European Union Network for
the Implementation and Enforcement
of Environmental Law

IMPEL REVIEW INITIATIVE (IRI)

"A voluntary scheme for reporting and offering advice To environmental authorities"

Report on the IRI that took place at the Centre DCMR,
Rotterdam, Netherlands,
7 – 10 October 2014
2014/09

Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years, IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.
Information on the IMPEL Network is also available through its website at: www.impel.eu.

REPORT STRUCTURE

1. Executive Summary

In line with the Recommendation for Minimum Criteria for Environmental Inspections (RMCEI), this informal review of the Centre for Economic Development (ELY) and the Regional State Administrative Agencies (AVI) was undertaken by a broad cross section of the IMPEL network. It focuses upon the inspection, permitting and enforcement of the IPPC Directive, the new requirements of the IED, and where relevant any other industrial processes that fall under the RMCEI.

The review team considers that the objectives of the area of EU environmental law within the scope of the review are being delivered in the Netherlands. Furthermore the arrangements for environmental inspection and enforcement are broadly in line with the RMCEI.

The DCMR planning, inspection and enforcement systems seem very sophisticated but quite rigid. The organisation is open to innovation and the use of new technologies. DCMR are also very good at engaging with and communicating with the public.

Throughout, the IRI team has identified several examples of 'good practice' and 'opportunities for development', when considering the implementation of the above Directive(s) during the review. Specifically, the review team has highlighted the following as particularly strong examples of this:

Good practice

Part A – Regulatory Framework

Part B – Permitting Activities

- The Netherlands have established centres of expertise for specific sectors and DCMR will hire people from them if necessary to support their activities on permitting or hire out their staff if needed to others
- Strong public engagement throughout the permitting process
- Netherlands Commission for Environmental Assessment (NCEA) gives advice on the Environmental Impact Assessment procedure (third party)
- The level of sign-off depends on the level of public objections
- Fact finding throughout the permitting process
- The responsibility for permitting and inspections have been concentrated in 28 Execution bodies from over 400 Municipalities and 12 Provinces

Part C – Performing Inspection Tasks

Planning of inspections

- Planning of inspections combines risk assessments made in RIAN with facts and figures in the national GIR database which supports the expert judgement of the inspectors
- Use risk based assessments to classify sectors and inform inspection frequency based on RIAN for all installations, from Seveso and IED installations to bakeries
- Rank installations in accordance to risk and link the frequency of inspections to the risk assessments
- The use of different approaches depending on the inherent risk such as a sector based approach, complaints driven for the lowest risk, and customised approach for the highest risk sites

Execution Framework

- Time spent on inspections is linked to the risk assessment and company/sector behaviour
- Good planning and clear inspection process
- Joint visits by inspectors and permit writers to the company when expanding/changing permits to ensure all parties are clear on the obligations under the permit

Training and Development

- Specific person who is responsible for managing professional development for inspectors and all staff
- Use of personal safety passports show companies that DCMR take health and safety seriously and makes access to sites more efficient
- Approach to training – for example, setting criteria for inspectors, assessing current skills and identifying training needs before devising training, use of mentors
- Formal evaluation of inspectors following coaching
- Focus on continuous development for staff
- Having clear established criteria for the recruitment of permit writers is useful

Enforcement

- Engage with senior managers within industries who are not compliant for discussion to incentivise change and improvements
- Use a clear enforcement strategy and take account of the willingness of the industries to comply and the environmental impact/risk to human health and environment to determine the type of sanction used.
- Developed a joint enforcement strategy which is applied by all competent authorities involved in Seveso regulation

Communication with the public

- Communication strategy and identification of target groups
- Incidents are published within 24 hrs along with actions taken on joint website with other emergency services
- Good consultation with the public in the permitting process
- Summaries of Seveso inspection reports and enforcement action taken are published on the internet

Execution and reporting

- Use of electronic noses and infrared cameras to identify vapour leaks
- The use of e-noses has led to industry following suit (and self monitoring) as some companies now use this approach in order to mitigate environmental emissions
- Use of innovative techniques to monitor air pollution and noise pollution
- Concentrate on solving problems and using data to inform identifying issues rather than focusing on the number of controls
- Companies have to report on incidents and flares through CIN
- Good incident processes in place
- Have a centralised incident management team which operates 24/7

