

## Fermanagh and Omagh District Council

# 2021 Updating and Screening Assessment



**In Fulfilment of Environment (Northern Ireland) Order 2002**

**Local Air Quality Management**

**December 2021**



<b>Information</b>	<b>Fermanagh and Omagh District Council</b>
<b>Local Authority Officer</b>	David Gillis
<b>Department</b>	Environmental Health Service
<b>Address</b>	The Grange Omagh Co. Tyrone
<b>Telephone</b>	03003031777
<b>E-mail</b>	eh@fermanaghomagh.com
<b>Report Reference Number</b>	USA/FODC/2021
<b>Date</b>	December 2021

## Executive Summary

The Environment (NI) Order 2002 and subsequent regulations place a duty on district councils to undertake regular review of air quality in their area. The Local Air Quality Management regime provides the framework for review of a range of air pollutants against objectives outlined in the Northern Ireland Air Quality Strategy.

By undertaking this Updating and Screening Assessment, Fermanagh and Omagh District Council have undertaken a review of potential sources of air pollution across the district in order to identify new sources, sources with increased emissions and areas exposed to air pollution sources where public exposure did not previously exist. This Update and Screening Assessment has been prepared in accordance with the Northern Ireland Local Air Quality Management Policy Guidance Document LAQM.PGNI (09).

Previous Progress Reports have detailed that for monitoring purposes Fermanagh and Omagh District Council have selected ten sampling sites in the District (Five in Omagh town and five in Enniskillen town) where passive diffusion tubes will be deployed to monitor NO<sub>2</sub> levels from traffic sources. The sites selected are in areas with the high traffic levels. A further ten sampling sites have been selected (Five in Omagh town and five in Enniskillen town) to monitor for SO<sub>2</sub> emissions arising primarily from domestic solid fuels. They are located in areas where there is a higher dependency on solid fuels for home heating.

Due to the Covid-19 pandemic the deployment of the diffusion tubes had been delayed. However, they are now in place and we will be in a position in the near future to review the monitoring data.

The assessment has not identified any new sources that require progression to a detailed assessment. At the planning application stage several applications were reviewed that were supported by Air Quality Impact Assessments. After consideration of these applications no new sources of pollution that require further action have been identified.

The Environmental Health Department are in the process of raising the agenda of Local Air Quality Management with the Elected members and the Planning Department development control team.

Fermanagh and Omagh District Council have recently created a position of a Climate Change Manager. An integral part of this role is the development of a Local Climate Change Action Plan which will further raise the profile of air quality within council, partner organisations and the public.

## Table of Contents

<b>Executive Summary.....</b>	<b>i</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 Description of Local Authority Area .....	1
1.2 Purpose of Report.....	2
1.3 Air Quality Objectives.....	2
1.4 Summary of Previous Review and Assessments .....	3
<b>2 New Monitoring Data.....</b>	<b>6</b>
2.1 Summary of Monitoring Undertaken.....	6
2.1.1 Automatic Monitoring Sites .....	6
2.1.2 Non-Automatic Monitoring Sites .....	7
2.2 Comparison of Monitoring Results with Air Quality Objectives .....	24
2.2.1 Nitrogen Dioxide .....	24
2.2.2 Particulate Matter (PM <sub>10</sub> ) .....	24
2.2.3 Sulphur Dioxide.....	24
2.2.4 Benzene.....	24
2.2.5 Other pollutants monitored .....	24
2.2.6 Summary of Compliance with AQS Objectives .....	24
<b>3 Road Traffic Sources .....</b>	<b>25</b>
3.1 Narrow Congested Streets with Residential Properties Close to the Kerb .....	25
3.2 Busy Streets Where People May Spend 1 hour or More Close to Traffic .....	25
3.3 Roads with a High Flow of Buses and/or HGVs. ....	25
3.4 Junctions .....	25
3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment	25
3.6 Roads with Significantly Changed Traffic Flows.....	29
3.7 Bus and Coach Stations .....	29
<b>4 Other Transport Sources.....</b>	<b>29</b>
4.1 Airports .....	29
4.2 Railways (Diesel and Stream Trains) .....	29
4.2.1 Stationary Trains.....	29
4.2.2 Moving Trains .....	29
4.3 Ports .....	30
<b>5 Industrial Sources .....</b>	<b>30</b>
5.1 Industrial Installations .....	30
5.1.1 New or Proposed Installations for which an Air Quality Assessment has been Carried Out ..	30
5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced.....	30
5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment.....	30

5.2	Major Fuel Depots .....	31
5.3	Petrol Stations .....	31
5.4	Poultry Farms .....	31
<b>6</b>	<b>Commercial and Domestic Sources .....</b>	<b>32</b>
6.1	Biomass Combustion – Individual Installations.....	32
6.2	Biomass Combustion – Combined Impacts.....	32
6.3	Domestic Solid Fuel Burning.....	32
<b>7</b>	<b>Fugitive or Uncontrolled Sources.....</b>	<b>33</b>
<b>8</b>	<b>Conclusions and Proposed Actions.....</b>	<b>35</b>
8.1	Conclusions from New Monitoring Data .....	35
8.2	Conclusions from Assessment of Sources .....	35
8.3	Proposed Actions.....	35
<b>9</b>	<b>References.....</b>	<b>36</b>
	<b>Appendices .....</b>	<b>37</b>
	<b>Appendix A: Quality Assurance / Quality Control (QA/QC) Data.....</b>	<b>38</b>
	<b>Appendix B: Impact of COVID-19 upon LAQM .....</b>	<b>39</b>

## List of Tables

Table 1.1	Air Quality Objectives included in Regulations for the purpose of LAQM in NI
Table 1.2	Previous Air Quality Reports for Fermanagh and Omagh District Council
Table 2.1	Pm <sub>10</sub> 2020 Monitoring Results for Lough Navar Automatic Monitoring Station
Table 2.2	Pm <sub>2.5</sub> 2020 Monitoring Results for Lough Navar Automatic Monitoring Station
Table 2.3	Details of Non-Automatic Monitoring Sites

## List of Figures

Figure 1.1	Map of Northern Ireland Highlighting Fermanagh and Omagh District Council
Figure 2.1	Example of NO <sub>2</sub> tube deployed.
Figure 2.2	Map of Omagh NO <sub>2</sub> Diffusion Tube Locations
Figure 2.3	Map of Great Northern Road Diffusion Tube Location
Figure 2.4	Map of Mountjoy Road Diffusion Tube Location
Figure 2.5	Map of Dromore Road Diffusion Tube Location
Figure 2.6	Map of Strathroy Road Diffusion Tube Location
Figure 2.7	Map of Killiclogher Road Diffusion Tube Location
Figure 2.8	Map of Enniskillen Diffusion Tube Locations
Figure 2.9	Map of Goal Square Road Diffusion Tube Location
Figure 2.10	Map of Dublin Road Diffusion Tube Location
Figure 2.11	Map of Henry Street Diffusion Tube Location
Figure 2.12	Map of Johnston Bridge Diffusion Tube Location
Figure 2.13	Map of Cherrymount Road Diffusion Tube Location
Figure 2.14	Example of SO <sub>2</sub> tube deployed
Figure 2.15	Map of Coolnagard Grove Diffusion Tube Location
Figure 2.16	Map of Knockgreenan Close Diffusion Tube Location
Figure 2.17	Map of Pinefield Gardens Diffusion Tube Location
Figure 2.18	Map of Willmount Close Diffusion Tube Location
Figure 2.19	Map of Rossole Road Diffusion Tube Location
Figure 2.20	Map of Glebe Park Diffusion Tube Location
Figure 2.21	Map of Killynure Crescent Diffusion Tube Location
Figure 2.22	Map of Derrin Street Diffusion Tube Location
Figure 3.1	Map of proposed by-pass.

## Appendices

**Appendix A:** Quality Assurance / Quality Control (QA/QC) Data

**Appendix B:** Impact of COVID-19 upon LAQ



# 1 Introduction

## 1.1 Description of Local Authority Area

This Updating and Screening Assessment is provided for Fermanagh and Omagh District Council area. The council occupies a total area of approximately 3,000 sq. km making it the largest council in terms of land mass equating to around twenty percent of Northern Ireland. It is located in the most westerly part of the province with much of the land rural in nature and includes the large water body of Lower and Upper Lough Erne. It has a population of approximately 117,337 which is the smallest of the eleven councils and covers one of the largest areas resulting in the lowest population density.

There are two main centres within the district, Omagh to the north east with a population of 20,418 and Enniskillen with a population of 13,776 to the west (NISRA population estimate 2020). The remainder of the district is largely rural in character, with a number of satellite villages and a dispersed settlement pattern typical of rural Northern Ireland. More detailed information for the district council area is available on the website [www.fermanaghomagh.com](http://www.fermanaghomagh.com).

The area has a large agricultural business sector and a broad mix of service industries including fabrication, quarrying, timber and cement product manufacture and a range of businesses supporting tourism and hospitality.



Figure 1.1

## 1.2 Purpose of Report

This report fulfils the requirements of the Local Air Quality Management process as set out in the Environment (Northern Ireland) Order 2002, the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedances are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

The objective of this Updating and Screening Assessment is to identify any matters that have changed which may lead to risk of an air quality objective being exceeded. A checklist approach and screening tools are used to identify significant new sources or changes and whether there is a need for a Detailed Assessment. The USA report should provide an update of any outstanding information requested previously in Review and Assessment reports.

## 1.3 Air Quality Objectives

The air quality objectives applicable to LAQM in Northern Ireland are set out in the Air Quality Regulations (Northern Ireland) 2003, Statutory Rules of Northern Ireland 2003, no. 342, and are shown in Table 1.1. This table shows the objectives in units of microgrammes per cubic metre  $\mu\text{g}/\text{m}^3$  (milligrammes per cubic metre,  $\text{mg}/\text{m}^3$  for carbon monoxide) with the number of exceedances in each year that are permitted (where applicable).

**Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in Northern Ireland**

<b>Pollutant</b>	<b>Air Quality Objective Concentration</b>	<b>Air Quality Objective Measured as</b>	<b>Date to be achieved by</b>
<b>Benzene</b>	16.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
<b>Benzene</b>	3.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2010
<b>1,3-Butadiene</b>	2.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003

<b>Carbon monoxide</b>	10.0mg/m <sup>3</sup>	Running 8-hour mean	31.12.2003
<b>Lead</b>	0.5µg/m <sup>3</sup>	Annual mean	31.12.2004
<b>Lead</b>	0.25µg/m <sup>3</sup>	Annual mean	31.12.2008
<b>Nitrogen dioxide</b>	200µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
<b>Nitrogen dioxide</b>	40µg/m <sup>3</sup>	Annual mean	31.12.2005
<b>Particles (PM<sub>10</sub>) (gravimetric)</b>	50µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
<b>Particles (PM<sub>10</sub>) (gravimetric)</b>	40µg/m <sup>3</sup>	Annual mean	31.12.2004
<b>Sulphur dioxide</b>	350µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
<b>Sulphur dioxide</b>	125µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
<b>Sulphur dioxide</b>	266µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

## 1.4 Summary of Previous Review and Assessments

Table 1.2 Previous reviews and assessments.

