

EPA Licensed Sites
2013 Report on Air Emissions



ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

Regulation: *We implement effective regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

Knowledge: *We provide high quality, targeted and timely environmental data, information and assessment to inform decision making at all levels.*

Advocacy: *We work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour.*

Our Responsibilities

Licensing

We regulate the following activities so that they do not endanger human health or harm the environment:

- waste facilities (e.g. landfills, incinerators, waste transfer stations);
- large scale industrial activities (e.g. pharmaceutical, cement manufacturing, power plants);
- intensive agriculture (e.g. pigs, poultry);
- the contained use and controlled release of Genetically Modified Organisms (GMOs);
- sources of ionising radiation (e.g. x-ray and radiotherapy equipment, industrial sources);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea activities.

National Environmental Enforcement

- Conducting an annual programme of audits and inspections of EPA licensed facilities.
- Overseeing local authorities' environmental protection responsibilities.
- Supervising the supply of drinking water by public water suppliers.
- Working with local authorities and other agencies to tackle environmental crime by co-ordinating a national enforcement network, targeting offenders and overseeing remediation.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Prosecuting those who flout environmental law and damage the environment.

Water Management

- Monitoring and reporting on the quality of rivers, lakes, transitional and coastal waters of Ireland and groundwaters; measuring water levels and river flows.
- National coordination and oversight of the Water Framework Directive.
- Monitoring and reporting on Bathing Water Quality.

Monitoring, Analysing and Reporting on the Environment

- Monitoring air quality and implementing the EU Clean Air for Europe (CAFÉ) Directive.
- Independent reporting to inform decision making by national and local government (e.g. *periodic reporting on the State of Ireland's Environment and Indicator Reports*).

Regulating Ireland's Greenhouse Gas Emissions

- Preparing Ireland's greenhouse gas inventories and projections.
- Implementing the Emissions Trading Directive, for over 100 of the largest producers of carbon dioxide in Ireland.

Environmental Research and Development

- Funding environmental research to identify pressures, inform policy and provide solutions in the areas of climate, water and sustainability.

Strategic Environmental Assessment

- Assessing the impact of proposed plans and programmes on the Irish environment (e.g. *major development plans*).

Radiological Protection

- Monitoring radiation levels, assessing exposure of people in Ireland to ionising radiation.
- Assisting in developing national plans for emergencies arising from nuclear accidents.
- Monitoring developments abroad relating to nuclear installations and radiological safety.
- Providing, or overseeing the provision of, specialist radiation protection services.

Guidance, Accessible Information and Education

- Providing advice and guidance to industry and the public on environmental and radiological protection topics.
- Providing timely and easily accessible environmental information to encourage public participation in environmental decision-making (e.g. *My Local Environment, Radon Maps*).
- Advising Government on matters relating to radiological safety and emergency response.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

Awareness Raising and Behavioural Change

- Generating greater environmental awareness and influencing positive behavioural change by supporting businesses, communities and householders to become more resource efficient.
- Promoting radon testing in homes and workplaces and encouraging remediation where necessary.

Management and structure of the EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Climate, Licensing and Resource Use
- Office of Environmental Enforcement
- Office of Environmental Assessment
- Office of Radiological Protection
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet regularly to discuss issues of concern and provide advice to the Board.

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Key Statistics for 2013

Stack Emissions at EPA Licensed Sites

- 208 sites with licensed air emissions
- 1,035 total air emission points (stacks)
- EPA carries out independent monitoring in addition to licensees own monitoring programme

EPA Air Emissions Monitoring

- 114 sites visited and monitored
- 684 tests of emissions completed
- 22 sites with non-compliant emissions
- 96 % of all tests were compliant
- EPA follow-up actions taken to ensure corrective actions in place

Licensee Reported Air Incidents

- 103 incidents related to breach of licence emission limits
- 21 incidents related to monitoring equipment failure
- 43 incidents related to control equipment failure
- 21 incidents related to odour issues
- EPA assessment and investigation of all incidents

Public complaints

- 877 complaints related to odour at licensed sites
- 12 sites associated with 697 (or 80%) of these odour complaints
- 37 complaints related to air emissions/air quality
- 156 complaints related to noise
- Complaints are reducing annually but addressing odour issues will remain an EPA priority

EPA Air Investigations

- 71 formal EPA investigations related to air, odour or noise in 2013
- 45 resolved to the satisfaction of the EPA (remainder under ongoing investigation)
- 5 successful related prosecutions in 2013

Section 1: Introduction

Section 1.1: The Role of the EPA in Regulation of Emissions to Air

The quality of the air which we all breathe has a significant impact on the quality of our lives. While the air quality in Ireland is within European air quality standards, our air quality for certain pollutants does not meet the tighter guideline values as set by the World Health Organisation. Data from the European Commission indicates that across EU Member States air pollution is the number one environmental contributor to premature deaths, being associated with more than 400,000 premature deaths in 2010 (and also resulting in significant economic cost). In addition, other air quality related issues such as odour and also excessive noise emissions from commercial and industrial activities result in health impacts and nuisance/annoyance and reduce the quality of life of those exposed. Measures to control and reduce the impact of pollutant emissions into the atmosphere are therefore a critical part of protecting the health and wellbeing of Irish and European citizens.

The EPA is responsible for the environmental licensing and enforcement of certain types of industrial and waste management activities, with the requirement for an EPA licence also typically being based on these activities exceeding a particular operating threshold (e.g. tonnes of waste accepted or quantities of materials produced).

The EPA currently licences approximately 805 sites under the Industrial Emissions Licensing (IEL), Integrated Pollution Control (IPC) and Waste licensing regimes. Further details of these licensing systems can be found on the EPA website at <http://www.epa.ie/licensing/>. These licences include a range of conditions with which the operator must comply in order to ensure that the activity has no significant environmental impact, and these conditions include requirements in relation to limiting and preventing emissions to atmosphere. Some licences, where required, include limits on the quantities of specific pollutants which can be released from individual emission points (stacks) as well as requirements for licensees to continuously or periodically measure these emissions to check compliance with the licence limits.

Where a measurement indicates that an Emission Limit Value (ELV) has been breached, it must be reported to the EPA as an incident for assessment. A breach of an air emission limit value does not necessarily mean that environmental pollution has taken place, as emissions limits are typically set based on applying the best available techniques to minimise emissions to their lowest achievable level rather than simply setting the emission limit at a value which will not result in an environmental impact. Hence each incident is typically assessed individually by the EPA to determine the potential impact. As part of an incident report, the licensee is required to specify both corrective and preventative action which has been/will be undertaken. Where an EPA inspector is not satisfied with the details of the licensee report, or where the environmental risk is significant, the EPA may escalate the enforcement action and open a formal investigation into the issue (called a Compliance Investigation (CI)) and require the licensee to take further corrective and preventative actions as necessary. Incidents/issues may be further escalated to legal enforcement (prosecution) where warranted. Incidents are discussed in more detail in Section 3 of this report.