Performance Monitoring

- Use of electronic noses with programmed prints which signal large emissions in order to enable early action. E-noses on the public roads signal changes in air composition and their readings can be used to identify the source of the emissions.
- Central system for performance reporting for inspections
- Use of quantity indicators for inspections

Part D – Meeting with Industry

- Good relationship with industries they regulate
- Operator understands their enforcement measures and processes
- The operators respect DCMR staff and consider them to be well qualified

Opportunities for development

Part A – Regulatory Framework

Part B – Permitting Activities

- Do not regularly review permits or have a regular review cycle for permits – for instance there could be a risk that industries are not compliant with new BAT within the timescales set by Europe (IED). In order to deal with this the DCMR has now set up time limited review cycle for the implementation of new BAT conclusions under IED. Consideration should be given to make this permanent.
- Processing permits takes a minimum of 6 months and can take up to 18 months for complicated permits. For permits which include new build or expansions the 6 month term is met.
- Could consider streamlining the permitting process for water and environmental permits to one to ensure the industry has one process to follow

Part C – Performing Inspection Tasks

Planning of inspections

- Should consider applying risk criteria such as emissions and environmental criteria on an installation level (IED)
- Should consider using Environmental Management Systems as an indication of good behaviour for IED industries
- Could consider using IDepend to identify appropriate interventions for specific companies and evaluate the effectiveness of these interventions

Execution Framework

- Could consider charging the companies for inspections and permits
- Could consider having a national IT system which would allow inspectors to share experiences and information on the performance of different companies
- Should consider distinguishing between new and existing installations
- Should reconsider the use of standardised and elaborate tools and guidance (be clear about what is needed for legal compliance) for Seveso inspections in order to ensure consistency across the Netherlands for industry
- Should consider peer reviews within the Netherlands between the new execution bodies

Training and Development

- Could consider increasing the number of joint inspections done by new inspectors with a mentor
- There is an opportunity to expand the safety passport concept to cover other areas, for instance safety measures in the event of an incident with chlorine
- Should consider being more flexible with recruitment criteria, for example not make criteria a legal requirement

Enforcement

- Should consider applying judgement in the application of the enforcement strategy to ensure proportionality
- Consider streamlining enforcement instruments and penalties under the Seveso regime
- Should explore the possibility of closer engagement with policy makers (ex ante and ex post evaluation)

Communication with the Public

- Should consider publishing summaries of all inspection reports on the internet (IED)
- Consider more use of social media
- Could consider following up public reactions/levels of understanding of the public to inspection reports/enforcement notifications to ensure these are suitable/appropriate
- Could consider publishing notes on when/if the company becomes compliant as part of the summary

Execution and reporting

- Could consider using the data to develop action plans to reduce complaints from the public
- Could consider using the data and the analysis to target repeat offenders through campaigns for example

Performance Monitoring

- Could consider using additional results orientated indicators
- Should consider using collected data more effectively

<u>Part D – Meeting with Industry</u>

- Industry suggested that inspectors should consider focusing more on high risk activities

- The operator suggested that permit writers should remain the same for a longer period and inspectors could be changed more frequently

2. Introduction

The IRI Scheme

The IRI scheme is a voluntary scheme providing for informal reviews of environmental authorities in IMPEL Member countries. It was set up to implement the European Parliament and Council Recommendation (2001/331/EC) providing for minimum criteria for environmental inspections (RMCEI), where it states:

"Member States should assist each other administratively in operating this Recommendation. The establishment by Member States in cooperation with IMPEL of reporting and advice schemes relating to inspectorates and inspection procedures would help to promote best practice across the Community."

Purpose of the IRI

The aims of the IRI are to:

- provide advice to environmental authorities seeking an external review of their structure, operation or performance by experts from other IMPEL members countries for the purpose of benchmarking and continuous improvement of their organisation
- encourage capacity building in environmental authorities in IMPEL member countries
- encourage the exchange of experience and collaboration between these authorities on common issues and problems
- spread good practice leading to improved quality of the work of environmental authorities and contributing to continuous improvement of quality and consistency of application of environmental law across IMPEL member countries (˝the level playing field˝).

The IRI is an informal review, not an audit process. The IRI is intended to enable the environmental authority and review team to explore how the authority carries out its tasks. It aims at identifying areas of good practice for dissemination together with opportunities to develop existing practice within the authority and authorities in other IMPEL member countries.