<b>Stage 1 Review and Assessment 2001</b>	The first stage assessment identified three pollutants of concern namely nitrogen dioxide, sulphur dioxide and particulate matter at risk of exceeding the strategy objectives.
<b>Stage 2/3 Review and Assessment 2004</b>	Following on from the findings of stage 1, a more detailed assessment of air quality was required for the three identified pollutants of concern. Informed by the results of monitoring/modelling it was concluded that it was not necessary to declare any AQMA for the district council.
<b>Progress Report 2005</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Updating &amp; Screening Assessment 2006</b>	The updating and screening assessment was undertaken in accordance with the LAQM TG (03). The report concluded that due to a major road development on the

	periphery of Omagh Town there may be likelihood of exceedance of objectives for nitrogen dioxide and particulates from road sources. Monitoring for nitrogen dioxide was initiated.
<b>Progress Report 2007</b>	The monitoring for nitrogen dioxide in Omagh continued for the period of this report. This report concluded that there were no exceedances of the air quality objectives for the remaining pollutant objective levels.
<b>Progress Report 2008</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors. Ongoing monitoring of nitrogen dioxide in Omagh generated from road traffic.
<b>Updating &amp; Screening Assessment 2009</b>	The USA was prepared in accordance with updated guidance contained within LAQM.TG(09). Informed by the completion of a monitoring/modelling programme for pollutants associated with road traffic, it was concluded that there was no need to proceed to a detailed assessment for any pollutants of concern.
<b>Progress Report 2010</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2011</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Updating &amp; Screening Assessment 2012</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2013</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2014</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.

<b>Updating &amp; Screening Assessment 2015</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2016</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2017</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2018</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors.
<b>Progress Report 2019</b>	This report concluded that no exceedances of the air quality objectives were identified at relevant receptors. Proposed that monitoring would take place within Enniskillen town and Omagh town areas for NO <sub>2</sub> .
<b>Progress Report 2020</b>	This report concluded that no exceedance of the air quality objectives was identified at relevant receptors. Proposed that in addition to NO <sub>2</sub> monitoring that SO <sub>2</sub> would be monitored within the Enniskillen and Omagh town areas. Deployment of tubes had been delayed due to Covid-19 pandemic.

## 2 New Monitoring Data

### 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

There are no automatic monitoring sites operated by Fermanagh and Omagh District Council within the district. However, the Environment Agency who manage the UK National Air Quality Monitoring Network on behalf of DEFRA maintain an automatic monitor at Lough Navar in Co. Fermanagh. This rural upland site provides background air quality readings for ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. No exceedances of the air quality standards for these pollutants were observed during the period. The below tables provide a summary of recorded results for each parameter in 2020;

**Table 2.1 PM2.5 Results**

#### Air Pollution Bands

Band	Hours in Band	Days in Band
PM2.5 Low	0	336
PM2.5 Moderate	0	0
PM2.5 High	0	0
PM2.5 Very High	0	0

**Table 2.2 PM10 Results**

Band	Hours in Band	Days in Band
PM <sub>10</sub> Low	-	336
PM <sub>10</sub> Moderate	-	0
PM <sub>10</sub> High	-	0
PM <sub>10</sub> Very High	-	0

### **2.1.2 Non-Automatic Monitoring Sites**

The 2019 report recommends the council would undertake a passive diffusion survey NO<sub>2</sub> in Omagh and Enniskillen town areas primarily to review air pollution arising from road traffic sources. Due to the impact of Covid-19 pandemic upon council services the commencement of the survey was delayed.

In order to provide an understanding of the impact from domestic sources it is also planned to undertake a diffusion survey for SO<sub>2</sub> in areas of higher density housing where there is the ability to avail of solid fuel heating as a supplementary heat source.

Fermanagh and Omagh District Council have identified ten NO<sub>2</sub> sampling sites where passive diffusion tubes are now located: five tubes in the Omagh Town area and five in the Fermanagh Town area. In addition, ten SO<sub>2</sub> sampling sites where passive diffusion tubes are now located: five tubes in the Omagh Town area and five in the Enniskillen Town area. A contract is now in place for the supply and testing of the diffusion tubes.

## **NO<sub>2</sub>**

The sites were selected to represent the areas where it is thought that concentrations are expected to be the highest and where the public may be exposed over the relevant averaging period of the objective. The photograph below is an example of a mounted NO<sub>2</sub> diffusion tube.

**Figure 2.1 Example of NO<sub>2</sub> diffusion tube mounted.**

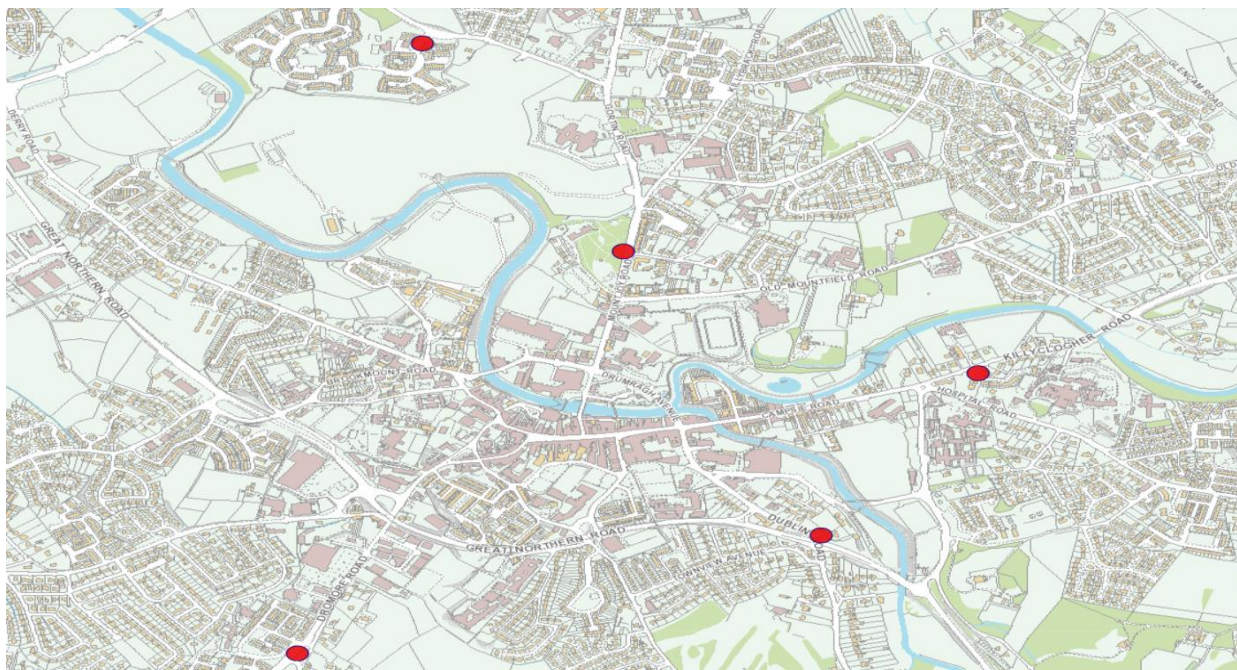




The following maps show the locations of the proposed sites;

### Map(s) of Non-Automatic Monitoring Sites

**Figure 2.2** Map of Omagh NO<sub>2</sub> Diffusion Tube Locations:



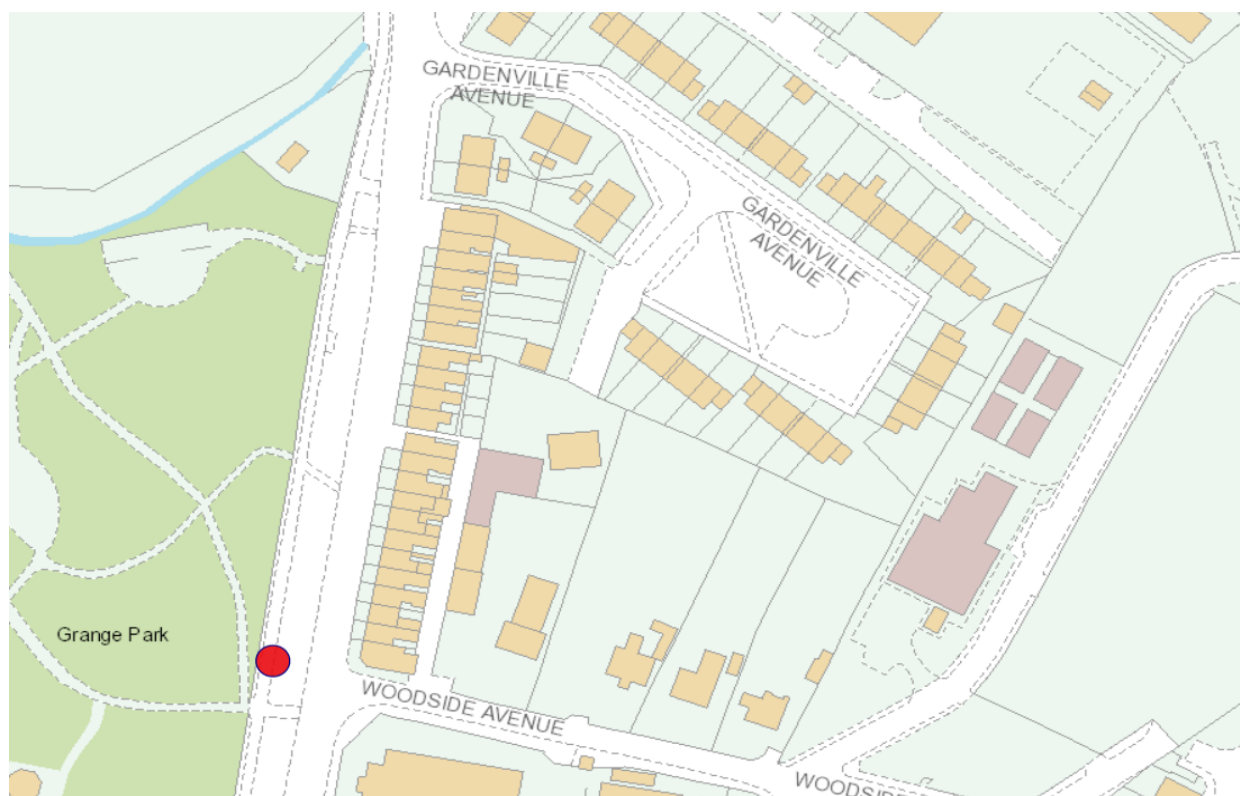
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.3** Map of Great Northern Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.4** Map of Mountjoy Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