This report provides summary information on compliance with air emissions licence requirements within the EPA licensed industrial and waste sectors for the year 2013. The EPA carries out spot-

checks on emissions from licensed sites as part of an annual monitoring programme, and the findings from this programme are described in Section 2, in addition to other enforcement information gathered by the EPA. Whilst the EPA carries out independent monitoring, the licence usually requires the licensee to carry out their own periodic monitoring of air emissions to assess compliance with the emission limit values as specified in their licence (and to report any issues to the EPA). Data from such incident reports are discussed in Section 3, along with details of the EPA process in terms of investigating incidents and ensuring that licensees take appropriate action to regain and maintain compliance with their licence where an incident occurs.

Section 1.2: Overview of Air Emissions Monitoring at EPA Sites

Monitoring of emissions of pollutants into the atmosphere is a technically challenging activity, as the majority of the gases discharged from industrial activities tend to be relatively 'clean' air with very small quantities of pollutants mixed within the gas. Monitoring these emissions involves the use of specialist equipment and in some cases requires further laboratory analysis of the collected sample.

Because of the need for technical expertise and a high level of quality control, from the start of 2014 the EPA introduced a requirement for licensees to only use air emissions monitoring contractors who are accredited by the Irish National Accreditation Board (INAB). This ensures that all monitoring contractors use the same measurement methods, have adequate quality assurance and quality control measures in place and that they provide accurate and auditable monitoring reports, creating a common minimum standard for all such work. The purpose of this is to ensure that licensees provide reliable and accurate information on their emissions to atmosphere.

Of the 805 IEL, IPC and waste sites regulated by the EPA, there are approximately 208 sites which have specific limits on stack emissions to atmosphere, however other sites may require air related enforcement effort due to other issues such as odours, fugitive emissions (i.e. emissions not via a stack or not via a specified emission point) or incidents (e.g. fires). Within these 208 sites there are approximately 1,035 separate emission points to atmosphere (stacks/vents) which require monitoring under the terms of the site licences.

Reports on licensee monitoring of emissions are reviewed by the EPA as part of routine enforcement activities. In addition to the licensee's own monitoring data, the EPA also currently carries out a programme of independent air emissions monitoring at licensed sites. The number of monitoring visits completed varies from year to year (see Section 2). Selection of sites to visit depends on a number of criteria, including:

- The type of activity (e.g. incineration activities will normally be visited every year);
- The scale of the activity (sites with a large number of significant emission points will be visited more regularly);
- Compliance history, based on EPA and licensee historical emissions monitoring results;
- Requests for monitoring from EPA regional enforcement teams (e.g. to investigate an incident at a site).

These visits are spot-checks, normally of 1-day duration, which will include monitoring at 1 or 2 individual emission points at each site. The emission points which are monitored are typically the most significant emission points at the sites (i.e. the highest potential for emissions) or emission

points where elevated emissions may have been identified through licensee monitoring data or previous EPA monitoring visits.

These monitoring reports are sent to the licensee for their records. Where the report indicates a breach of an emission limit value, the licensee will be requested to respond with details of their investigation of the incident and to identify appropriate actions to correct the issue and prevent reoccurrence, where necessary. The EPA may also decide to formally investigate (Compliance Investigation) the breach of ELV and take further enforcement action (e.g. prosecution), depending on the significance of the incident.

The scope of the independent air emissions monitoring programme carried out by the EPA is different to other EU countries. For example, the English Environment Agency (EA) does not complete a regular independent monitoring programme (but does carry out audits using a system called Operator Monitoring Assessment (OMA) and has required permit holders to use accredited monitoring companies for a number of years). Northern Ireland and Scotland do complete a programme of monitoring with, for example, in the region of 40 sites being visited annually in Scotland.

Section 1.3: Overview of Air Quality and Air Emissions in Ireland

Ambient Air quality

The National Ambient Air Quality Network monitored air quality at 29 locations throughout Ireland in 2013, including rural, urban and sub-urban areas. Data from the network indicates that air quality in Ireland compares favourably with other EU Member States. Measured values of sulphur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), Ozone (O₃), particulate matter (PM₁₀ and PM_{2.5})¹, heavy metals, benzene and polycyclic aromatic hydrocarbons (PAH) were all below limit and target values set out under EU legislation.

However, when some of these parameters are compared to the tighter World Health Organisation air quality guideline values, it highlights some potential issues. Data for recent years indicates measured concentrations which are above or at these guideline values with respect to PM₁₀, PM_{2.5}, ozone and PAH. Achievement of these lower guideline values would impact positively on public health, and it is possible that in the future these WHO guideline values will be adopted as limit values by the EU, which may occur following the European Commission's review on the air quality Directives. Fine particulate matter (PM₁₀ and PM_{2.5}) are, in particular, a pollutant of concern as they are associated with human health impact and it is likely that future air quality standards for these specific pollutants will be more stringent than are currently in place. The current European Clean Air For Europe (CAFE) Directive already requires Ireland to reduce PM_{2.5} levels in ambient air by 10 % between now and 2020.

¹ PM₁₀ and PM_{2.5} are very small particles which have diameters of 10 micrometres or less and 2.5 micrometres or less, respectively. These particle sizes are more likely to result in human health effects as they can more easily enter the respiratory system.