Scope of the IRI in the Netherlands

The IRI uses a questionnaire to review the environmental authority against the requirements of the RMCEI. The IMPEL ˝Doing the Right Things˝ Guidance Book for planning of environmental inspections has been used to help structure the questionnaire and the review. The Guidance Book was developed to support Inspectorates in implementing the RMCEI and describes the different steps of the Environmental Inspection Cycle pursuant to the RMCEI.

The scope of the IRI in the Netherlands focussed on the work of the DCMR in Rotterdam in relation to permitting and inspection. A particular focus was given to IED/IPPC and Seveso industries and the regulation of these.

Structure

A pre-review meeting was held in Rotterdam on 1 July where the programme and the scope for the review were discussed. The meeting was attended by the Team Leader, Rapporteur, and the hosts.

The review itself took place in Rotterdam, in the DCMR's main office, on October 7-10. The Review was structured according to the revised IRI questionnaire developed by the IRI review project during 2009. The IRI Review team consisted representatives from six different IMPEL member countries.

Team Leader		Terry Shears	
UK	Environment Agency England	Elen Strale	Rapporteur
Belgium		Inge Delvaux	Reviewer
Belgium		Martine Blondeel	Reviewer
Poland	Voivodship Inspectorate of Environmental Protection in the region of Kujawsko-Pomorskie	Adam Nadolski	Reviewer
Turkey	Senay Aslan		Reviewer
Turkey	Ibrahim Ozdemir		
Germany	Pollution Control Regional Government Cologne	Horst Bűther	Reviewer
Finland	ELY Uusimaa	John Molander	Reviewer
Project leader	DCMR	Marinus Jordaan	Host
Impel coordinator	DCMR	Koen de Kruif	Host

Table 1: DCMR IRI review team

Picture 1: Review team and hosts at the Rotterdam DCMR offices

3. Main Findings

Part A – Defining the regulatory framework of environmental protection in the IMPEL member country.

Objective
To find out about the organisation of the environmental authority, the relevant legislation it complies with and relationships with the public, operators, government and other countries.

General national and regional information
Source: Wikipedia

The Netherlands

The Netherlands is the main constituent country of the Kingdom of the Netherlands. It is a small, densely populated country, lying mainly in Western Europe, but also including three islands in the Caribbean. The European part of the Netherlands borders Germany to the east, Belgium to the south, and the North Sea to the northwest, sharing maritime borders with Belgium, the United Kingdom and Germany.

The three largest and most important cities in the Netherlands are Amsterdam, The Hague and Rotterdam. Amsterdam is the country's capital: The Hague holds the Dutch seat of government. The port of Rotterdam is the largest port of Europe - as large as the next three largest combined.

The Netherlands' name literally means "Low Country", inspired by its low and flat geography, with only about 50% of its land exceeding one metre above sea level. Most of the areas below sea level are man-made. Since the late 16th century, large areas (polders) have been reclaimed from the sea and from lakes, amounting to nearly 17% of the country's current land mass.

With a population density of 406 people per km² - 497 if water is excluded - the Netherlands is a very densely populated country for its size. Only Bangladesh, South Korea and Taiwan have both a larger population and a higher population density. Nevertheless, the Netherlands is the world's second largest exporter of food and agriculture products, after the United States.

The Netherlands was one of the first countries in the world to have an elected parliament, and since 1848 it has been governed as a parliamentary democracy and a constitutional monarchy, organised as a unitary state.

Administrative division

The Netherlands is divided into twelve provinces, each under a Commissioner of the King (Commissaris van de Koning), except for Limburg province where the position is named Governor (Gouverneur). All provinces are divided into municipalities (gemeenten), of which there are 403. The country is also subdivided into 24 water districts, governed by a water board (waterschap or hoogheemraadschap), each having authority in matters concerning water management. The creation of water boards actually pre-dates that of the nation itself, the first appearing in 1196. The Dutch water boards are among the oldest democratic entities in the world still in existence.

Picture 2: Map of the Netherlands

Rotterdam

Rotterdam is the third-largest city in the Netherlands and one of the largest ports in the world. Starting as a dam constructed in 1270 on the Rotte River, Rotterdam has grown into a major international commercial centre. Its strategic location at the Rhine-Meuse-Scheldt delta on the North Sea and at the heart of a massive rail, road, air and inland waterway distribution system extending throughout Europe is the reason that Rotterdam is often called the "Gateway to Europe".