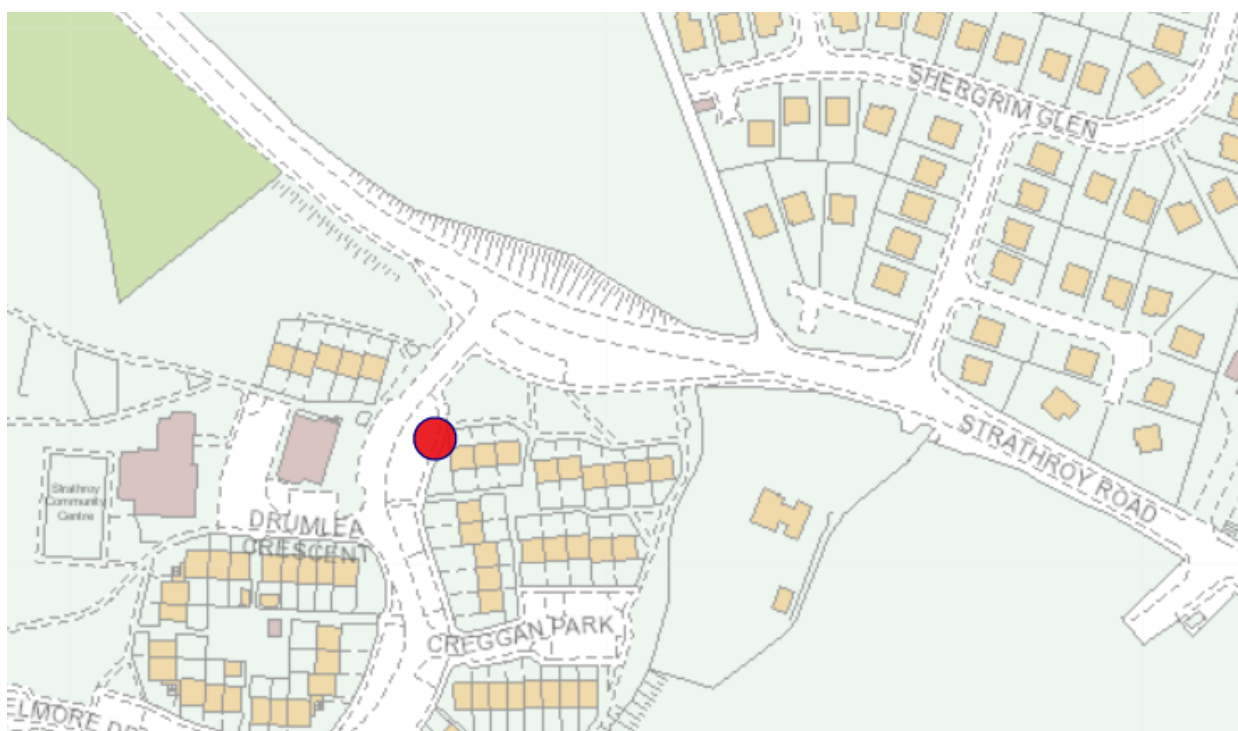
**Figure 2.5** Map of Dromore Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

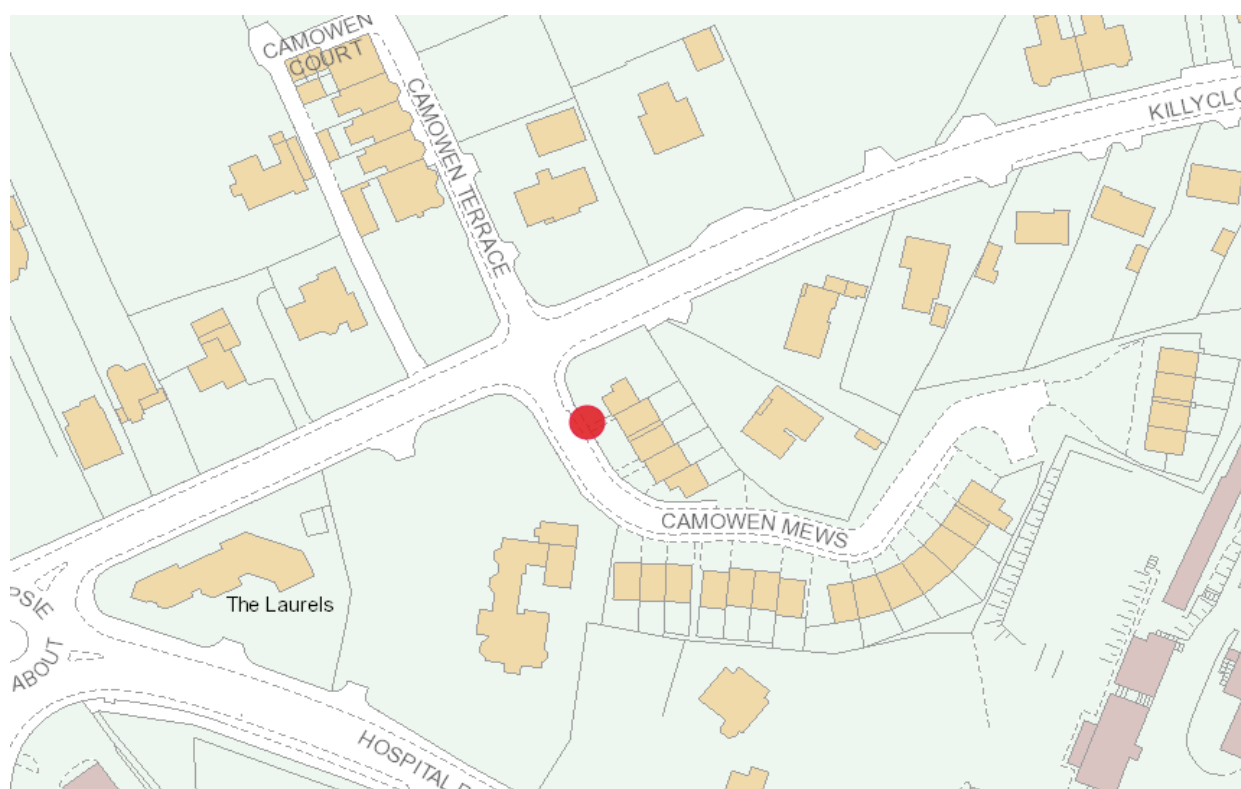


**Figure 2.6** Map of Strathroy Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.7** Map of Killyclogher Road Diffusion Tube Location:



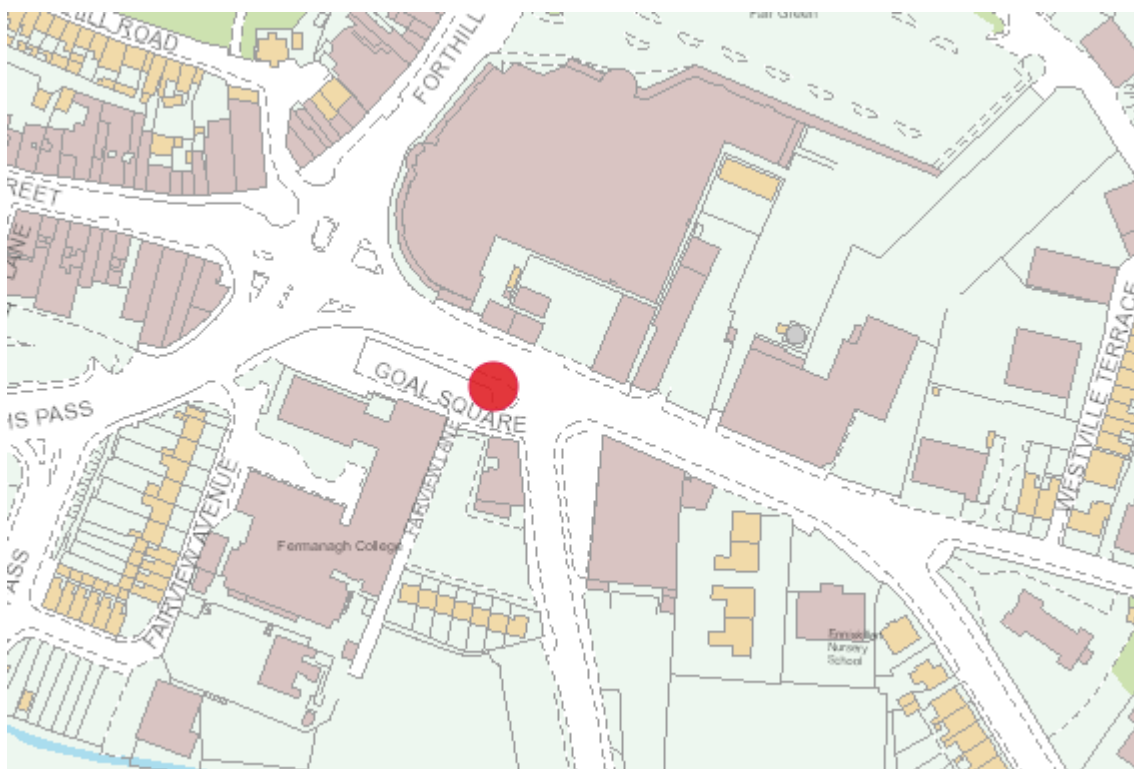
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.8** Enniskillen NO<sub>2</sub> Diffusion Tube Locations:



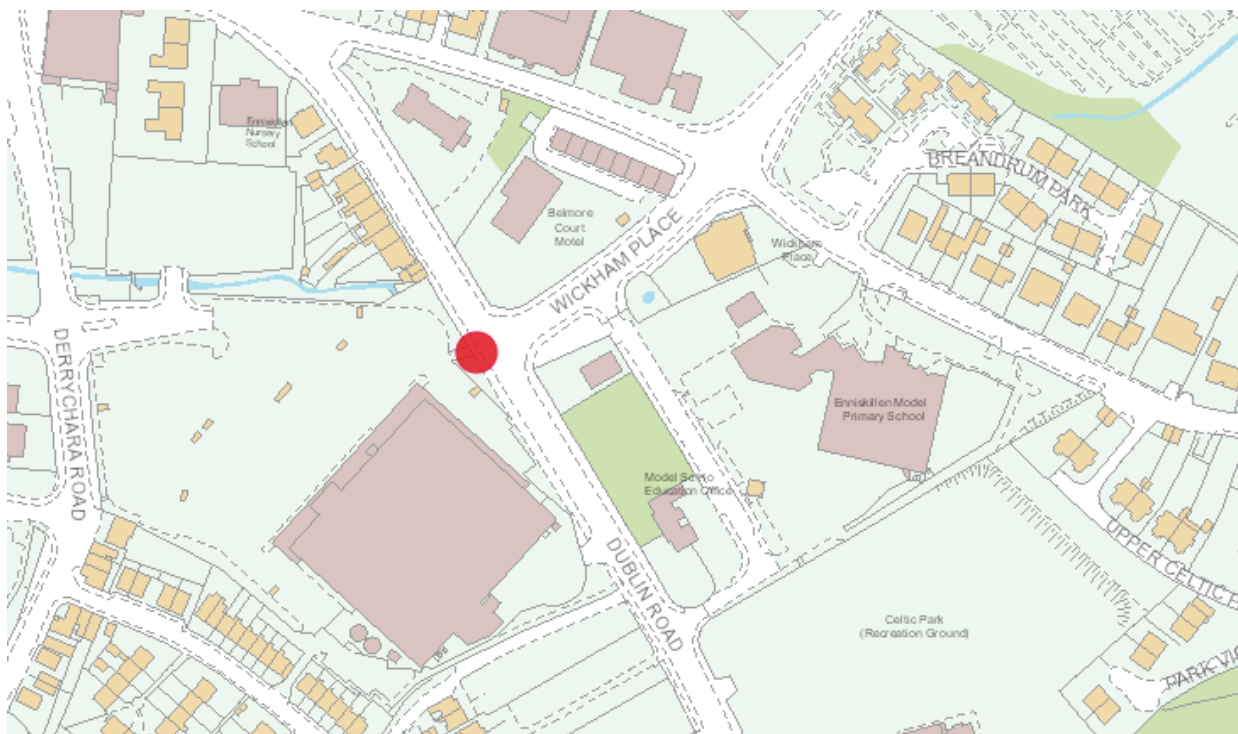
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.9** Map of Goal Square Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.10** Map of Dublin Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