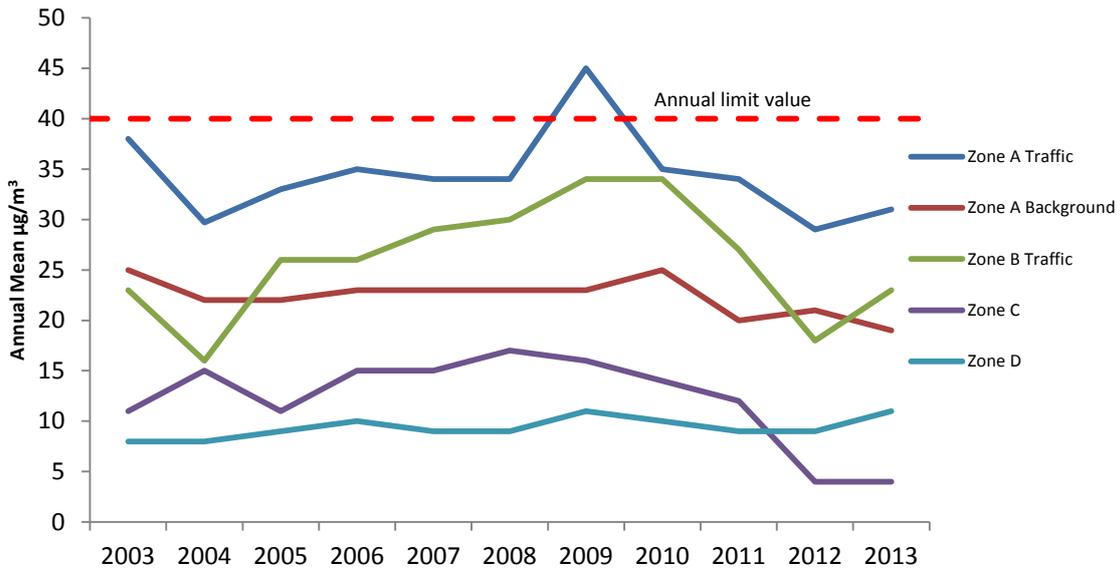


Figure 1: Trend in ambient NO₂ concentrations from 2003 – 2013. (Zone A is Dublin, Zone B is Cork, Zone C refers to larger towns with a population over 15,000, while Zone D represents rural areas)

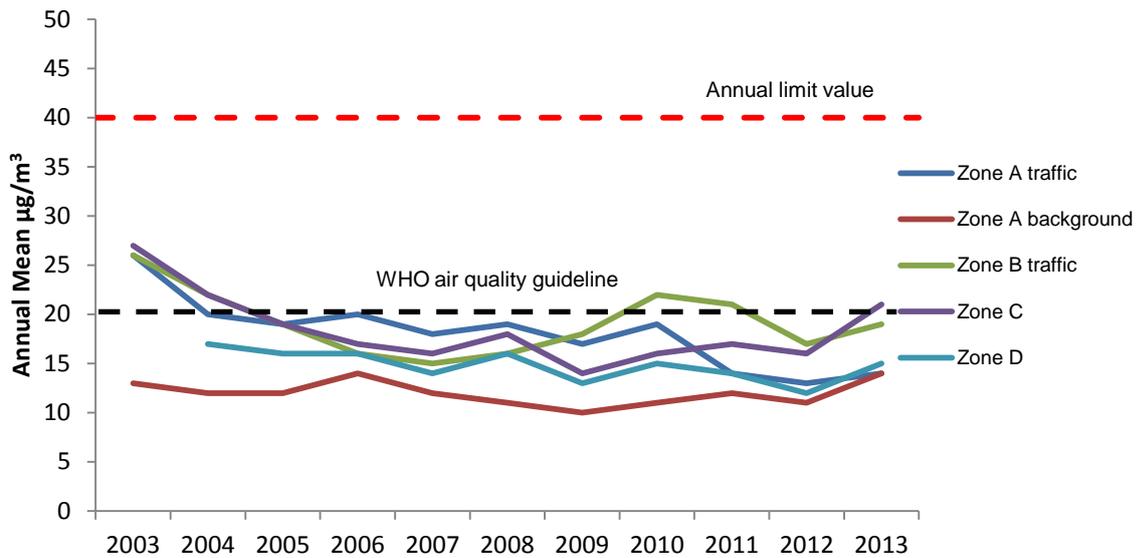


Figure 2: Trend in ambient PM₁₀ concentrations from 2003 – 2013, includes WHO guideline value and EU limit value. (Zone A is Dublin, Zone B is Cork, Zone C refers to larger towns with a population over 15,000, while Zone D represents rural areas).

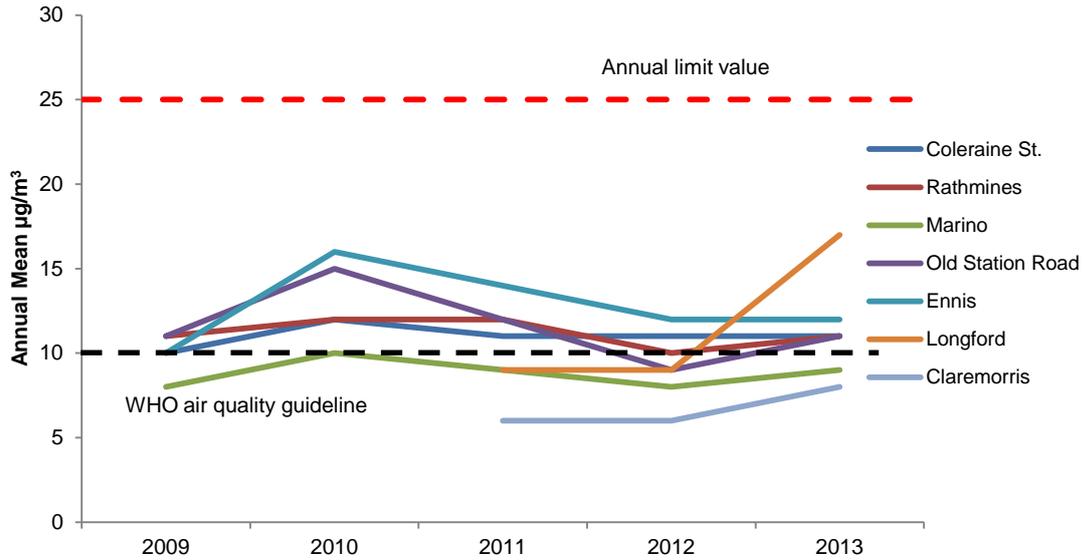


Figure 3: Trend in ambient PM_{2.5} concentrations from 2009 – 2013, includes WHO guideline value and EU limit value.

