



# Providing Electronic Information on Facility Location

## Application Guidance Notes

**Environmental Protection Agency**  
PO Box 3000, Johnstown Castle Estate, Co. Wexford  
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699  
Web: [www.epa.ie](http://www.epa.ie) Email: [info@epa.ie](mailto:info@epa.ie)

## **ABOUT THESE GUIDANCE NOTES**

These guidance notes have been prepared to assist applicants in the preparation of an application for an Integrated Pollution Prevention and Control (IPPC) Licence and Waste Licence. While every effort has been made to ensure the accuracy of the material contained in this document, the EPA assumes no responsibility and gives no guarantees, undertakings and warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any content contained in this Guidance Note, then the requirements in the Application Form should take precedence.

For queries of an administrative or technical nature in relation to submitting digital drawing files and tabular data templates please contact:

Mr. Gavin Smith  
Environmental Protection Agency  
Johnstown Castle Estate  
Co. Wexford

Telephone: 053-9160600  
E-mail: [g.smith@epa.ie](mailto:g.smith@epa.ie)

## 1. INTRODUCTION

During the licence application process applicants are required to submit drawings of the proposed installation/facility including information on the site boundary and infrastructure as well as the proposed emission, monitoring and sampling points. In addition to submitting the drawings in paper format with the application, applicants are required to submit digital drawings files electronically on a separate CD included with the application. The information should be supplied to the EPA in an electronic format and geo-referenced within the Irish National Grid system. The EPA incorporates these drawings within the EPA's geographical information management systems (GIS) to facilitate the licensing process. This document provides detailed guidance on the information required and the procedures for preparing data for submission with the licence application.

## 2. OVERVIEW OF DATA REQUIRED

Applicants are required to submit geo-referenced digital drawing files (e.g. AutoCad files) with the application, showing the following in Irish Grid projection:

- Site boundary and overall site plan under Section B.2 of the application.
- Emission points proposed under Section E.6 of the application.
- Monitoring and sampling points under Section F.3 of the application.

Acceptable drawing file formats include DXF, DWG, DGN, ESRI Shapefile, MapInfo or other upon agreement with the EPA. This data should be submitted to the EPA on a separate CD-Rom.

In addition to the drawing files applicants are required to submit tabular data templates outlining the following information:

- The proposed atmospheric, surface water, sewer, ground and noise emission points as outlined in sections E.1 to E.5 of the application. The template will include information on the emission point code, emission type, Irish Grid reference (6E, 6N) and state if verified with a GPS.
- The proposed emissions monitoring and sampling points as outlined in section F.2 of the application. The template will include information on the monitoring/sampling point code, the point type, Irish Grid references (6E, 6N) and state if verified with a GPS.

The data for the above sections should be entered into separate tabular data templates and submitted to the EPA on the CD containing the digital drawing files outlined above. Tabular data templates can be downloaded from the Licensing pages of the EPA website at [www.epa.ie](http://www.epa.ie).

## 3. PREPARATION OF DIGITAL DRAWING FILES

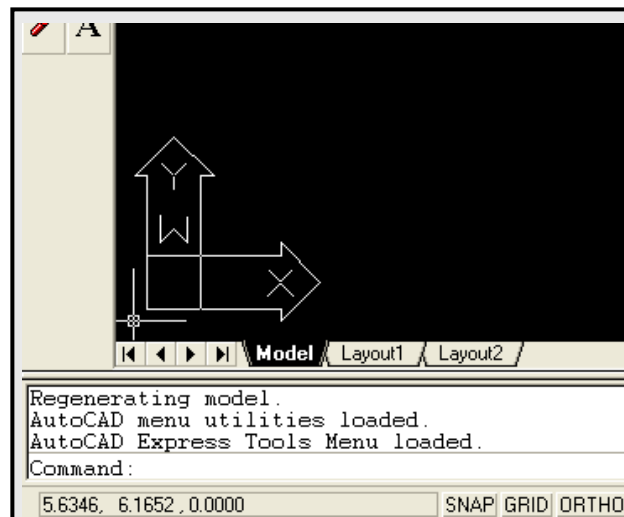
The preparation and submission of detailed site plans outlining the site boundary, site infrastructure, on-site and off-site emission points, and the site monitoring and sampling points are a requirement of the application process. The EPA requires applicant to submit these site plans in a digital format (DXF, DWG, DGN, ESRI Shapefile, or MapInfo) and projected within the Irish Grid projection system. The production of such site plans is most commonly carried out in AutoCAD. This section outlines the method for projecting AutoCAD files such as DXF, DWG and DGN formats in Irish Grid projection.