Located in the province of South Holland, Rotterdam is in the west of Netherlands and the south of the Randstad. The population of the city was 619,879 in 2014. The population of the greater Rotterdam area, called "Rotterdam-Rijnmond" or just "Rijnmond", is approximately 1.3 million. The combined urban area of Rotterdam and The Hague with a population of approximately 2.9 million is the most populous in the Netherlands. Rotterdam is known for its University (Erasmus), cutting-edge architecture, lively cultural life, striking riverside setting and maritime heritage. It is also known for the Rotterdam Blitz.

The largest port in Europe and one of the busiest ports in the world, the port of Rotterdam was the world's busiest port from 1962 to 2004, when it was surpassed by Shanghai. Rotterdam's commercial and strategic importance is based on its location near the mouth of the Nieuwe Maas (New Meuse), a channel in the delta formed by the Rhine and Meuse on the North Sea. These rivers lead directly into the centre of Europe, including the industrial Ruhr region.

Economy

Rotterdam has always been one of the main centres of the shipping industry in the Netherlands. From the Rotterdam Chamber of the VOC, the world's first multinational, established in 1602, to the merchant shipping leader Royal Nedlloyd

established in 1970, with its corporate headquarters located in the landmark building the 'Willemswerf' in 1988. In 1997 Nedlloyd merged with the British shipping industry leader P&O forming the third largest merchant shipping company in the world. The Anglo-Dutch P&O Nedlloyd was bought by the Danish giant corporation 'AP Moller Maersk' in 2005 and its Dutch operations are still headquartered in the 'Willemswerf'. Rotterdam is also home to the Dutch half of the Anglo-Dutch consumer goods giant Unilever, and Mittal Steel Company N.V., subsidiary of Luxembourg-based Arcelor Mittal, the world's largest steel company.

The Erasmus University has a strong focus on research and education in management and economics. The University is located on the east side of the city and is surrounded by numerous multinational firms. On Brainpark I, Brainpark II, Brainpark III and Het Rivium are located offices of major multinationals. In the centre of the city are the above-mentioned Unilever offices, but also Robeco, Fortis (including Mees Pierson and Stad Rotterdam Verzekeringen), ABN AMRO, ING (Nationale Nederlanden), the Rotterdam WTC, and the before mentioned Maersk Line which incorporates the Dutch merchant marine legacy.

The City of Rotterdam makes use of the services of semi-government companies Roteb (to take care of sanitation, waste management and assorted services) and the Port of Rotterdam Authority (to maintain the Port of Rotterdam). Both these companies were once municipal bodies but now they are autonomous entities, owned by the City.

Port of Rotterdam

Rotterdam has the largest port in Europe, with the rivers Meuse and Rhine providing excellent access to the hinterland upstream reaching to Basel, Switzerland and into France. In 2004 Shanghai took over as the world's busiest port. In 2006, Rotterdam was the world's seventh largest container port in terms of twenty-foot equivalent units (TEU) handled.

The port's main activities are petrochemical industries and general cargo handling and trans-shipment. The harbour functions as an important transit point for bulk materials and between the European continent and overseas. From Rotterdam goods are transported by ship, river barge, train or road.

In the first half of the twentieth century, the port's centre of gravity shifted westward towards the North Sea. Covering 105 square kilometres (41 sq mi), the port of Rotterdam now stretches over a distance of 40 kilometres (25 mi). It consists of the city centre's historic harbour area, including Delfshaven; the Lloydkwartier; the Maashaven/Rijnhaven/Feijenoord complex; the harbours around Nieuw-Mathenesse; Waalhaven; Vondelingenplaat; Eemhaven; Botlek; Europoort, situated along the Calandkanaal, Nieuwe Waterweg and Scheur (the latter two being continuations of the Nieuwe Maas); and the reclaimed Maasvlakte area, which projects into the North Sea.

Dutch environmental legislation

Source: Practical law, Environmental law and practice in The Netherlands: overview

Dutch environmental law is largely influenced by EU law. Therefore, the Dutch regulatory framework is often based on, or amended by, new EU directives and regulations. These either apply directly, or are incorporated into national law by amending existing acts or creating new decrees.

The main sources of national environmental law are:

- Acts of Parliament.
- Government regulations, policy rules and decrees.
- Jurisprudence and case law.