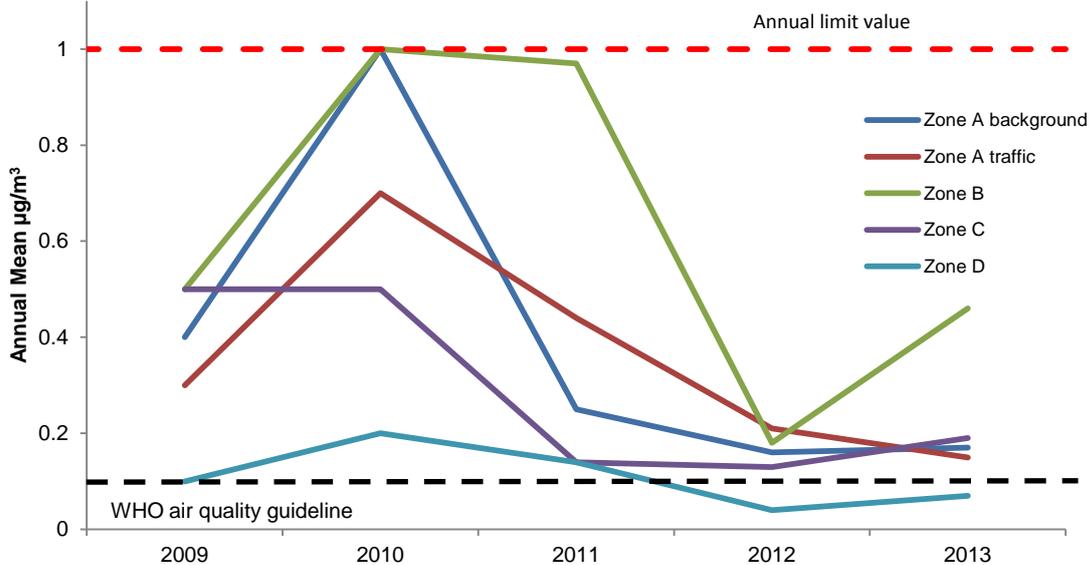


Figure 4: Trend in ambient PAH concentrations from 2009 – 2013 (Zone A is Dublin, Zone B is Cork, Zone C refers to larger towns with a population over 15,000, while Zone D represents rural areas), includes WHO guideline value and EU limit value.

National Emissions of Air Pollutants

The European National Emissions Ceiling (NEC) Directive caps emissions of a range of pollutants from Ireland, namely oxides of nitrogen (NO_x), sulphur dioxide (SO₂), volatile organic compounds (VOC) and ammonia (NH₃). Ireland has successfully achieved emissions below the specified thresholds for all of these pollutants with the exception of NO_x. Figure 5 below indicates the trend in NO_x emissions in Ireland since 1990, indicating the main sources to be transport, industrial emissions and

power station emissions. The EU will shortly issue a revised NEC Directive which will place further pressure on Ireland to control emissions of pollutants, including the introduction of a cap on emissions of fine particulate matter. This will require further measures to be taken to reduce emissions of these pollutants. Further information on the NEC is available at <http://www.epa.ie/climate/emissionsinventoriesandprojections/>.

Useful information on emissions of pollutants specifically from EPA licensed sites is also available from the EPA Pollutant Release and Transfer Register (PRTR) report for 2012, which reports on emissions to air, water and sewer. This is available at <http://www.epa.ie/enforcement/prtr/about/>. Figure 6 presents the trend in emissions of certain pollutants as reported under the PRTR regime.

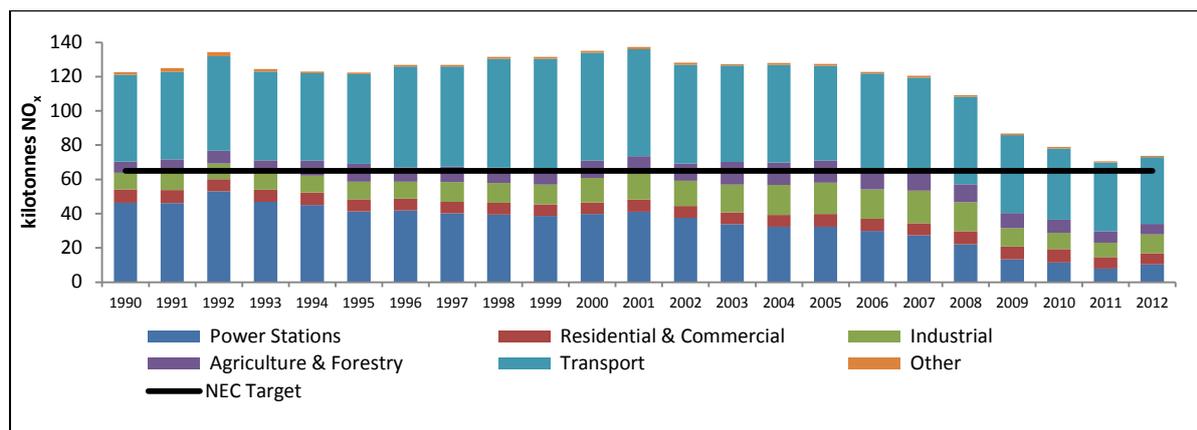


Figure 5: Emissions of NO_x from Ireland, 1990 – 2012

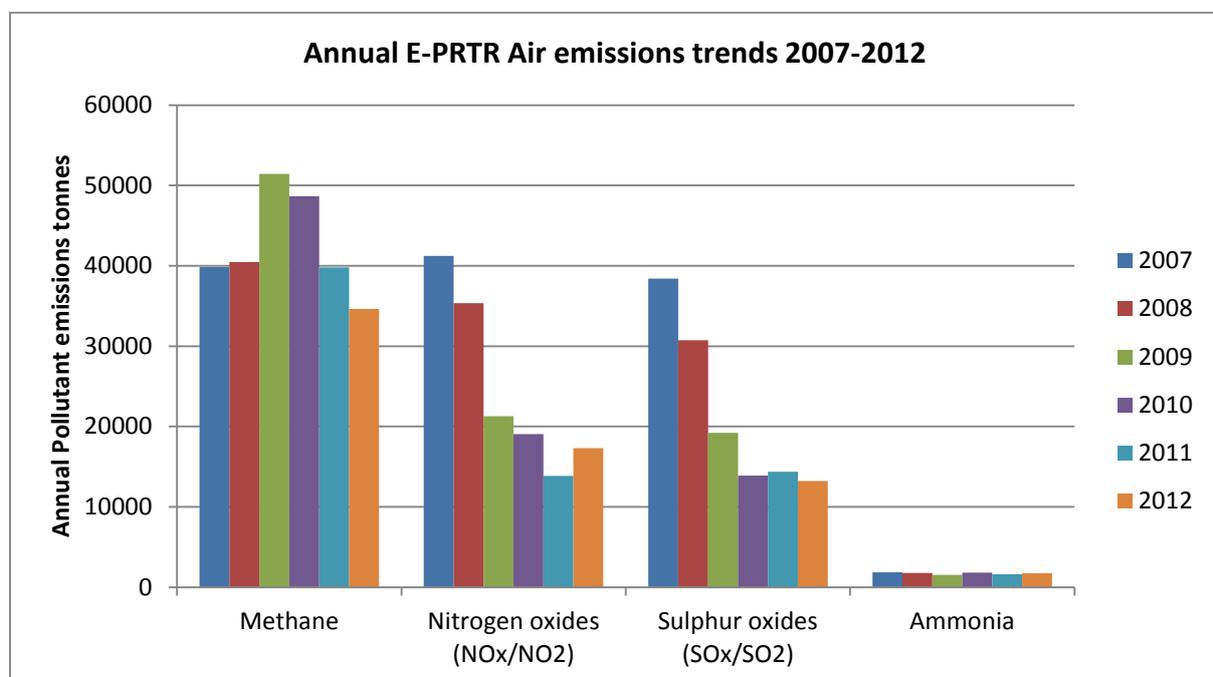


Figure 6: Data from European PRTR Report – recent trend in PRTR reported emissions

European legislation is also likely to be introduced over the coming years which will seek to reduce emissions of pollutants to air from specific activities such as small and medium scale industrial and commercial combustion activities, agriculture (reduced ammonia emissions), shipping, road transport and non-road mobile machinery.