The Irish Grid as mentioned above is the primary projection system used in Ireland and by the EPA. Point locations are represented by 6 digit Eastings and Northings. For example 315986, 234395 is the Irish Grid Reference for the centre point of O'Connell Bridge in Dublin. Further technical details on the Irish Grid coordinate system are available from the Ordnance Survey of Ireland website at [www.osi.ie](http://www.osi.ie). The Irish Grid is the projection system required for all digital drawing files and point locations being submitted to the EPA as part of the application process.

### ***Confirming a Drawing Files Projection:***

To confirm whether or not a drawing has already been projected in Irish Grid the drawing can be checked in AutoCAD using the following steps.

1. Open the file in AutoCAD.
2. In the lower left corner of the AutoCAD window, the co-ordinates of the drawing can be viewed. If the co-ordinates are not visible, right click on the corner to turn them on (Fig. 1).



**Fig.1: Location of Drawing Co-ordinates in the bottom left corner**

3. If the co-ordinates are large number of digits, similar to the known grid references it is probable that the drawing has already been projected in Irish Grid. This should be verified against known reference points. If drawings are projected in Irish Grid they are ready for submission.
4. If the co-ordinates are similar to the format -7.46, 53.20, it is likely that the drawing has been projected using decimal degrees. Drawings projected using decimal degrees should be re-projected in Irish Grid.
5. Drawings that are not projected will have co-ordinates near 0,0,0 when the cursor is moved towards the bottom left hand corner of the window. Such maps have been drawn using 0,0,0 as the base point and will need to be projected into the Irish Grid as outlined in the next section of this document.

### ***Projecting a Drawing File in Irish Grid:***

If it has been confirmed that the drawing file has not already been projected into the Irish Grid, the file can be projected using the following steps.

Before converting the drawing file

1. Ensure that the correct Irish Grid reference of at least one easily identifiable point in the drawing is known. For example the most northerly emission point or the bottom left corner of the main building.
2. In AutoCAD set the drawing units to metres:
  - Go to the *Format* menu,
  - Select *Units* (Fig.2),
  - In the *Drawing Units* dialog box that opens, choose metres as the *Insertion Scale* and click OK (Fig.3).