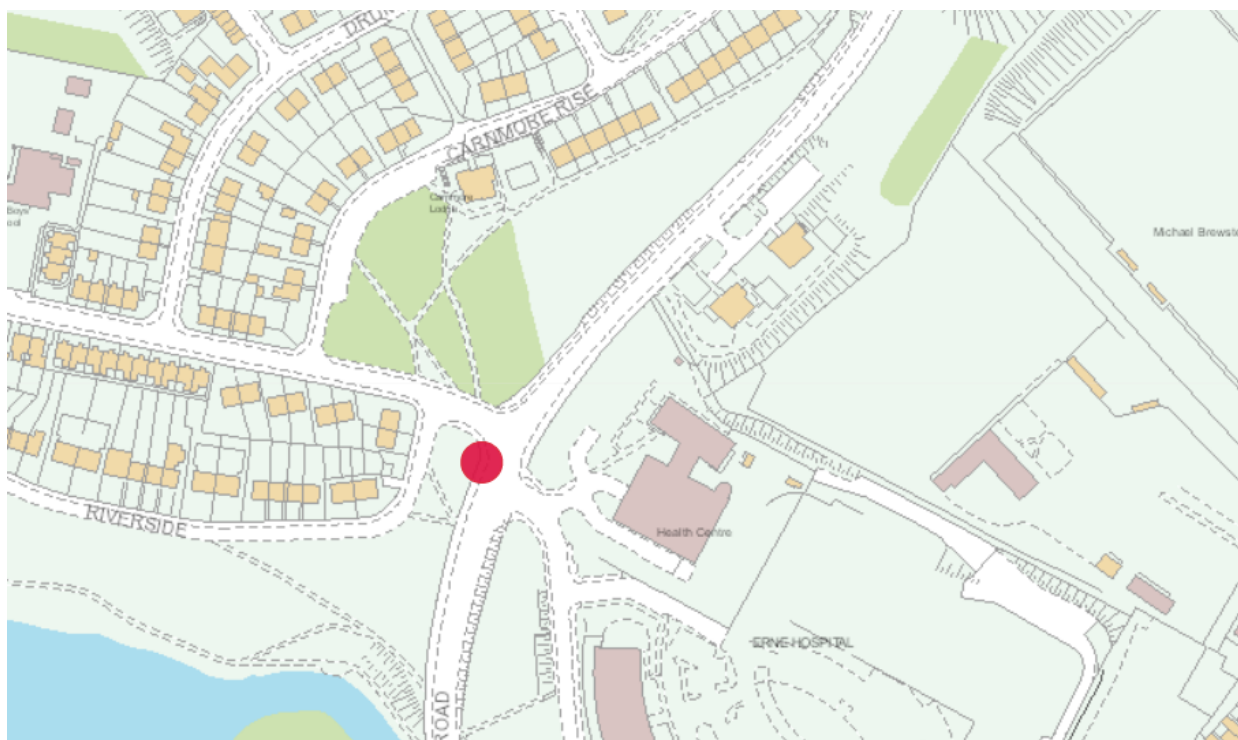
**Figure 2.11** Map of Henry Street Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

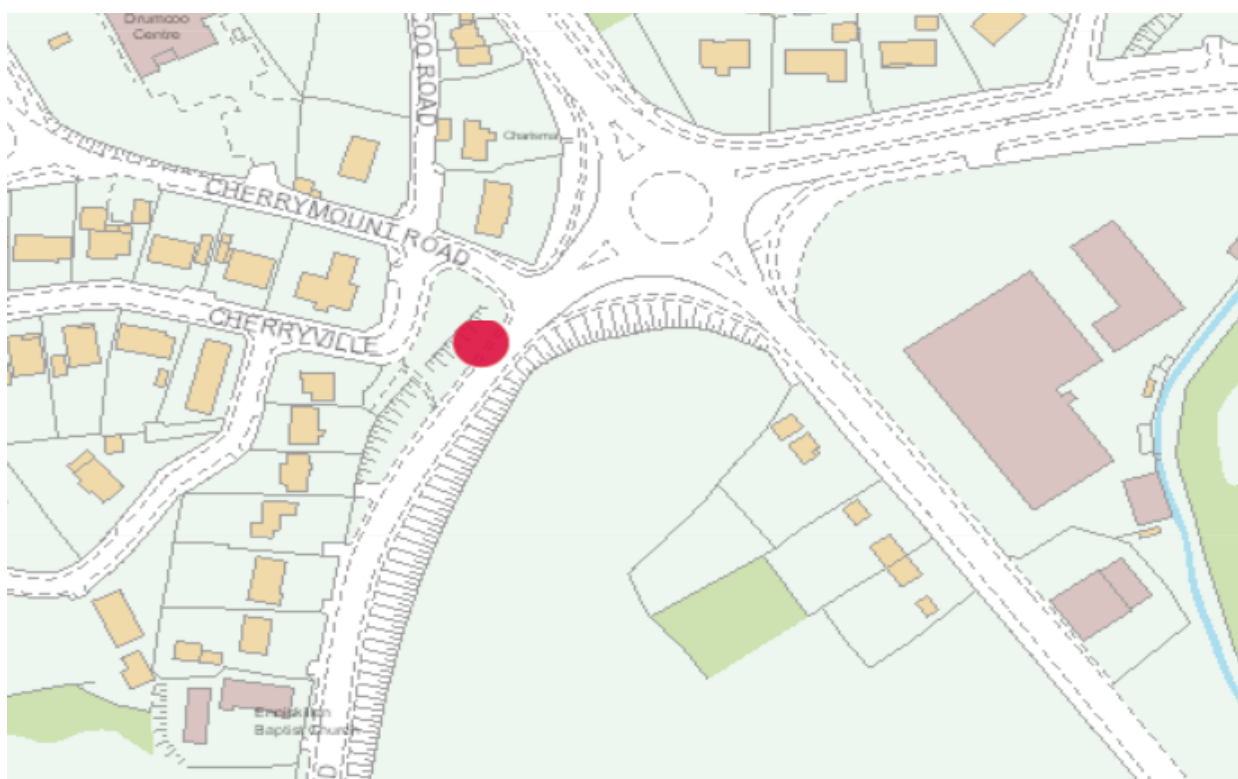


**Figure 2.12** Map of Johnston Bridge Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.13** Map of Cherrymount Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**SO<sub>2</sub>**

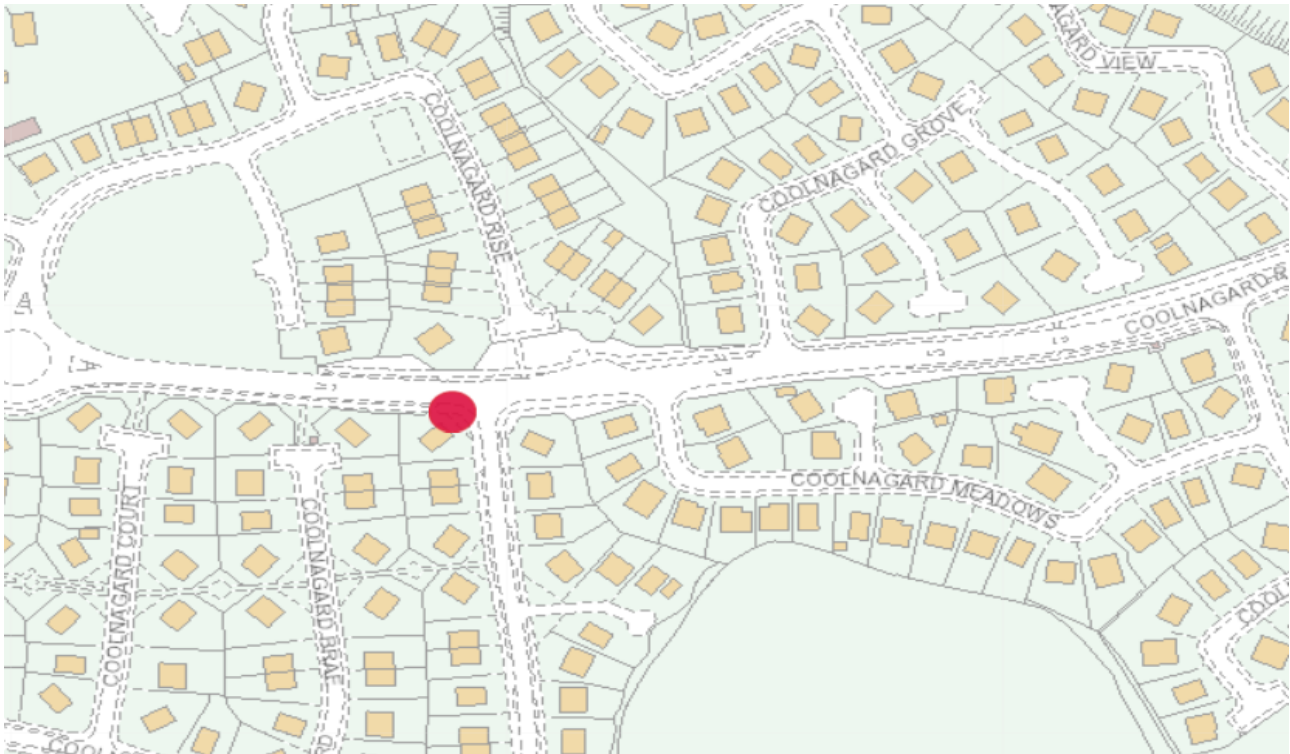
The sites were selected to represent the areas where it is thought that concentrations are expected highest due to the density of housing using solid fuels. The photograph below is an example of a diffusion tube mounted for SO<sub>2</sub> monitoring;

**Figure 2.14** Example of SO<sub>2</sub> diffusion tube deployed



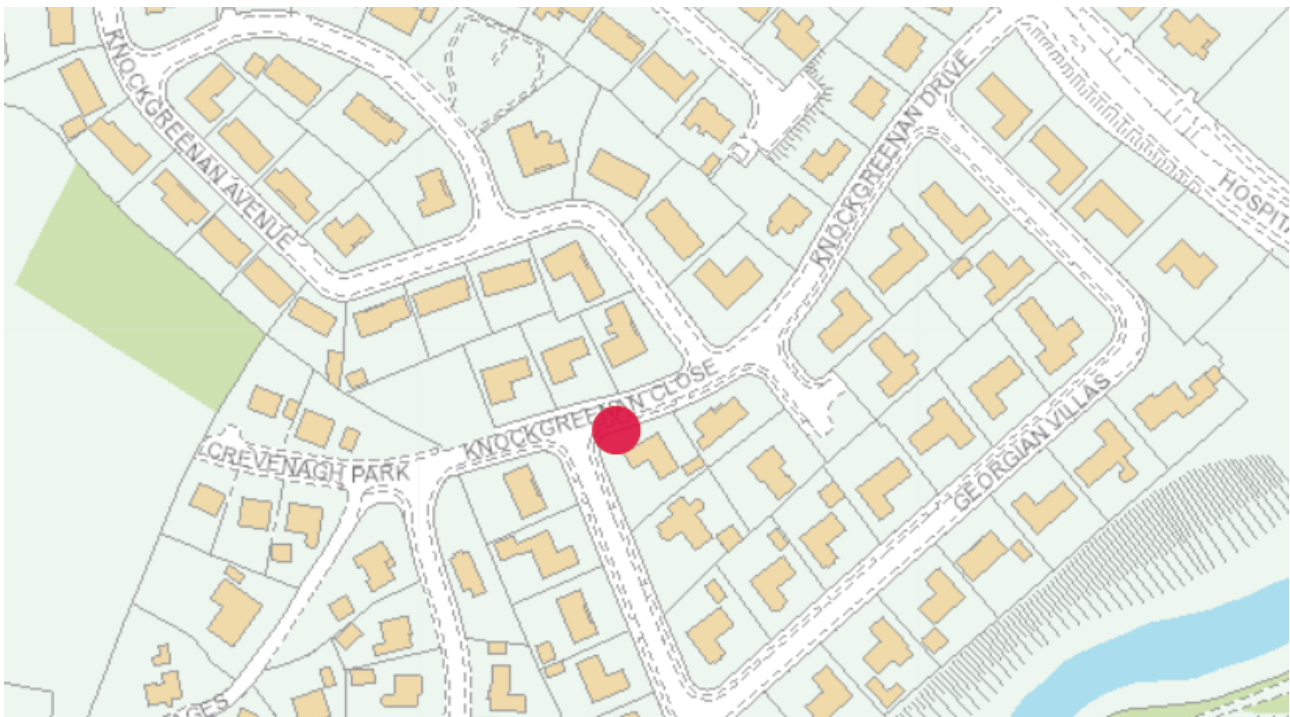
The following maps show the locations of the sites;