Section 2: EPA Air Emissions Monitoring and Enforcement Data Summary 2013

Section 2.1: Results of EPA Air Emissions Monitoring

A total of 684 tests during 114 site visits were carried out by third party contractors in 2013 on behalf of the EPA. Visits are generally carried out on an unannounced basis, though licensees may be contacted in advance to verify that operational activities will be ongoing within a certain time period. This minimises the number of visits which have to be abandoned due to a site not being in production/operation (as abandoning a visit still incurs significant cost in terms of mobilising and deploying the monitoring team).

24 of these 684 tests indicated an emission above the emission limit value (ELV) specified in the licence. These 24 ELV breaches were recorded at 22 sites (as some sites reported more than 1 ELV breach). This equates to 4% of total tests being non-compliant, and indicates that around 19% of the licensed sites monitored had an ELV breach of some type. The main parameters exceeded include (see details in Figure 7 below):

- Volumetric flow (i.e. the total amount of gas discharged);
- Particulates (dust);
- Volatile organic compounds (VOCs), e.g. from use of solvents in coating activities;
- Pollutants from fuel combustion such as nitrogen dioxide and carbon monoxide.

In terms of the magnitude of the recorded ELV breaches, 7 of the 24 breaches were of a magnitude greater than twice the relevant ELV. ELV breaches are assessed by the relevant EPA inspectors, with enforcement action being taken as required to ensure that appropriate corrective and preventative actions are put in place by the licensee. The process for investigation of incidents/issues and escalation of enforcement activities is outlined in Section 1.1 and Section 3.

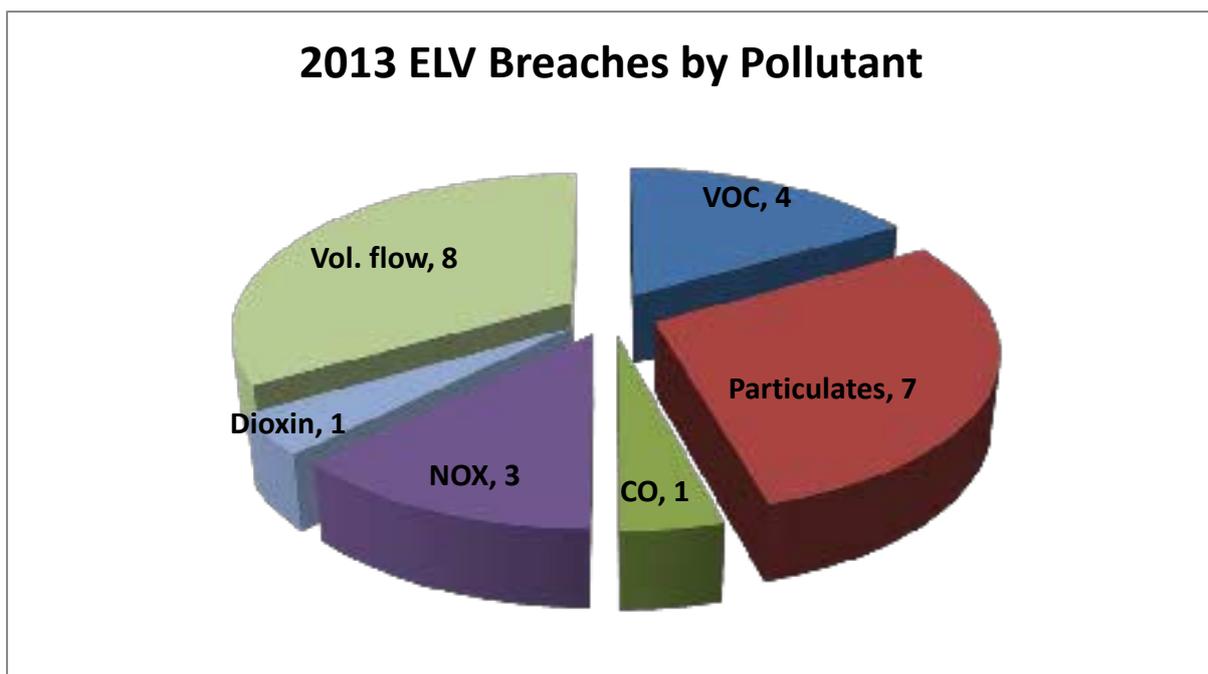


Figure 7: Identified ELV breaches by parameter in 2013 based on EPA monitoring

The table below compares the number of samples taken and the number of ELV breaches for each of the last 3 years, and indicates an overall decrease in the number of non-compliant tests and the number of non-compliant sites. The number of tests per year has increased over the last three years despite a reduction in the overall number of visits, this is due to improved efficiencies in the planning and completion of these visits. The data indicates that compliance rates are improving over the last 3 years.

Table 1: Summary data on EPA emissions monitoring over the period 2011 to 2013

	2011	2012	2013	Total
Air monitoring Visits per year	153	112	114	379
Tests per year	540	570	684	1794
No. of ELV Breaches	44 (at 40 sites)	38 (27)	24 (22)	106
% of ELV breaches by site	26 %	24 %	19 %	-
% of ELV breaches by test	8 %	7 %	4 %	-

Section 2.2: Complaints Submitted to the EPA

Complaints received from the public and other parties are recorded in an EPA electronic reporting tool and the table below presents summary information on the complaints received in relation to air quality and also noise. Not all complaints received by the EPA relate to EPA licensed activities.

Table 2: Summary data on complaints submitted to the EPA

Complaint Issue/Theme	No. of Complaints	Not assigned to Licensees ⁴	Total number of associated Licensees	Industrial Licensed Sites	Waste Licensed Sites	Waste Water Treatment Plants
Air ¹	37	7	25	16	9	0
Noise ²	156	13	20	17	3	0
Odour ³	895	18	55	31	20	4

1: The majority of these relate to smoke/dust/nuisance emissions.