The environmental regulatory framework covers the following fields:

- Environmental management (pollution prevention and control).
- Air.
- Conservation of nature, wildlife and habitats.
- Contaminated land.
- Environmental impact assessments (EIAs).
- Nuisance.
- Waste.
- Water.

Health and safety and planning matters are regulated separately from environmental matters, but are interlinked. Seveso II is a good example of this integration.

The key environmental legislative regime includes (regional environmental agencies have an important task here):

- Spatial Planning Act
- Environmental Management Act
- IED
- Seveso II
- Water Act/ Water Permit
- Public registers

This review predominantly focuses on the Environmental Protection Act and Seveso II since these are what govern the prevention and pollution control, IPPC/IED and safety issues, Seveso II. The Environmental Protection Act governs different themes like air quality, waste etc and permitting activities. IED has been transposed into Dutch law.

Spatial Planning Act

The Dutch government, provinces and local districts establish management plans to shape the Netherlands now and in the future. The **Spatial Planning Act** regulates how these plans are produced and amended.

Environmental impact assessments

The requirement for EIA is covered in the EMA, which describes the basic principles of environmental policy. T he details are then set out in the Environmental Impact Assessment Decree (*Besluit milieueffectrapportage*) (EIA Decree), including when an EIA must be carried out.

The requirement to carry out an EIA is divided into two types of activities (referred to as plans and projects) (*Appendices, EIA Decree*):

- C-list activities: plans and projects for which an EIA is mandatory because of the nature of the activity itself. For example, the construction of oil refineries, chemical installations and motorways.
- D-list activities: plans and projects that are assessed individually (on the basis of an Article 7.16 to 7.20 procedure) to determine whether an EIA is required. An EIA is only necessary where these plans or projects are likely to have significant effects on the environment, for example, the:
    - construction, alteration or enlargement of a waterway;
    - construction of a highway (other than a motorway).

Depending on the activity and the thresholds in the C list and D list, a limited or extensive procedure must be applied.

Where an EIA is required, it must be undertaken before any decision is taken in relation to a plan or project. The EIA must be taken into account in making that decision.

A further EIA regime is contained in Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (Strategic Environmental Assessment Directive). This Directive lays down the rules for a mandatory EIA for strategic decisions. This means, for example, that plans for spatial planning or waste management must be reviewed for any impact they may have on the environment. This Directive was implemented into Dutch law in September 2006 through an amendment of the EMA and the EIA Decree.

The Crisis and Recovery Act (*Crisis- en Herstelwet*) (CRA) was enacted to facilitate the realisation of infrastructure projects and other major building projects to mitigate the economic crisis. The CRA exempts those projects from the EIA. Developers do not have to investigate alternative solutions, as is required under an EIA.

Permits and regulator

A permit may be subject to an EIA, in which case the permit will not be issued without an EIA being performed. The competent authority for the EIA is the authority responsible for granting the permit.

Penalties

If a required EIA is not carried out, the company can be subject to administrative sanctions. If a relevant authority grants planning permission for a development without properly considering the statement, the permission or development consent risks being legally challenged.

Environmental Management Act

Dutch businesses must comply with specific environmental regulations, which are based on the **Environmental Management Act** and incorporated within general environmental rules such as the **Environmental Activities Decree** or **environmental licensing**.

The **Environmental Management Act** is the centrepiece of eco-legislation and determines what (legal) tools can be deployed to protect the environment. The main instruments are environmental plans and programmes as well as requirements on environmental quality, licensing, general rules and enforcement. The same Act also contains rules on levies, contributions and compensation.

Penalties

If the facility must have a permit, and it is not obtained, the operator commits a criminal offence and can be penalised under the Economic Offences Act (*Wet op de economische delicten*) (EOA). Penalties include fines and up to six years' imprisonment. However, imprisonment is generally reserved for extreme cases of continuing criminal behaviour.

Water Act/ Water Permit

Water permits (WP) are regulated by the Water Act (*Waterwet*) (WA)

Prohibited activities

The following are prohibited without a WP:

- Discharging materials into surface waters.
- Discharging materials or water at a water treatment plant.
- Dumping materials in sea waters.
- Discharging water in or extracting water out of surface waters.

For some other polluting activities notification given at the environmental office instead of a WP is sufficient.