**Figure 2.15** Map of Coolnagard Grove Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

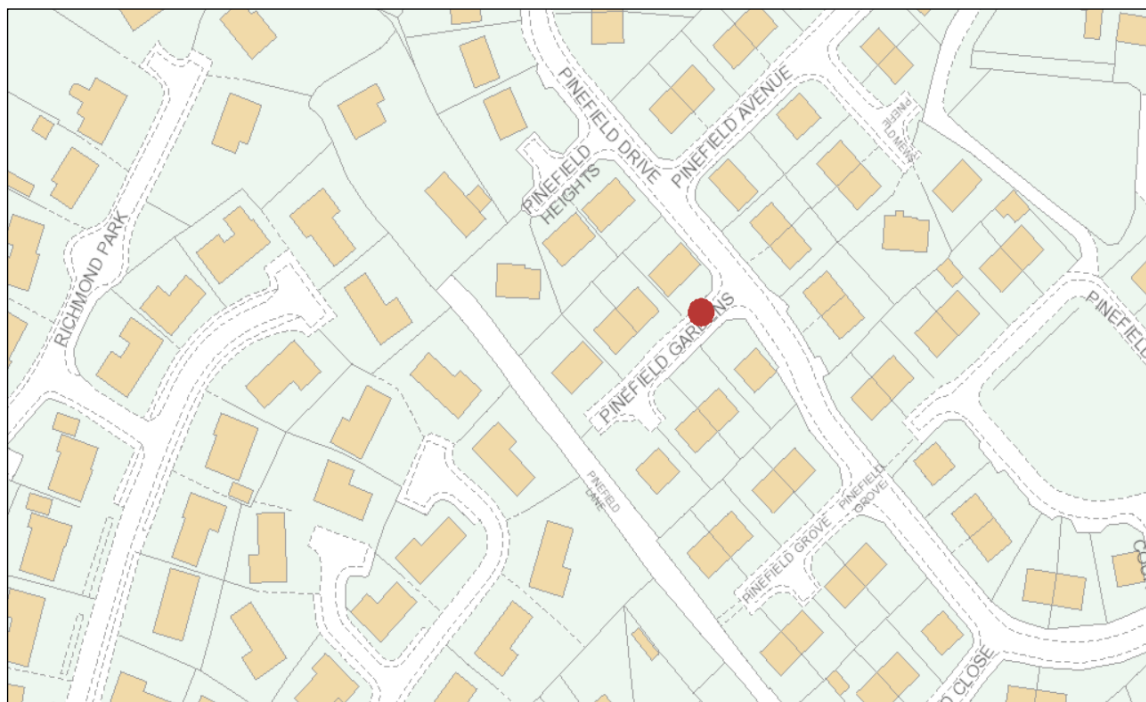
**Figure 2.16** Map of Knockgreenan Close Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

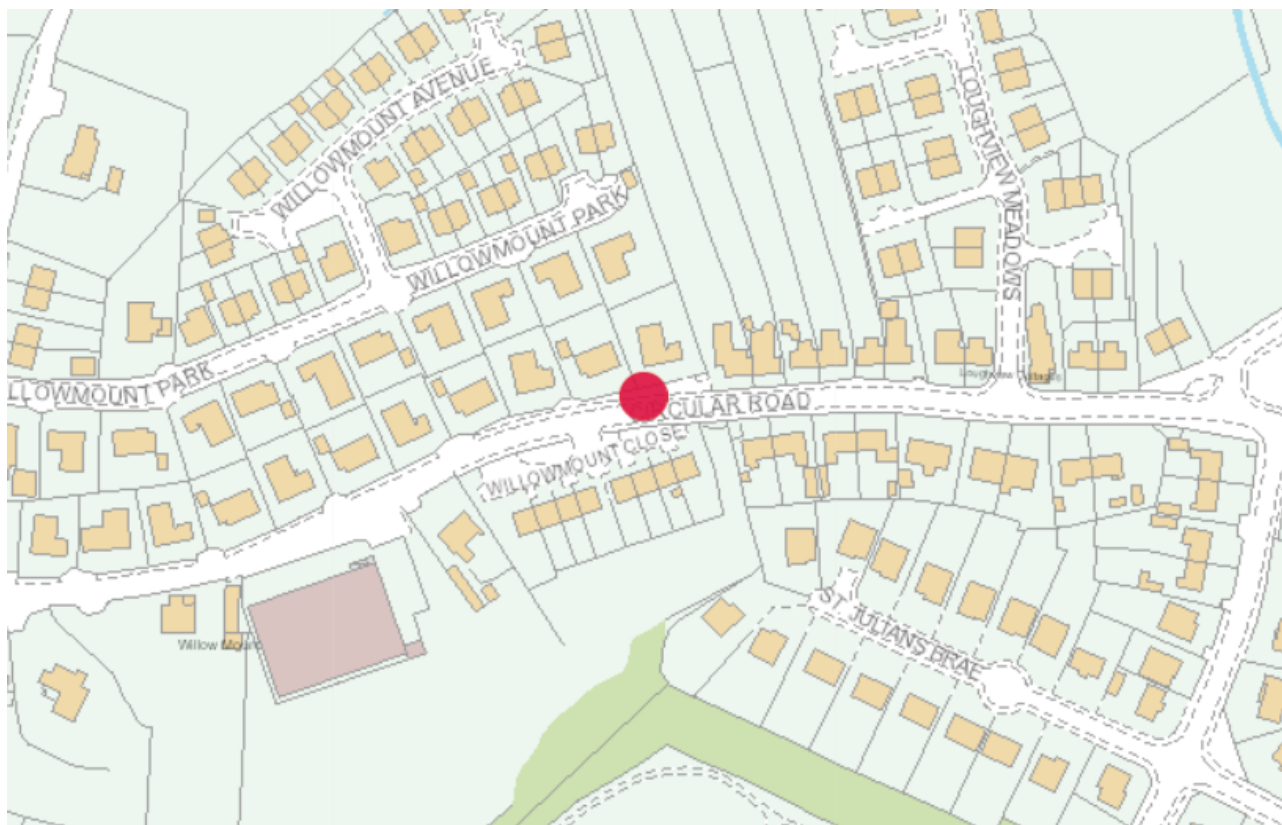


**Figure 2.17** Map of Pinefield Gardens Street Diffusion Tube Location:



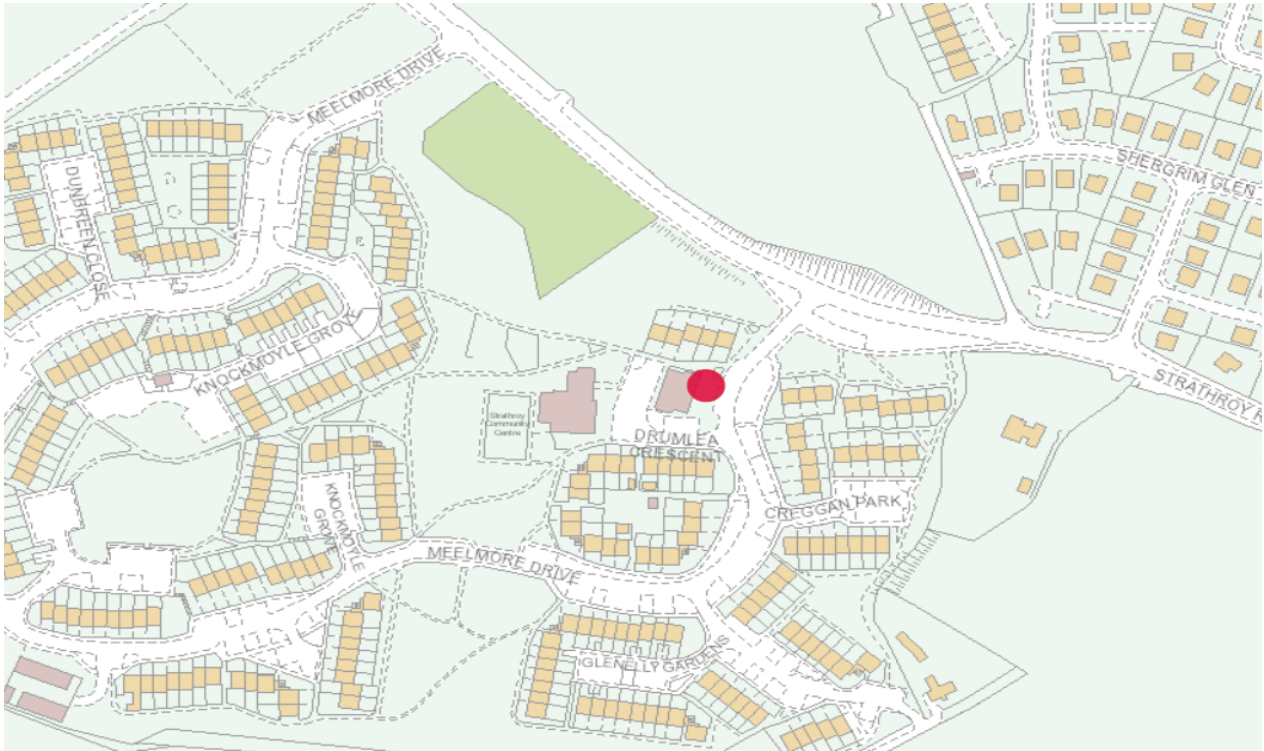
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.18** Map of Willowmount Close Diffusion Tube Location:



