



Comhshaol, Oidhreachta agus Rialtas Áitiúil  
**Environment, Heritage and Local Government**

## **THE NATIONAL LITTER POLLUTION MONITORING SYSTEM**

### **LITTER MONITORING BODY**

#### **AUDIT REPORT**

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**Prepared for:**

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## 1. Introduction

The National Litter Pollution Monitoring System enables local authorities to monitor changes in the nature and extent of litter pollution in their functional areas over time and to use this data to provide more effective litter management planning at local level.

As a self-assessment mechanism, it is essential that local authorities properly implement the system and that their performance is audited by the Litter Monitoring Body to ensure that the system is working as designed and to identify any problems with its key elements.

In January 2008, the Litter Monitoring Body audited five local authorities:

1. Carlow County Council;
2. Carlow Town Council;
3. Kilkenny County Council;
4. Wexford County Council; and
5. Wexford Borough Council.

The purpose of these audits is to determine how each local authority implements and operates the Litter Monitoring System. Carlow County Council assists in the implementation of the system for Carlow Town Council. Wexford County Council also assists Wexford Borough Council in the implementation of the system.

During each audit, the key elements of the system are assessed, including:

- the identification and mapping of Potential Litter Generators;
- the production of Litter Generation Potential Maps;
- the carrying out of Litter Quantification and Litter Pollution surveys; and
- the collation / inputting of survey data into the relevant database for submission to the Litter Monitoring Body.

Each of the above key elements were examined to ensure that each component of the System is working as designed and is being properly implemented by each local authority.

During the course of the audit, the Litter Monitoring Body reviewed all documentation, verified photographs and interviewed local authority staff to identify problems encountered during System implementation and operation. The Litter Monitoring Body also reviewed the circulation of information regarding the System in each of the audited local authorities. The purpose of this was to ensure that System’s information issued by the Litter Monitoring Body (i.e. manuals, Systems Reports, including the Systems Survey Results, Seminar Summary Document etc.) over time has been circulated to all the relevant staff to ensure the proper implementation and operation of the system.

The audit allows the Litter Monitoring Body to consult with those who are on the ground undertaking the litter surveys. This ensures that the Litter Monitoring Body recognises if amendments are required to the System for the following years’ surveys. This is discussed in more detail in Section 3.

It was noted during the audit that the new ‘sweet related litter’ category is being utilised accurately.

## 2. Findings

The Litter Monitoring Body found that the five local authorities audited were, for the most part, operating the system’s methodologies correctly in accordance with the Monitoring Manual. However, the audits identified a small number of areas where remedial action was required on the part of the audited local authorities to ensure that the system operates as designed – details of these incidents are set out below.

### 2.1 Litter Pollution Surveys Methodology

- There is a need to ensure that the personnel carrying out the surveys are familiar with the area cleanliness rating photographs provided in the manual. The majority of the local authorities audited assigned the correct area cleanliness ratings to the litter surveys. It is suggested that the area cleanliness rating photos should be circulated to all Litter Monitoring Officers before the commencement of this years surveying. This set of photos illustrates examples of area cleanliness ratings and is available on [www.litter.ie](http://www.litter.ie).
- In one local authority audited, the judgement on the visibility of key **“Litter Indicator Items”** was not accurate. It should be noted that there are two values for the Litter Pollution Index a) the presence or absence of Litter Indicator Items and b) the Area Cleanliness Rating; the combination of both derive the Litter Pollution Index (LPI). Therefore an incorrect judgement on the visibility of key litter indicator items will result in a modified Litter Pollution Index rating. This was also apparent in the 2007 Audit. It is important that local authority’s judgement on the visibility of key litter indicator items is accurate. Refer to Audit Report 2007 for more details.
- The Conclusion/Comment sections of the survey form were not completed in the majority of cases. This option is useful as it enables surveyors to provide feedback regarding possible solutions to the litter problem in the surveyed areas. During the audits the Litter Monitoring Body highlighted the importance of filling out the comments section comprehensively to those involved in litter surveying.

- At least one photograph is required of each survey location – in most cases photographs were available to be examined. Some local authorities use a digital camera; this is acceptable if the photo identification is cross-referenced on the litter pollution survey forms. One of the local authorities audited did not provide litter pollution survey photographs and it was therefore very difficult to verify the area cleanliness ratings during the audit. It is recommended that digital cameras be provided for the surveyors when undertaking the surveys. It is important that the photographs are downloaded frequently to ensure that they are not misplaced or deleted by other local authority staff using the digital camera. The photo identification was not clear on a number of the survey forms, this made some surveys difficult to audit.

## 2.2 Litter Quantification Surveys Methodology

- The most important item to note in relation to the litter quantification survey forms is that the method of **counting cigarette and chewing gum** has been altered. It is now accepted that the counting of all cigarette and chewing gum in a 50m stretch is more accurate than counting in a 10m stretch and multiplying by five. The Litter Monitoring Body noted that during the audit one local authority was counting these litter items and multiplying by five. It is likely that these results were not as accurate as they could have been, using the amended methodology.