Seveso II in the Netherlands

Source: international papers Jacques van Steen et al.and additional information from Marinus Jordaan

The Seveso II Directive is implemented in the Netherlands through a decree which is based on environmental, occupational safety, disaster, and fire brigade regulation. An important characteristic of this decree, which is called "*BRZO 1999*", is cooperation between the key regulatory bodies, in particular the Competent Authority for environmental regulation, the Labour Inspectorate, and the fire brigade. Within this cooperation, the Competent Authority for environmental regulation serves as coordinator. Whereas cooperation as such is prescribed, the degree of cooperation is up to the various parties involved in a particular situation. This may vary from the competent authority for environmental regulation fulfilling a "mailbox function" (minimum situation) to operating jointly as a team (optimal situation). It is important to note here that the legal responsibilities of the various Competent Authorities remain unchanged.

As far as reporting obligations for upper-tier establishments are concerned, BRZO 1999 implies the integration of three reports into one report: the Safety Report. A schematic representation of Seveso II implementation in the Netherlands is given in Figure 1.

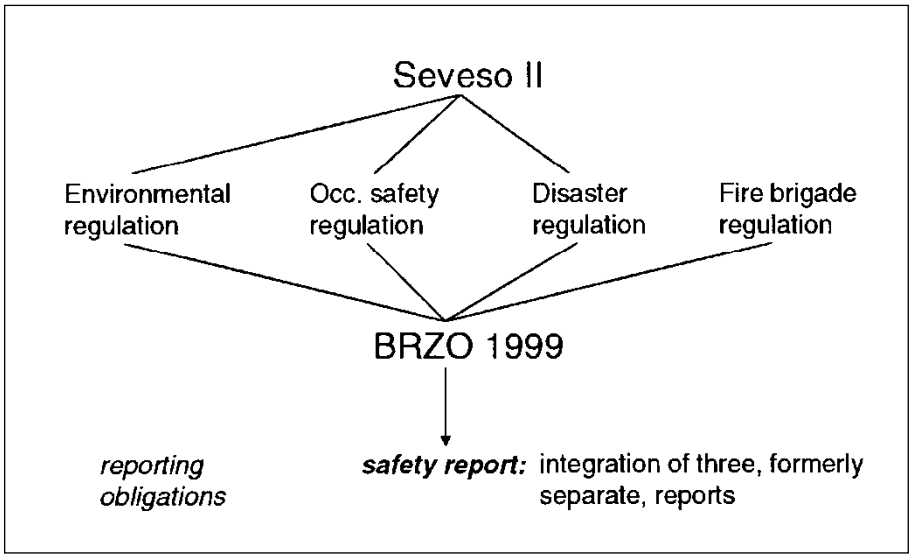


Figure 2. Seveso II implementation in the Netherlands

The integration of External Safety Report, Occupational Safety Report and company fire brigade report into one Safety Report affects the three regulatory bodies involved. These bodies are required to cooperate in evaluating the integrated Safety Reports, and cooperation is also required in carrying out the prescribed inspections at upper-tier as well as lower-tier establishments.

For the Rijnmond region, located in the vicinity of Rotterdam, these joint activities are an issue of major importance. The Rotterdam-Rijnmond region is not only the most densely populated area in the Netherlands, with more than 1 million people living within an area of less than 800 km2, but is also heavily industrialized. Many chemical and petrochemical plants, power plants, and storage and transshipment companies are located in this area, and among these there are a substantial number of Seveso sites. The number of upper-tier and lower-tier establishments is about 75 upper-tier and 25 lower-tier. Given these large numbers, organizing the required cooperation is a significant task in itself.

Since the start in 2000 there have been two national improvement programmes of which the second, the "BRZO+", just started in January 2014. The first improvement plan from 2005 (BeteRZO or translated "better SEVESO") had a major influence on the way all agencies worked together on a national scale;

- all (regional) inspection plans (art 18 Seveso) are put up according to a standard format;
- one ICT tool for reporting (joint inspection register, GIR);
- one inspection method (new inspection method, NIM);
- one training scheme with compulsory training and standards (BRZO academy);
- one enforcement strategy (2013);
- one format for active publication of inspection results to the public (2014);
- one monitoring system (in development);

IED (RIE in Dutch) in the Netherlands

The IED has mainly influence on the Environmental Management Act and the All-in-one permit for physical aspects Act as EU directives have been incorporated into these laws. The necessary changes were implemented in law on 24th May, 2013.