2: 7 sites account for 124 of these noise complaints

3: 12 sites (a mixture of waste and food/drink sector) account for 697 of these odour complaints

4: These are complaints which are not associated with a licensee and are likely to be related to non-EPA licensed activities.

The 1,088 complaints reported above for air/noise/odour account for 91 % of all complaints recorded in 2013 by the EPA. 55 % of air/noise/odour complaints received in 2013 were subsequently subject to formal investigation by the EPA (Compliance Investigation) in order to initiate measures by the licensee to correct the issue and prevent reoccurrence. The 11 sites with the highest number of air/odour/noise complaints in 2013 are listed below, accounting for 706 of the 1,088 air/odour/noise complaints received by the EPA.

Considering odour issues separately from noise/air themed complaints, it is clear that odour is by far the most significant source of complaints, accounting for more than 70 % of all complaints received by the Office of Environmental Enforcement, with 877 of the 895 odour complaints being associated with EPA licensed sites. The majority of individual complaints are in relation to waste activities and

food and drink production activities, with 12 individual sites responsible for 697 (80%) of the reported odour complaints.

Table 3: List of sites with highest numbers of associated air/odour/noise complaints

Site Name	Licence Number	Complaint Issue	No. of Complaints
Ballynagran Residual Landfill	W0165-02	Odour	139
Arrow Group	P0812-01	Noise/odour	130
Oxigen Environmental (Coes Road)	W0144-01	Odour	77
Thornton's Recycling Centre	W0044-02	Odour	60
College Proteins Limited	P0037-03	Odour	59
Nutricia Infant Nutrition Limited	P0792-02	Odour/Noise	50
Nurendale	W0140-03	Odour/Noise	45
Dublin Products Limited	P0041-03	Odour	40
Cooley Distillery	P0826-02	Noise	38
Irish Country Meats (Sheepmeat) (Navan)	P0172-01	Odour	34
Oxigen Environmental (Robinhood)	W0152-03	Odour	34

Section 2.3: Compliance Investigations

Where an issue is not resolved to the satisfaction of the EPA, enforcement activities are escalated and a formal investigation (known as a compliance investigation (CI)) is initiated. 464 of these CIs were created by the EPA in 2013 in relation to all licensed waste and industrial sites, with 71 (15 %) related to air/odour/noise. A breakdown of these CIs by sector is presented below. The Food & Drink, Surface Coating and Chemical sectors account for a large proportion of the air related CIs created in 2013. These compliance investigations are closed only when the Agency is satisfied with the actions taken by the licensee to address the issue under investigation (the corrective actions required will vary for each individual investigation).

Table 4: Summary of Compliance Investigations by industrial sector

Sector	Air	Odour/Smells	Noise	Total
Food & Drink Sector	2	12	5	19
Surface Coating Sector	10	1	1	12
Chemical Sector	8	2		10
Landfill Sector	2	7		9
Non-Hazardous Waste Transfer Stations Sector		5		5
Energy Sector	4			4
Other Activities	3			3
Metals Sector	2			2
Mineral & Other Materials Sector	2			2
Timber Treatment	2			2
Cement Sector	1		1	2
Hazardous Waste Transfer Stations Sector		1		1
Total	36	28	7	71

Of the 71 compliance investigations opened in 2013 in relation to air/odour/noise, 45 have been closed and 26 remain under investigation (as of October 2014).

5 prosecution cases were taken against licensee companies in 2013 involving air/odour/noise issues at licensed sites, as well as prosecution of 4 company directors. The details of these prosecutions are summarised in the table below.

Table 5: Summary data on air related prosecutions in 2013

Licence Number	Site Name	Director(s) Prosecuted	Issue	Fines, Costs, Donations (€)
W0205-01	Greyhound Recycling and Recovery, Dublin 22	Yes	Odour	47,500
W0017-04	Gortadroma Landfill, Limerick	No	Odour	7,960
W0109-02	Inagh Landfill, Clare	No	Odour	8,700
P0093-01	PPI Adhesive Products Limited, Waterford	Yes	Breach of Emission Limit Value to air	34,077
P0812-01	Arrow Group Limited, Kildare	No	Odour	32,500

The top 5 root causes for air/odour related compliance investigations are presented in the table below, based on information gathered by the EPA as part of these investigations. Site management issues around adequacy of procedures and staff training is the most significant cause, identifying a need for improved environmental management systems at some sites. Hence these compliance investigations would require evidence of appropriate improvements in these areas prior to the investigation being closed by the EPA. In addition to carrying out reactive enforcement activities and investigations at site where incidents/issues occur, this information is also used to inform all licensees about common compliance issues and areas where improvements are required across all licensees or within a particular sector. For example, the EPA ran a series of interactive live webinars in 2013 on a range of compliance topics to highlight preventative actions which licensees can put in place to minimise licence non-compliances/incidents.

This type of information, along with feedback from site inspections and other enforcement activities is used to develop an annual enforcement plan for different sectors of licensed activities (e.g. pharmaceutical production, energy generation, solvent coating activities, etc.) to ensure that priority issues within each sector are addressed rather than applying a generic set of enforcement activities to all licensed sites.

Table 6: Likely root causes of air issues subject to compliance investigations

Likely Cause	Air	Odour/ Smells	Total
Inadequate Operational Procedures/Training	10	6	16
Failure of abatement equipment	4	5	9
Inadequate infrastructure	5	4	9
Other	4	2	6
Leachate/Landfill Gas management (landfill sites only)	1	4	5

Note: Only the 5 most common 'likely causes' are presented here, which accounts for 45 of the 71 air/odour/noise compliance investigations

A number of licensed sites had more than one air related compliance investigation opened in 2013. Details of companies with multiple compliance investigations opened in 2013 are presented below.

Table 7: List of licensees with more than 1 active compliance investigation in 2013

Site Name	Licence Number	No. of Investigations
Chemifloc Limited	P0076-01	4
Irish Country Meats (Sheepmeat) (Navan)	P0172-01	4
Arrow Group	P0812-01	2
Bord na Mona Fuels Limited (Littleton)	P0499-01	2
College Proteins Limited	P0037-03	2
Dublin Products Limited	P0041-03	2
Electricity Supply Board (Moneypoint)	P0605-03	2
Gairdini	P0639-03	2
Glanbia Foods Society Limited (Drogheda)	P0799-01	2
Irish Cement Limited (Limerick)	P0029-03	2
Jamestown Shot Blasting & Metal Coating Limited	P0796-01	2
North Kerry Landfill Site	W0001-04	2
Nutricia Infant Nutrition Limited	P0792-02	2
Premier Periclase Limited	P0376-01	2
Saint-Gobain Performance Plastics Ireland	P0096-02	2

Section 3: Licensee Reported Air Enforcement Incident Data for 2013

Licensees are required to report environmental incidents to the EPA under the terms of their licence. The EPA electronic reporting tool requires categorisation of these incidents and hence data is available specifically on incidents which relate to air emissions/air quality. The table below summarises incidents where there is a potential for impact on air quality into 4 categories:

- Breach of ELV: This is where the licensees own monitoring (not EPA monitoring as described in Section 2) indicates that emissions from a stack are above the limit value specified in their licence;
- Monitoring Equipment Offline: This relates only to sites which have a requirement to monitor emissions continuously. Only a small number of sites have such a requirement in their licence;
- Other/uncontrolled release: Uncontrolled releases typically relate to situations where a treatment system is not functioning adequately and cannot fully control emissions. This normally then requires the licensees to cease the related process;
- Odour: Odour incidents typically occur at sites such as landfill, waste transfer stations, and food and drink processing activities.