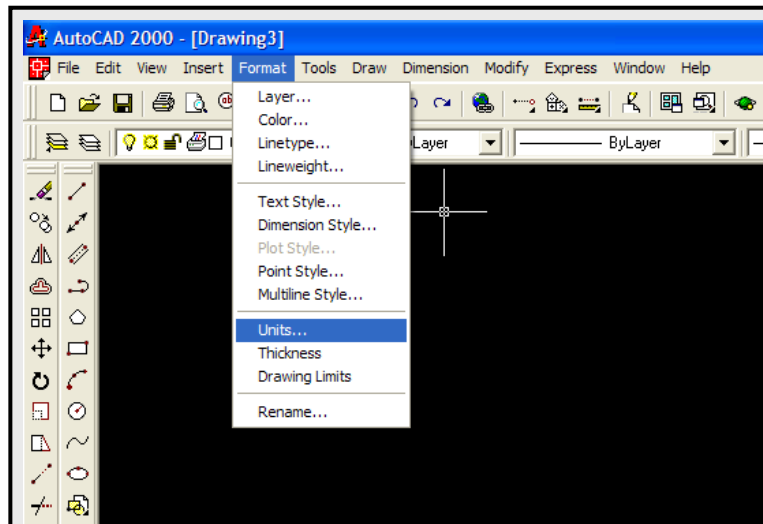


Fig.2: Format Menu, Select Units

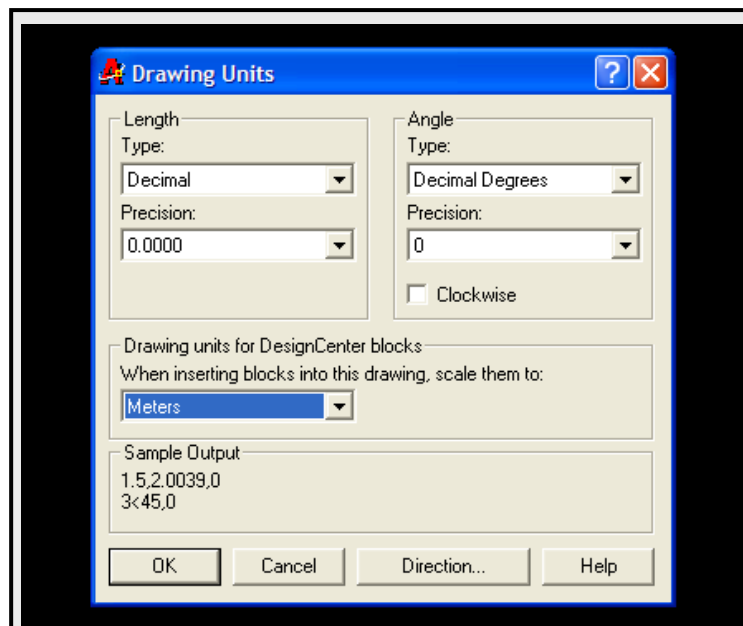


Fig.3: Drawing Units Window – Drawing units should be set to metres

3. Open the .dwg file within AutoCAD
  - Go to the *File* menu,
  - Select *Open*, a new window should open to browse to the required drawing file.
4. For ease of viewing, zoom to the extent of the drawing
  - Right click mouse, choose *Zoom* (Fig.4),

- Right click mouse again, choose *Zoom Extents* (Fig.5),
- Hit escape (Esc) on the keyboard.

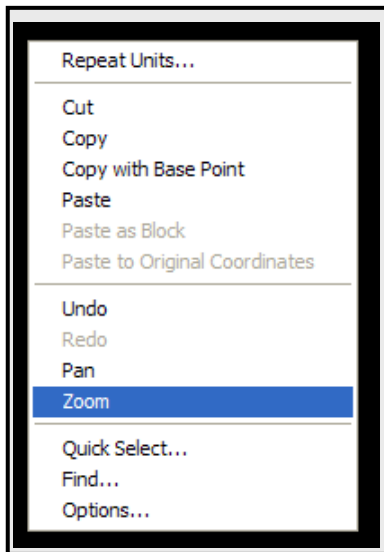


Fig.4: Right Click – Zoom

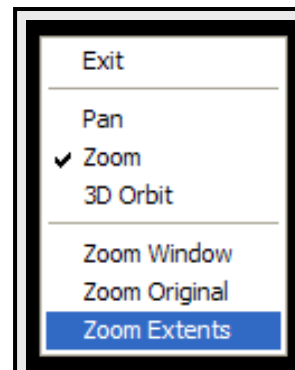


Fig.5: Right Click

5. Ensure that the Object Snapping option is turned on
  - Go to the *Tools* menu,
  - Select *Drafting Settings* (Fig.6).
  - In the *Drafting Settings* dialog box, go to the *Object Snap* tab and select *Object Snap On*. In the *Object Snap Modes*, ensure that at least *endpoint*, *centre*, *node* and *intersection* are turned on. Then click *OK* (Fig.7).