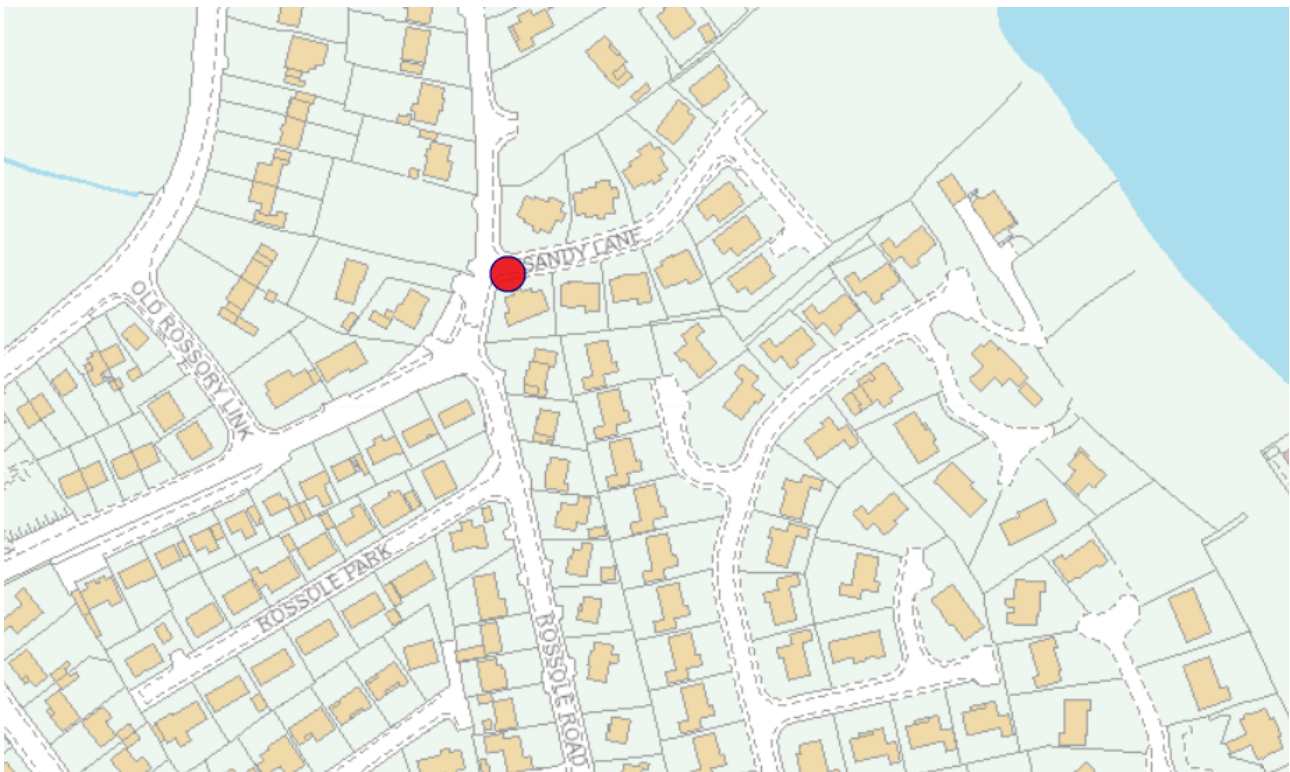
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.19** Map of Strathroy Diffusion Tube Location



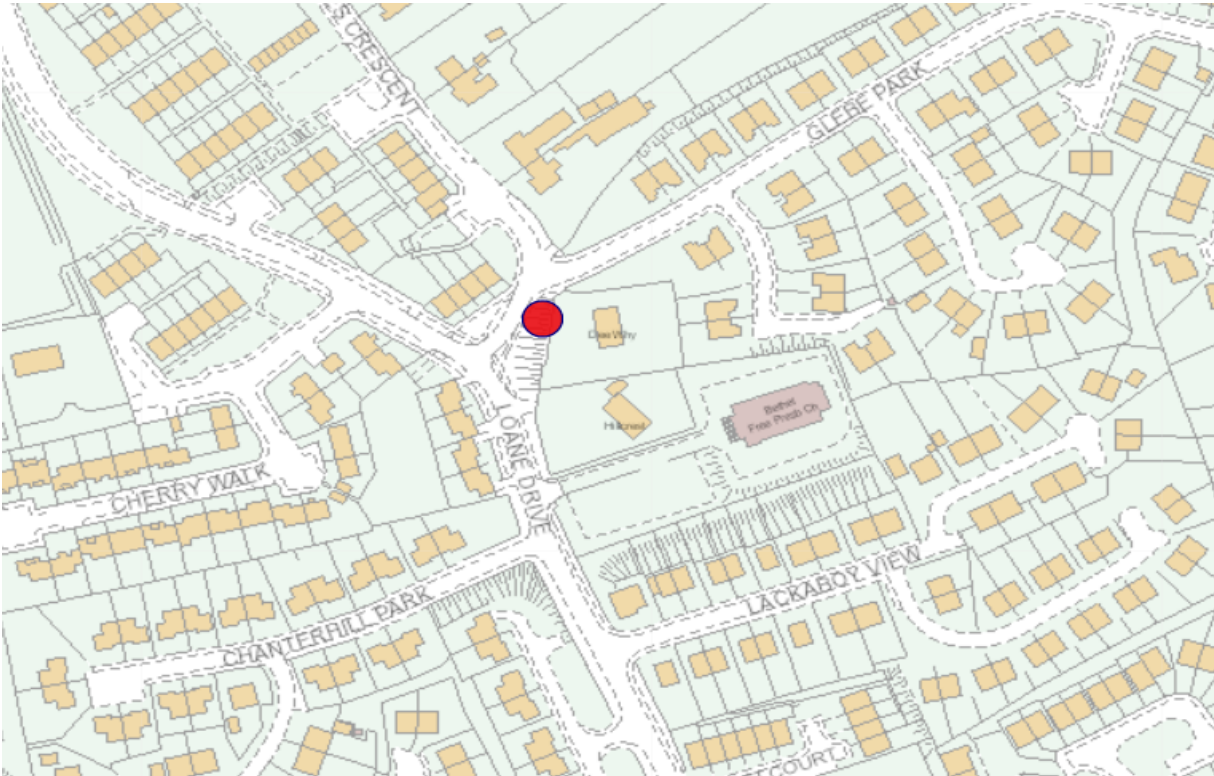
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.20** Map of Rossole Road Street Diffusion Tube Location:



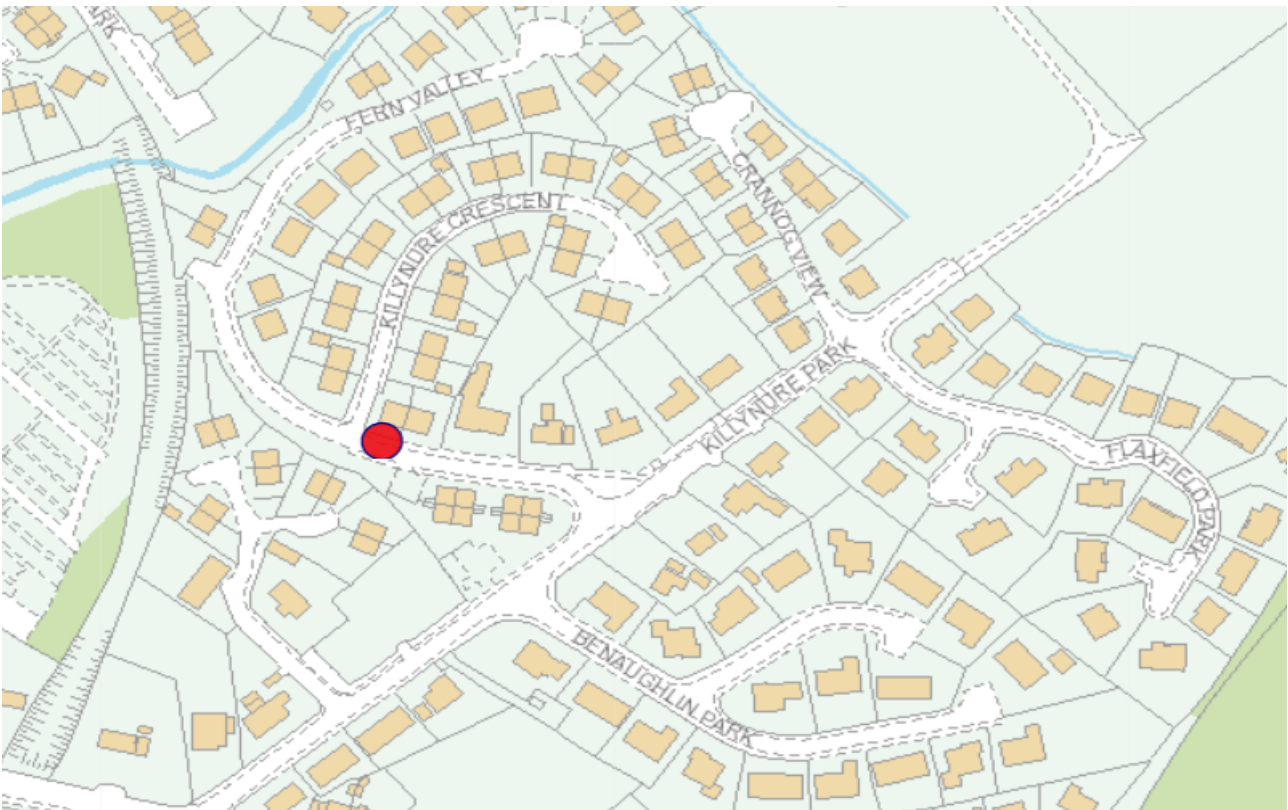
© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.21** Map of Glebe Park Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

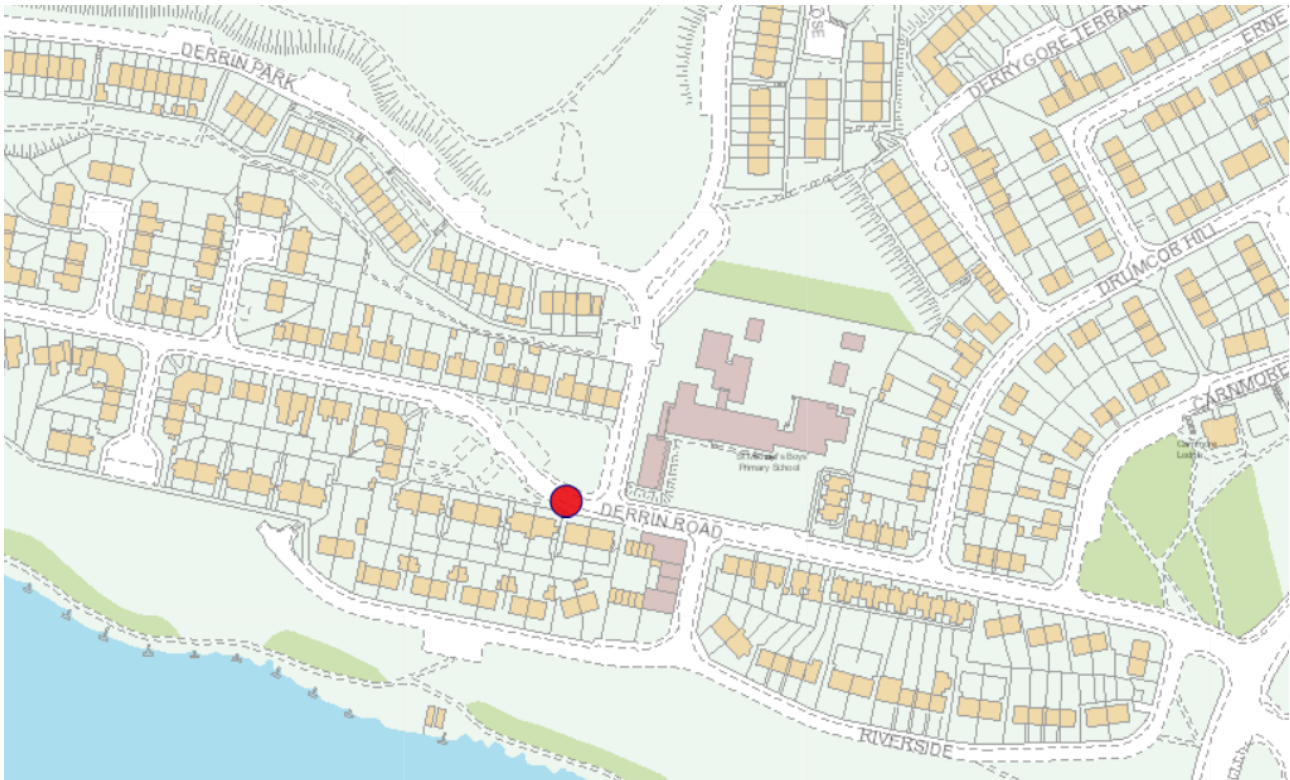
**Figure 2.22** Map of Killynure Crescent Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

