C,D)
- Types of litter (1,2,3,4)
- Sources of litter (1,2,3,4)
- Comments

### **...And Remember**

Surveyors should be consistent in their grading throughout the survey and not change their views on what determines each grade.

When considering the grade, be careful not to include litter or other environmental problems that are on adjacent land and not in the transect (however if there is a significant amount of litter just outside your survey area you can note this in the comments section).

## **7. Photography**

Whilst you are surveying use your camera to record 'grot spots' in your area. It is important also to highlight particularly clean locations to allow a picture of good and bad areas to be built up in your area. Perhaps you could display these photos to raise awareness of litter issues. This display could be used to recruit volunteers to help clean up the 'grot spots'.

## **8. Health and Safety**

- Always survey in pairs.
- Take particular care in car parks and when surveying other areas where car movements are likely.
- Do not pick up any litter, unless an organised litter pick is being undertaken and the necessary precautions are being taken.
- If you spot any hazardous items, for example, syringes, broken glass and clinical waste, etc, make a note of their location and contact the 24 hr control centre.

## **9. Survey Results**

The data collected can be used in a variety of ways. A cleanliness index can be calculated to allow comparisons over time or with other sites. Bar charts and pie charts can be used to illustrate the different types and sources of litter found and can be further divided by zone. The information gathered should be helpful in deciding what further action needs to be taken to reduce the litter problem. More bins may be required, or existing ones may need to be moved. Litter picks may need to be concentrated in known grot spots and additional support may be required from the community or the Council.

It is important to be absolutely clear about the purpose of your survey before you start. If you want to get some really useful data that can be

used for planning further action think carefully about the categories used for types and sources of litter and adapt these to suit your school. If you want to be able to compare your results with other schools/council areas and national standards it would be important to stick to the standard format. If you want to use the survey to monitor improvements over time make sure that your survey methodology is constant.

## **10. Other Information**

For more information on various aspects of surveys or for help at any stage please contact the Litter Education Support Officer.