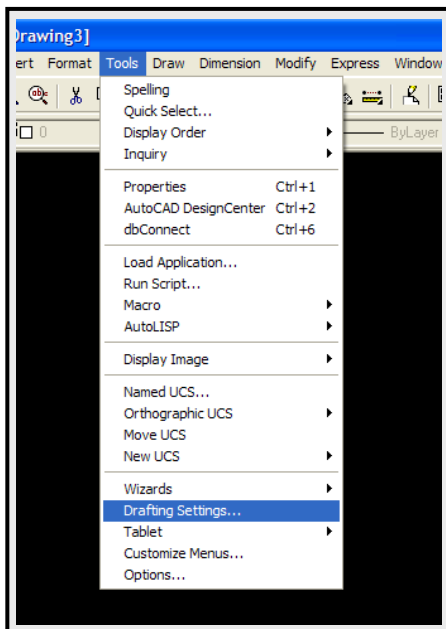


Fig.6: Tools menu, Drafting Settings Snap is turned on

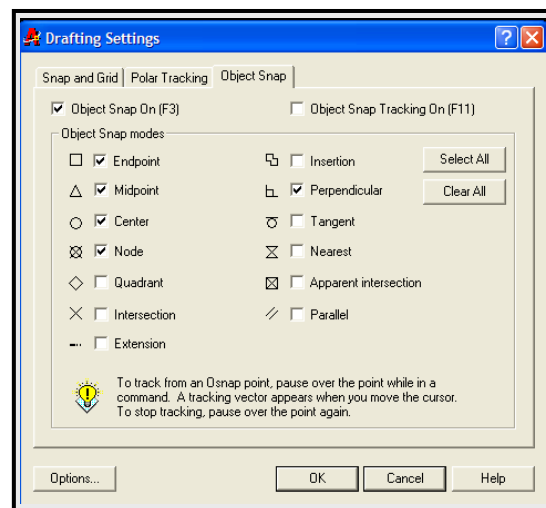


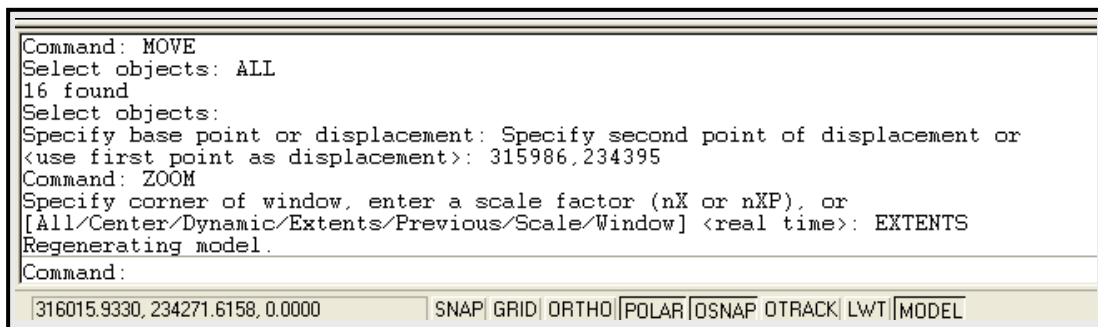
Fig.7 Drafting Settings – ensure Object Snap is turned on

6. Check the current co-ordinates of the drawing. The co-ordinates of the drawing can be viewed in the very bottom left corner of the AutoCAD window (see section on *“Confirming a Drawing Files Projection”*). If the drawing is not already geo-referenced, when the mouse cursor is moved

towards the lower left hand corner of the screen, the co-ordinates should be 0,0,0 or close to that.

#### Geo-Referencing the Drawing File (Fig.8)

7. To move the scaled site drawing from its current co-ordinates to new Irish Grid co-ordinates carry out the following steps:
  - In the Command line  
Type **MOVE** and hit the return key.
  - The user will be requested to **SELECT OBJECTS**  
Type **ALL**  
Hit return, users may have to hit return twice.
  - The user will then be asked to **SPECIFY BASE POINT OR [DISPLACEMENT]**  
Using the mouse click onto the known base point on the screen. The base point is a point for which exact 6E 6N Irish Grid references are known. Ensure that the cursor snaps to exactly the right point.



```

Command: MOVE
Select objects: ALL
16 found
Select objects:
Specify base point or displacement: Specify second point of displacement or
<use first point as displacement>: 315986,234395
Command: ZOOM
Specify corner of window, enter a scale factor (nX or nXP), or
[All/Center/Dynamic/Extents/Previous/Scale/Window] <real time>: EXTENTS
Regenerating model.
Command:
316015.9330, 234271.6158, 0.0000 | SNAP | GRID | ORTHO | POLAR | OSNAP | OTRACK | LWT | MODEL
  
```

Fig.8: Command lines for moving the drawing

8. The user will then be asked to **SPECIFY SECOND POINT**, at this point type in the correct Irish Grid Co-ordinate in the Command line and hit return. If the drawing disappears from the screen zoom to the extent of the drawing by right clicking the mouse and choose zoom, then right clicking again and choose *Zoom Extents*.
9. The drawing should now be accurately geo-referenced. You can check this by moving the mouse over the point for which you have set the co-ordinates. In the lower left hand corner of the screen the new co-ordinates of the drawing should be visible and should have changed from 0,0,0 to coordinates similar to those just entered.
10. The same process should be carried out for all drawings that are being submitted to the EPA as part of the application process.

## 4. PREPARATION OF TABULAR DATA TEMPLATES

The preparation and submission of 6E 6N Irish Grid references for all emission, monitoring and sampling points is a requirement of sections E and F of the application form. The EPA also require applicants to submit this data on emission, monitoring and sampling points in a digital format on tabular data templates (e.g. in excel or .dbf files or similar on agreement). Tabular data templates are available on the Licensing pages of the EPA website at [www.epa.ie](http://www.epa.ie). This section

outlines the format of the tabular data templates and the type of information required within the templates.