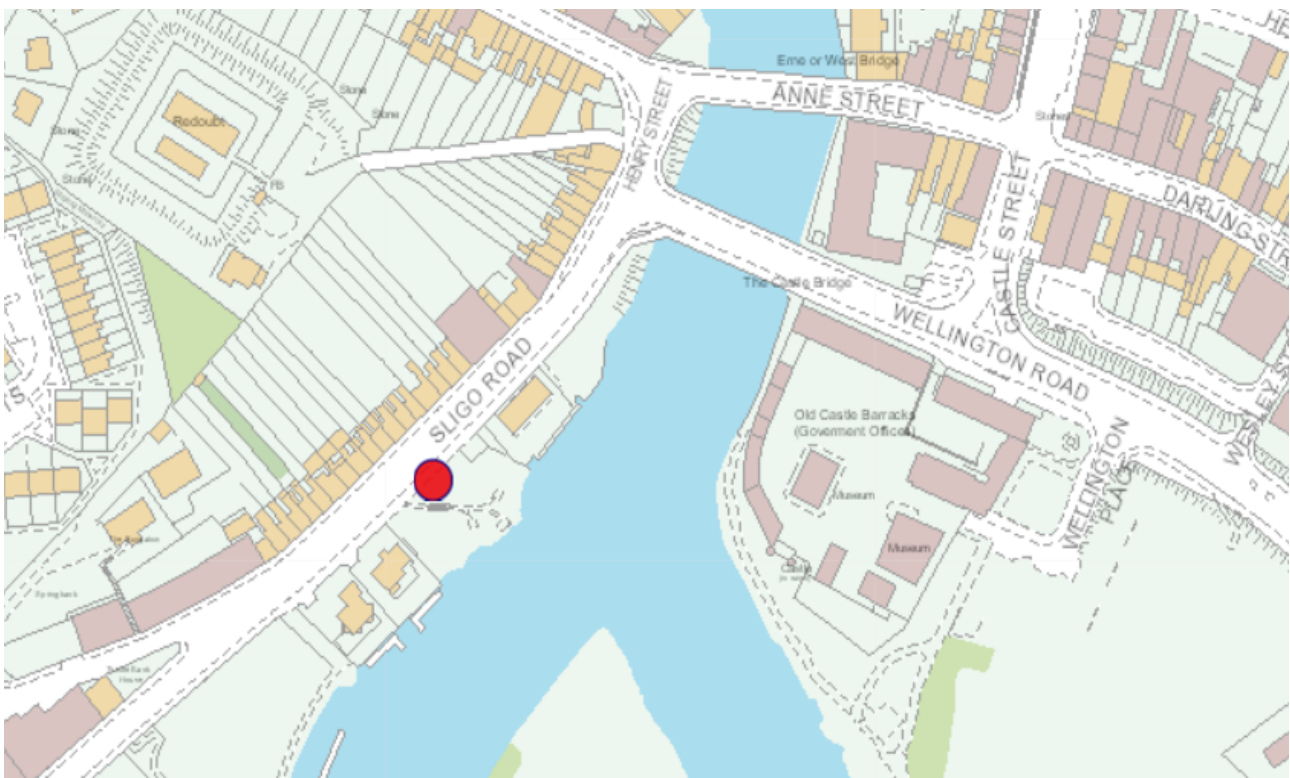


**Figure 2.23** Map of Derrin Road Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Figure 2.24** Map of Henry Street Diffusion Tube Location:



© Crown Copyright & Database Right 2020, © Ordnance Survey Ireland - SpatialNI is a service provided by Ordnance Survey of Northern Ireland®

**Table 2.3 Details of Non-Automatic Monitoring Sites**

<b>Site ID</b>	<b>Site Name</b>	<b>Site Type</b>	<b>X OS Grid Reference</b>	<b>Y OS Grid Reference</b>	<b>Site Height (m)</b>	<b>Pollutants Monitored</b>	<b>In AQMA?</b>	<b>Is Monitoring Co-located with a Continuous Analyser (Y/N)</b>	<b>Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)</b>	<b>Distance to Kerb of Nearest Road (m) (N/A if not applicable)</b>	<b>Does this Location Represent Worst-Case Exposure?</b>
O1N	Crevenagh Road	Roadside	249691	372267	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
O2N	Mountjoy Road	Roadside	245255	373299	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
O3N	Dromore Road	Roadside	244474	371888	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
O4N	Strathroy Road	Roadside	244774	374033	2m	NO <sub>2</sub>	N	N	Y (1M)		N
O5N	Killyclogher Road	Roadside	246098	372868	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
O1S	Coolnagard Grove	Roadside	244974	371415	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
O2S	Knockgreenan Close	Roadside	246926	372096	2m	SO <sub>2</sub>	N	N	Y (1M)		Y

<b>Site ID</b>	<b>Site Name</b>	<b>Site Type</b>	<b>X OS Grid Reference</b>	<b>Y OS Grid Reference</b>	<b>Site Height (m)</b>	<b>Pollutants Monitored</b>	<b>In AQMA?</b>	<b>Is Monitoring Co-located with a Continuous Analyser (Y/N)</b>	<b>Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)</b>	<b>Distance to Kerb of Nearest Road (m) (N/A if not applicable)</b>	<b>Does this Location Represent Worst-Case Exposure?</b>
O3S	Pinefield Gardens	Roadside	244388	374077	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
O4S	Willowmount Close	Roadside	245771	373958	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
O5S	Strathroy Road	Roadside	244782	374039	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
E1N	Junction at Goal Sq	Roadside	224066	343933	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
E2N	Dublin Road	Roadside	224274	343760	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
E3N	Henry Street	Roadside	223000	344217	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
E4N	Johnston Bridge	Roadside	223496	344661	2m	NO <sub>2</sub>	N	N	Y (1M)		Y
E5N	Cherrymount Road	Roadside	223767	345777	2m	NO <sub>2</sub>	N	N	Y (1M)		Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
E1S	Rossole Road	Roadside	223030	343217	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
E2S	Glebe Road	Roadside	225311	345118	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
E3S	Killynure Crescent	Roadside	224759	343835	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
E4S	Derrin Road	Roadside	223216	344746	2m	SO <sub>2</sub>	N	N	Y (1M)		Y
E5S	Henry Street	Roadside	223000	344217	2m	SO <sub>2</sub>	N	N	Y (1M)		Y

## **2.2 Comparison of Monitoring Results with Air Quality Objectives**

### **2.2.1 Nitrogen Dioxide**

#### **Automatic Monitoring Data**

Fermanagh and Omagh District Council do not undertake any Automatic monitoring.

#### **Diffusion Tube Monitoring Data**

Ten diffusion tubes now deployed. Monitoring data will be made available at next reporting stage.

### **2.2.2 Particulate Matter (PM<sub>10</sub>)**

Fermanagh and Omagh Council do not monitor PM<sub>10</sub>.

### **2.2.3 Sulphur Dioxide**

Diffusion tubes now deployed. Monitoring data will be made available at next reporting stage.

### **2.2.4 Benzene**

Fermanagh and Omagh Council do not monitor Benzene.

### **2.2.5 Other pollutants monitored**

Fermanagh and Omagh Council does not monitor for other pollutants currently.

### **2.2.6 Summary of Compliance with AQS Objectives**

Fermanagh and Omagh Council does not yet have any new air quality data to examine. In light of the above there is no requirement to proceed to a Detailed Assessment.



### **3 Road Traffic Sources**

#### **3.1 Narrow Congested Streets with Residential Properties Close to the Kerb**

In Northern Ireland the Department for Infrastructure (Roads) has responsibility for transport planning and road maintenance. Recent transport studies have been undertaken within the district. Using this data no newly identified congested streets with a vehicle flow above 5,000 vehicles per day and with residential properties close to the kerb have been identified.

Fermanagh and Omagh District Council confirms that there are no new/newly identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb, that have not been adequately considered in previous rounds of Review and Assessment.

#### **3.2 Busy Streets Where People May Spend 1 hour or More Close to Traffic**

Fermanagh and Omagh District Council confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

#### **3.3 Roads with a High Flow of Buses and/or HGVs.**

Fermanagh and Omagh District Council confirms that there are no new/newly identified roads with high flows of buses/HDVs.

#### **3.4 Junctions**

Fermanagh and Omagh District Council confirms that there are no new/newly identified busy junctions/busy roads.

#### **3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment**

DfI Roads Western Division are progressing the design and development of the A4 Enniskillen Southern Bypass between the A4 Dublin road and the A4 Sligo Road. An

Environmental Impact Assessment (EIA) has been completed but the scheme has yet to be approved.

The proposed Enniskillen bypass will provide a new transport link to the southern side of the town, improving the connection between the A4 Dublin Road and the A4 Sligo Road, which will include the following:

- Construction of 2.1km single carriageway with overtaking lanes provided at each end of the new road;
- Construction of two roundabouts at the Dublin Road and Derrylin Road;
- Construction of two new river bridges over the River Erne and River Sillees;
- Provision of a 3.5m cycleway / footway along the full length of the Bypass and extending along the Dublin Road and Derrylin Road to connect into existing non-motorised user infrastructure; and
- Enhancement of non-motorised user facilities to include the provision of a Puffin crossing on the Derrylin Road.

Infrastructure Minister Nichola Mallon confirmed on 11 May 2021 her intention to proceed with the Enniskillen Southern Bypass scheme and make the statutory orders, having considered all of the environmental information and responses to the consultation of the scheme and the draft orders.

The EIA included an air quality assessment which was undertaken to examine the potential effects of the proposed scheme on air quality, arising from both the construction and operational phases.

Potential effects on air quality resulting from the proposed scheme have been assessed following principles in relevant guidance outlined in the Design Manual for Roads and Bridges (DMRB) HA207/07 (DMRB HA207/07)16, associated Interim Advice Notes (IANs) and Defra's Local Air Quality Management Technical Guidance (LAQM.TG(16)).

A detailed assessment has been carried out for local air quality, as this takes into account diurnal changes in traffic flows. The dispersion modelling software (ADMS-Roads v4.0.1.0) was used to determine potential impacts on NO<sub>2</sub> concentrations at human health receptors in the proposed scheme opening year. A simple level of assessment has been undertaken for regional emissions of NO<sub>x</sub>, PM<sub>10</sub> and carbon dioxide (CO<sub>2</sub>) for the opening and design years, in accordance with DMRB guidance (paragraphs 3.2 and 3.38).

The overall conclusion regarding the effect of the proposed scheme is that there would be no significant adverse effect on local air quality as a result of particulate matter emissions. However there is expected to be a significant improvement regarding NO<sub>2</sub> concentrations in areas of the town.