A total of 188 'air' incidents were reported in 2013, compared to the total reported incidents for IEL, IPC and Waste licences of 1660 (i.e. 11.3 % of all reported incidents were air related).

Table 8: Summary of air related incidents reported by licensees

Incident Nature	Number of Reported Incidents	No. of Sites Reporting this Incident Type	% of sites reporting ¹
Breach of ELV (air)	103	32	15 %
Monitoring Equipment Offline	21	6	3 %
Other/uncontrolled Release ²	43	19	9 %
Odour	21	15	NA ³
Total	188	72	

Note 1: % of sites reporting with respect to overall total of 208 sites with air emissions ELVs

Note 2: The majority of these incidents relate to bypasses of air emissions treatment equipment

Note 3: Not relevant here as not all sites causing odour have specific emission points included in the licence

In total there are 1,035 designated air emission points assigned against 208 licensees (IE/IPC/Waste licences). ELV breaches were reported for 46 of these emission points, or 4.4 % of all air emission points. This is in good agreement with the EPA data in Section 2 which indicates that 4 % of all tests completed by the EPA resulted in a breach of a limit value.

Every incident report is reviewed and assessed by an EPA inspector, and as part of the incident report the licensee is required to specify both corrective and preventative action which has been/will be undertaken. Where an EPA inspector is not satisfied with the details of the licensee report, or where the environmental risk is high, they may escalate the enforcement action and open a formal investigation into the issue (called a Compliance Investigation (CI)). In total 34 of the reported 188 air/odour incidents were escalated to this status after inspector assessment. As part of

these investigations the EPA typically requires the licensee to take specified actions to assess and address the issue, and the investigation is closed only when the EPA is satisfied with the actions taken by the licensee. Of the 34 incidents escalated to Compliance Investigation status, 11 are still part of ongoing investigations (as of October 2014) and may be subject to further enforcement action (e.g. prosecution). The remaining 23 have been investigated and resolved to the satisfaction of the EPA.

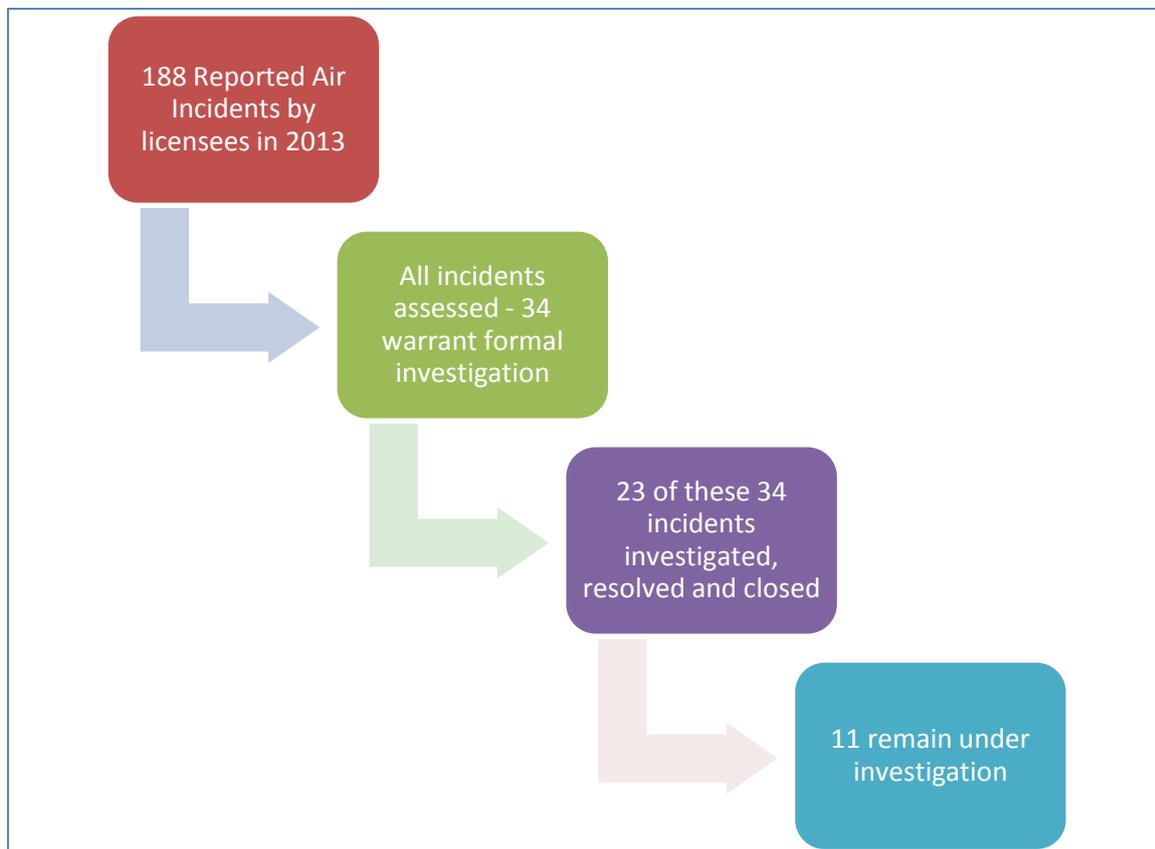


Figure 8: Enforcement activity in relation to reported air/noise/odour incidents

As part of incident reporting by licensees, the likely cause of the incident is also recorded. In a large percentage of cases in relation to air emissions the likely cause relates to failure of air emissions treatment equipment, failure of monitoring equipment or abnormal operations within the industrial process.