The audit allowed the Litter Monitoring Body to assess the adequacy of the current minimum number of annual litter pollution and quantification surveys carried out by the local authorities. It is suggested that the number of surveys currently being completed by local authorities on an annual basis is appropriate; therefore there will be no increase in the number of surveys to be completed for the 2008 surveys.

## 2.3 Survey Timescale

It was noted during the audit that some local authorities completed surveys on the same day of the week or month of the year e.g. all surveys are completed on a Monday. This is not an accurate representation of the annual level of litter pollution in a local authority's functional area. Each local authority is asked to

alter the time of the surveys to give a true representation of litter pollution variance with time i.e. surveys should be completed at different times of the day, on different days of the week and in different months of the year.

## 2.4 System Documentation

- From the audit it was clear that much of the System’s documentation is not disseminated to all of the relevant staff, in particular litter wardens who are carrying out the litter pollution and quantification surveys. This has improved slightly with a number of local authorities disseminating the report to all those involved in Systems implementation.
- In the 2007 audit it was apparent that a number of those personnel who carry out the litter surveys each year do not receive a copy of the System’s Survey Report. In 2006 the Litter Monitoring Body modified the System’s Survey Report to twenty-three pages from approximately sixty pages to ensure that the System’s Survey Report is read by all those involved in the System. This approach ensures that the relevant staff both understand and continue to support the national monitoring system.
- It is important that all those involved in litter monitoring in the local authority have access to [www.litter.ie](http://www.litter.ie). This website contains all relevant documentation relating to the System’s implementation.

## 2.5 Staff Undertaking Surveys

- It was noted in one local authority audited that not enough staff were available to undertake the litter pollution/quantification surveys. If possible, more staff should be trained in the system to cover holidays/sick leave etc.
- It is important that all surveyors should be properly trained in the system. It was noted during the audit that one local authority had numerous litter wardens undertaking the surveys, some of whom had never undertaken training in the litter monitoring pollution system. This led to disparities in the manner in which the surveys were undertaken. It is recommended that all surveyors should be properly trained to ensure discrepancies do not occur. In addition it is recommended that a set number of litter

wardens are assigned the task of completing litter surveys in a local authority to avoid confusion and ensure accuracy in completing litter surveys.

## **2.6 Litter GIS**

The majority of the local authorities audited utilise the GIS system which has been developed by the Local Government Computer Services Board (LGCSB) to identify litter pollution survey locations.

A number of local authorities mentioned that they require ongoing/further support from the LGCSB in order to ensure that the litter GIS system is working in an efficient manner.

### 3. Recommendations

The following are the key recommendations from the Audits:

1. **Litter Survey Plan:** this was designed by the Litter Monitoring Body to ensure that litter surveys are completed at different times of the day, days of the week, months of the year and in the necessary range of locations. It is recommended that all local authorities use this plan to ensure consistency. This is available to download at [www.litter.ie](http://www.litter.ie)
2. It is recommended that local authorities continue to use the **Litter Monitoring Folder**, which is prepared for each of the surveyors before commencement of each year's litter surveys. This ensures that surveys are completed at the correct times and in an accurate manner.
3. It is recommended to undertake **Internal Audits** both before results are forwarded to the Litter Monitoring Body and throughout the surveying period. The importance of internal audits was revealed this year as the incorrect value for "Litter Indicator Items" was assigned to a number of surveys in one local authority audited, and this modified the Litter Pollution Index. In addition, it is recommended that the Litter Monitoring Officer should ensure that photo identification and photographs are currently linked to each survey form.
4. It is recommended to continue to count cigarette and chewing gum litter along a 50m stretch as opposed to a 10m stretch as this ensures survey results are more accurate.

## 4. Conclusions

The Litter Monitoring Body found that the five audited local authorities were in the main implementing the key elements of the National Litter Pollution Monitoring System correctly. Furthermore, the local authorities concerned are committed to undertaking the necessary actions to resolve the operational issues identified in this report as soon as possible. Overall, the five audited authorities are good models of the System's implementation. Their experiences, together with the recommendations in this report, can assist other local authorities to implement the system properly within their functional areas.

During the audit the Litter Monitoring Body discussed the main points local authorities should keep in mind when surveying. A **detailed report on the audit** was also forwarded to all local authorities audited; this should ensure that any non-compliance with implementation of the System are rectified for future surveys.

This report should ensure that all local authorities will benefit from the findings of the system audits carried out to date, as it is not possible to audit system implementation / operation in every local authority.

## 5. Acknowledgements

The Litter Monitoring Body wish to thank the staff of Carlow County Council, Carlow Town Council, Kilkenny County Council, Wexford Borough Council and Wexford County Council for their help and co-operation during the course of these audits.