Tabular Data Template for Emission Points

Applicants are required to list all proposed atmospheric, surface water, sewer, ground and noise emission points as outlined in sections E.1 to E.5 of the application. The template should be structured in the same way as the templates outlined in Fig.9 and Fig.10. One row should be assigned to each emission point with the correct information for each field.

PT_CD	PT_TYPE	EASTING	NORTHING	VERIFIED
Provide label ID's assigned in Section E of application	A = Atmospheric SW = Surface Water SE = Sewer GW = Groundwater N = Noise SL = Soil / Ground WS = Waste	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

Fig.9: Structure of tabular data template for emission points

PT_CD	PT_TYPE	EASTING	NORTHING	VERIFIED
A1-1	A	302255	116995	Y
SW1	SW	302018	116745	Y
SW2	SW	302232	116437	Y
SE1	SE	302253	116896	Y
GW1	GW	302368	117257	Y
N1	N	302384	117030	Y
N2	N	302324	117053	Y

Fig.10: Sample emission point data (sample data not real emission points)

Tabular Data Template for Monitoring and Sampling Points

Applicants are required to list all proposed emissions monitoring and sampling points as outlined in section F.3 of the Application Form. The template should be structured in the same way as the templates outlined in Fig.11 and Fig.12. One row should be assigned to each emissions monitoring and sampling point with the correct information for each field.

PT_CD	PT_TYPE	EASTING	NORTHING	VERIFIED
Provide label ID's assigned in Section F3 of application	M = Monitoring S = Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

Fig.11: Structure of tabular data template for emissions monitoring and sampling points

PT_CD	PT_TYPE	EASTING	NORTHING	VERIFIED
A1-1	M	302255	116995	Y
SW1	M	302018	116745	Y
SW2	M	302232	116437	Y
SE1	M	302253	116896	Y
GW1	M	302368	117257	Y
N1	M	302384	117030	Y
N2	M	302324	117053	Y

Fig.12: Sample emissions monitoring and sampling point data (sample data not real emission points)

**SUBMITTING DIGITAL DRAWING FILES AND TABULAR DATA TEMPLATES**

All digital drawing files and tabular data templates should be submitted on a separate CD and delivered with the application to the EPA. The CD should contain the following data:

1. Digital drawing file of site boundary and overall site plan projected in Irish Grid.
2. Digital drawing file of all proposed emission points projected in Irish Grid.
3. Digital drawing file of all proposed emissions monitoring and sampling points projected in Irish Grid.
4. Digital tabular data template for proposed emission points including 6E 6N Irish Grid references for each point.
5. Digital tabular data template for proposed emissions monitoring and sampling points including 6E 6N Irish Grid references for each point.

It is recommended that the data be stored on the CD using the folder structure outlined in Fig.13.

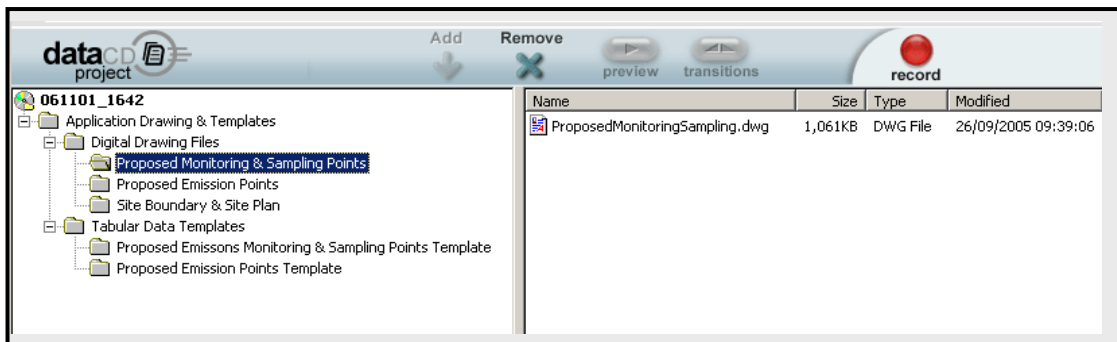


Fig.13: Recommended folder structure for storing required data on CD