For incidents involving a breach of an emission limit value, licensees are also required to detail the pollutant which caused the ELV breach and the amount of pollutant released. The chart below shows the air emission parameters which resulted in ELV breaches and the % of breaches accounted for by each parameter. The main difference from the EPA data presented in Section 2 is the greater amount of carbon monoxide and sulphur dioxide breaches. These are typically reported from sites which have continuous monitoring systems. As with the EPA data, breaches of particulate and Volatile Organic Compound (VOC) emission limits are a significant proportion of reported breaches.

64 % of reported ELV breaches to air were of a magnitude greater than twice the ELV.

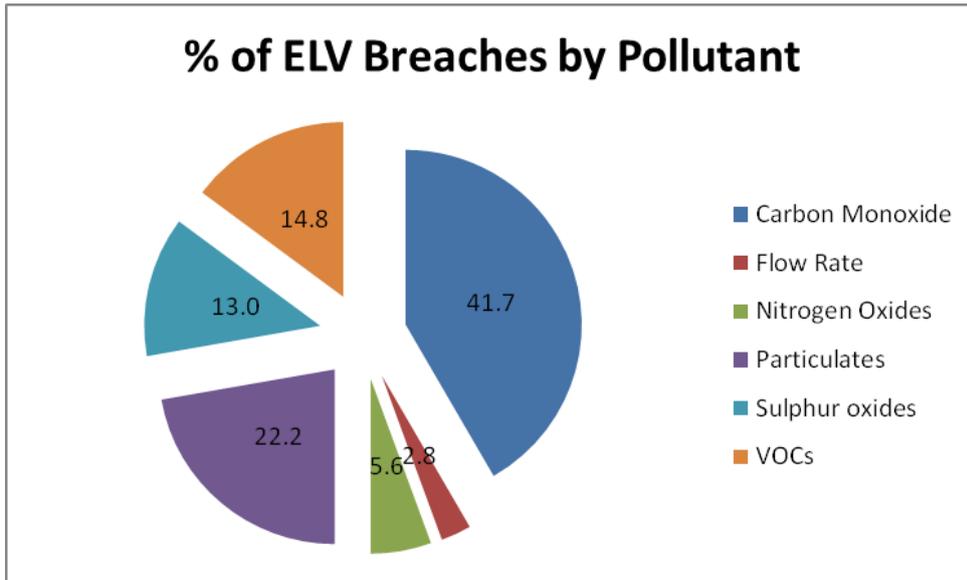


Figure 9: Breakdown of ELV breaches by pollutant for licensee air emissions monitoring

This type of information is analysed by the EPA and is used to target enforcement activities as part of the annual development of the EPA enforcement plan.

Section 4: Conclusions & Future Priorities

Data from EPA independent monitoring of licensee emissions indicates that the rate of non-compliance is trending downwards and is in good agreement with the non-compliance rates from monitoring carried out by licensees themselves. The EPA will continue to target enforcement activities to maintain compliance levels where they are good and to target specific sectors and/or sites where improvements in environmental performance are necessary, particularly in relation to priority pollutants such as particulates and volatile organic compounds. Provisional data from 2014 (first 8 months) indicates a pro-rata reduction in the number of reported breaches of air emission limit values.

In addition to reactive enforcement activities such as investigations and prosecutions at individual sites, the EPA also provides information to all licensees on common areas where improvements may be required via general information notes and through interactive real-time webinars, a series of which were presented by the EPA to licensees in 2013, covering a variety of enforcement topics. This type of engagement with licensees will continue to be used as an enforcement tool to maintain and improve performance levels at compliant sites, while recognising that more direct and focussed enforcement effort will be required at poorly performing sites.

Odour complaints in relation to licensed sites account for the majority of complaints received by the EPA. Whilst the overall number of odour complaints received by the EPA annually is reducing (for example, in 2009 nearly 1,800 odour complaints in relation to waste licensed activities alone were received), there are a relatively small number of sites which continue to generate a significant number of complaints. Resolution of these issues remains a priority work area for the EPA Office of Environmental Enforcement, and provisional data for the first 8 months of 2014 indicates a reduction in the number of odour complaints (pro rata) compared to 2013.

Current and future legislation will continue to place downward pressure on emissions from EPA licensed activities, for example, the recently introduced Industrial Emissions Directive and the impending European Medium Combustion Plant Directive, along with other policy measures which are being developed to reduce ambient levels of fine particulates and contribute towards improvements in public health. The EPA will implement and enforce any additional requirements on licensed activities to reduce emissions to atmosphere for the protection of public health and the environment.

AN GHNÍOMHAIREACTH UM CHAOMHNÚ COMHSHAOIL

Tá an Gníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaoil a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaoil a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialú: Déanaimid córais éifeachtacha rialaithe agus comhlíonta comhshaoil a chur i bhfeidhm chun torthaí maíthe comhshaoil a sholáthar agus chun díriú orthu siúd nach gclóíonn leis na córais sin.

Eolas: Soláthraimid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírthe agus tráthúil chun bonn eolais a chur faoi gcinnteoireacht ar gach leibhéal.

Tacaíocht: Bímid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaoil atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaoil inbhuanaithe.

Ár bhFreagrachtaí

Ceadúnú

- Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaoil:
- saoráidí dramhaíola (m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistriúcháin dramhaíola);
- gníomhaíochtaí tionsclaíocha ar scála mór (m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta);
- an diantalmhaíocht (m.sh. muca, éanlaith);
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe (OGM);
- foinsí radaíochta ianúcháin (m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíocha);
- áiseanna móra stórála peitрил;
- scardadh dramhuisce;
- gníomhaíochtaí dumpála ar farraige.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdarás áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhírú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúcháin.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídionn an ciseal ózóin.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

Bainistíocht Uisce

- Monatóireacht agus tuairisciú a dhéanamh ar cháilíocht aibhneacha, lochanna, uiscí idirchriosacha agus cósta na hÉireann, agus screamhuiscí; leibhéal uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairisciú a dhéanamh ar Cháilíocht an Uisce Snámha.

Monatóireacht, Anailís agus Tuairisciú ar an gComhshaoil

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairisciú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (m.sh. tuairisciú tréimhsiúil ar staid Chomhshaoil na hÉireann agus Tuarascálacha ar Tháscairí).

Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gás ceaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhair breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn

Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainnithint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, an uisce agus na hinbhuanaitheachta.

Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaoil in Éirinn (m.sh. mórfheananna forbartha).

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéal radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taimí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d'earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaoil ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnteoireacht i ndáil leis an gcomhshaoil (m.sh. Timpeall an Tí, léarscáileanna radóin).
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chosc agus a bhainistiú.

Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht chomhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlach a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an ghníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig Aeráide, Ceadúnaithe agus Úsáide Acmhainní
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Measúnú Comhshaoil
- An Oifig um Cosaint Raideolaíoch
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltaí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.



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