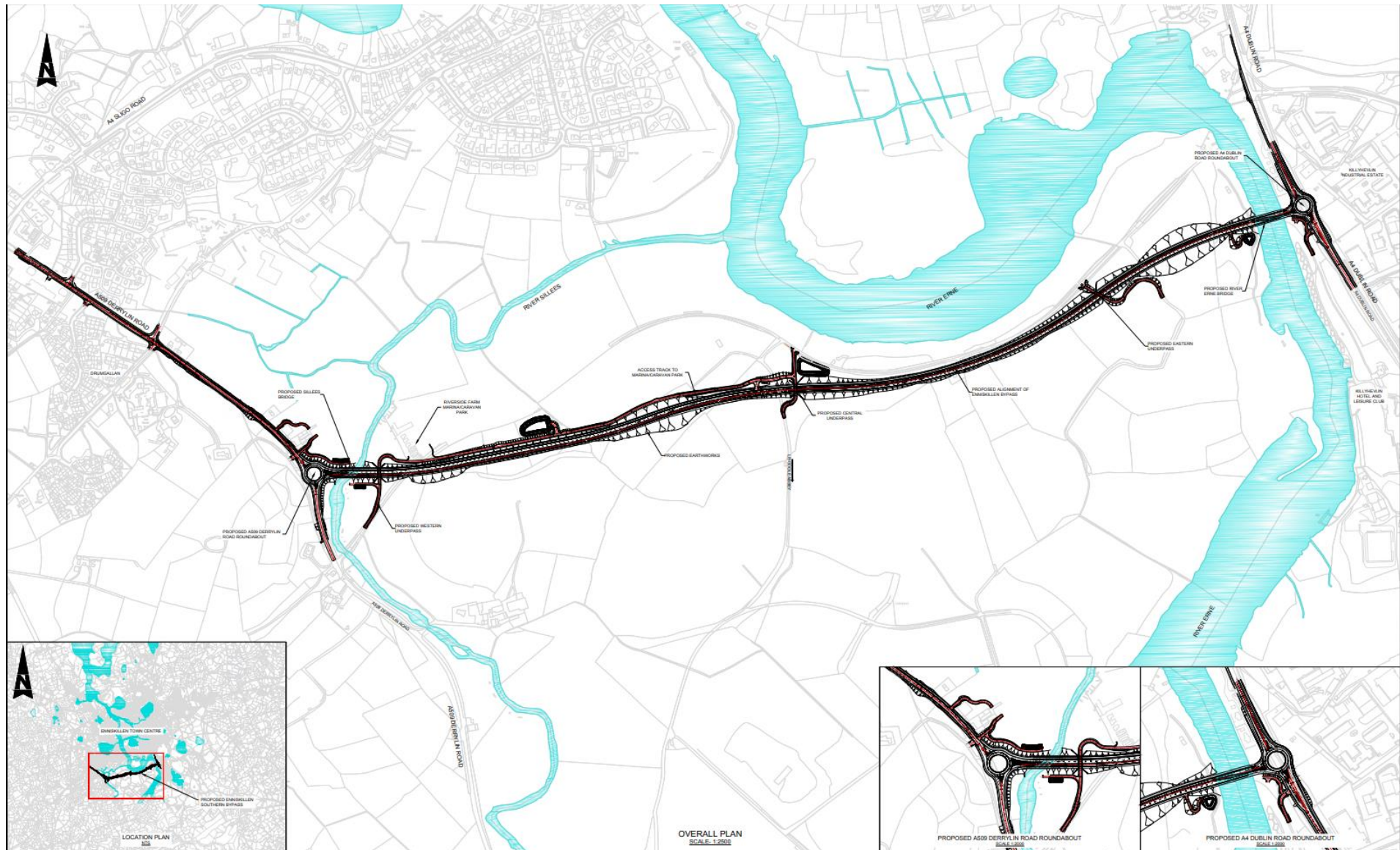


Figure 3.1: Map of proposed by-pass.

Fermanagh and Omagh District Council has assessed new/proposed roads meeting the criteria in Table 7.1 of Chapter 7 of LAQM.TG16 and concluded that it will not be necessary to proceed to a Detailed Assessment.

### **3.6 Roads with Significantly Changed Traffic Flows**

Fermanagh and Omagh District Council confirms that there are no new/newly identified roads with significantly changed traffic flows.

### **3.7 Bus and Coach Stations**

Fermanagh and Omagh District Council confirms that there are no relevant bus stations in the Local Authority area.

## **4 Other Transport Sources**

### **4.1 Airports**

Fermanagh and Omagh Council confirms that there are no new airports in the Local Authority area.

### **4.2 Railways (Diesel and Stream Trains)**

#### **4.2.1 Stationary Trains**

Fermanagh and Omagh District Council confirms that there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

#### **4.2.2 Moving Trains**

Fermanagh and Omagh District Council confirms that there are no locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.

## **4.3 Ports**

Fermanagh and Omagh District Council confirms that there are no ports or shipping that meet the specified criteria within the Local Authority area.

# **5 Industrial Sources**

## **5.1 Industrial Installations**

Fermanagh and Omagh District Council permit Part C processes under the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013.

### **5.1.1 New or Proposed Installations for which an Air Quality Assessment has been Carried Out**

The following new or proposed industrial installations, situated within its area or nearby in a neighbouring authority, have been granted planning approval. These installations have been subject to air quality impact assessments.

LA10/2017/1249/F: Underground valuable minerals mining and exploration, surface level development and ancillary works.

The application has been supported with an Air Quality Impact Assessment. The application is currently scheduled to be reviewed at a public enquiry and at the time of writing this report no date for the hearing has been set.

### **5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced**

Fermanagh and Omagh District Council confirms that there are no industrial installations with substantially increased emissions or new relevant exposure in their vicinity within its area or nearby in a neighbouring authority.

### **5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment**

Fermanagh and Omagh District Council confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

## **5.2 Major Fuel Depots**

There are no major fuel (petrol) storage depots within the Local Authority area.

## **5.3 Petrol Stations**

Fermanagh and Omagh District Council confirms that there are no petrol stations meeting the specified criteria.

## **5.4 Poultry Farms**

Fermanagh and Omagh District Council confirms that there are no poultry farms meeting the specified criteria.

## **6 Commercial and Domestic Sources**

### **6.1 Biomass Combustion – Individual Installations**

Fermanagh and Omagh District Council have assessed biomass combustion plants as they are processed through the planning process.

Fermanagh and Omagh District Council has assessed the biomass combustion plant, and concluded that it will not be necessary to proceed to a Detailed Assessment.

### **6.2 Biomass Combustion – Combined Impacts**

Fermanagh and Omagh District Council has assessed the biomass combustion plants, and concluded that it will not be necessary to proceed to a Detailed Assessment.

### **6.3 Domestic Solid Fuel Burning**

Fermanagh and Omagh District Council have recently commenced sampling for SO<sub>2</sub> at eight sites within the District. Results will be made available at the next stage of reporting. It will then be determined if a Detailed Assessment is required.



## 7 Fugitive or Uncontrolled Sources

Fermanagh and Omagh District Council considers all planning applications that have the potential to adversely affect air quality in relation to the relevant public exposure criteria, as described in the most recent Technical Guidance LAQM.TG16, the developer is requested to submit an air quality assessment. The following developments have the potential to adversely affect air quality:

La10/2020/1267/F: Housing development of 210 dwellings, 51 detached houses, 88 semi-detached houses, 17 townhouses and 54 apartments.

The application was supported with an Air Quality Assessment, that assessed the potential air quality impacts of the additional road traffic generated by the proposed development.

The assessment considered the Air Quality Objectives for NO<sub>x</sub>, NO<sub>2</sub> and PM<sub>10</sub>. The impact of traffic movements associated with the development has been assessed against the air quality objective levels for a baseline year of 2019 and a future year of 2025, and 2040 with and without development. The assessment predicted the proposed impact of the development to be well below the relevant air quality objective levels.

LA10/2020/1229/F: Residential development of 87no. dwellings comprising of 29no. detached and 58no. semi-detached units;

An Air Quality Impact Assessment was submitted and assessed the impact of the proposed development. The assessment predicted that the proposal would have an insignificant impact on pollutant levels.

LA10/2017/1249/F: Underground valuable minerals mining and exploration, surface level development and ancillary works.

In November 2021 the Department of Infrastructure Minister requested the Planning Appeals Commission to convene a Public Enquiry. During this process the impact of the proposal on Air Quality will be examined.

Fermanagh and Omagh District Council confirms that there are no potential sources of fugitive particulate matter emissions in the Local Authority area.

## **8 Conclusions and Proposed Actions**

### **8.1 Conclusions from New Monitoring Data**

No new data is available at the time of preparation of this report.

### **8.2 Conclusions from Assessment of Sources**

No new sources were identified.

### **8.3 Proposed Actions**

This Update and Screening Assessment has identified that there is no need to proceed to a detailed assessment for any of the pollutants of interest. Fermanagh and Omagh District Council have commenced monitoring for NO<sub>2</sub> and SO<sub>2</sub> and will be in a position at the next reporting stage to ascertain if a detailed assessment may be required at any of the locations.

## 9 References

- Fermanagh and Omagh District Council Progress Report 2019 and 2020
- Defra, Clean Air Strategy, 2019:
- Defra, Local Air Quality Management: Technical Guidance 2016
- Defra 'Workplace Analysis Scheme for Proficiency (WASP) NO<sub>2</sub> diffusion tubes proficiency tests'.
- Environment (Northern Ireland) Order 2002.
- Northern Ireland Air – Air Quality in Northern Ireland website

## **Appendices**

Appendix A: Quality Assurance / Quality Control (QA/QC) Data

Appendix B: Impact of COVID-19 upon LAQM

## **Appendix A: Quality Assurance / Quality Control (QA/QC) Data**

Fermanagh and Omagh District Council have recently commenced monitoring. Information regarding QA/QC data will be detailed once results from monitoring is made available.

## Appendix B: Impact of COVID-19 upon LAQM

COVID-19 has had a significant impact on society. Inevitably, COVID-19 has also had an impact on the environment, with implications to air quality at local, regional and national scales. COVID-19 has presented various challenges for Local Authorities with respect to undertaking their statutory LAQM duties in the 2021 reporting year.

Despite the challenges that the pandemic has given rise to, the events of 2020 have also provided Local Authorities and other organisations with an opportunity to quantify the air quality impacts associated with wide-scale and extreme intervention and changes in behaviour such as reduced road traffic and working from home.

1. The deployment of the diffusion tubes for  $\text{NO}_2$  and  $\text{SO}_2$  had been delayed due to the contracted laboratory ceasing activities and the availability of resources to install and change the tubes.
2. Fermanagh and Omagh District Council was not impacted regarding automatic air quality monitoring as none exists within the district.
3. As Fermanagh and Omagh District Council had no monitoring in place at the time, the impact was limited.
4. No additional monitoring was carried out.
5. There are no ongoing issues with our local air quality monitoring network related to the COVID-19 response.
6. Fermanagh and Omagh District Council have not undertaken any analysis of the impact of the COVID-19 pandemic in air quality. It is considered that due to the reduction in road traffic during this period that any impact would have been a positive one regarding the reduction in pollutant levels.
7. No further activities were undertaken.
8. No additional information is available at this time.