Implementation of environmental legislation in the Netherlands

Overview of the National regulatory authorities related to environment

Ministry of Infrastructure and Environment

Main activities. This Ministry is responsible for the development of policy and legislation and can provide information on all principal environmental topics.

www.government.nl/ministries/ienm

Ministry of Economic Affairs, Agriculture and Innovation

Main activities. This Ministry co-operates with the Ministry of Infrastructure and Environment in relation to energy and emission regulations.

www.government.nl/ministries/eleni

Ministry of Social Affairs and Employment

Main activities. In relation to the environment, the Ministry is responsible for the issuance for asbestos removal permits and monitors compliance in relation to the removal of asbestos. It is also responsible for other labour issues and working conditions policy and inspection. It has an inspection role in Seveso.

www.government.nl/ministries/szw

Inspection Environment and Transport (ILT)

Main activities. ILT is responsible for day-to-day inspection of transport of goods, transport by road, air and water as well as passenger transport, and environmental and building regulations. For information on these topics, it is possible to contact the hotline and information centre.

www.ilent.nl

Directorate-General for Public Works and Water Management

Main activities. The Directorate-General for Public Works and Water Management manages and develops the national network of roads and waterways on behalf of the Minister and State Secretary of Infrastructure and Environment.

www.rijkswaterstaat.nl

Emissions Authority

Main activities. The Emissions Authority is responsible for the issuance of emission permits, the allocation and issuing of emission rights, monitoring compliance and imposition of sanctions.

www.emissieautoriteit.nl/

Netherlands Commission for Environmental Assessment

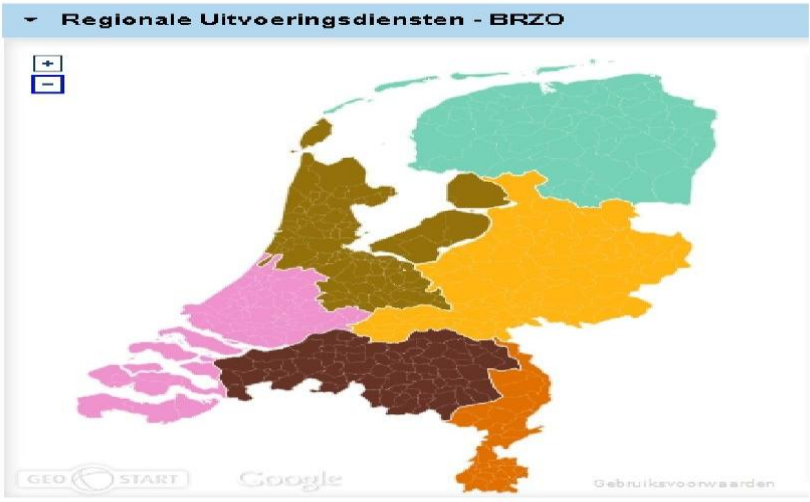
Main activities. The Netherlands Commission for Environmental Assessment (NCEA) prepares mandatory and voluntary advisory reports for government (national, provincial and local) on the scope and quality of environmental assessments (EAs).

www.commissiemer.nl

National Waste Notification Bureau

Main activities. The National Waste Notification Bureau processes the reports of industrial and hazardous waste, including ship-generated waste, distributes the data of these reports to government authorities and other bodies, and maintains a database of waste permits. www.lma.nl

Picture 3: The Region



Regional environmental inspection and licensing

As mentioned earlier municipalities and provinces must co-operate in the formation of regional agencies (*Regionale Uitvoeringsdiensten*) (RUD) to whom enforcement powers has been transferred. Since 2013 there are 28 regional agencies similar to the DCMR that deal with these tasks for all municipalities and provinces. For Seveso companies, six of these agencies have been assigned to coordinate the Seveso work in their region at these companies.

DCMR organizational structure and legislative powers

The legal base for the DCMR environmental agency is a community regulation between 16 municipalities in the Rijnmond area and the Province of South Holland. It started about forty years ago. Some members of the committee of the DCMR act as the executive committee. The executive committee meets six times a year and prepares the general meeting with all committee members. The members of this executive committee are representatives of the Province (chair), and city council member of Rotterdam and three other municipalities. The total budget of the DCMR is about €50 million and the staff is about 500 people. The agency is managed by a managing director, together with four unit managers. A description of the tasks, responsibilities and authorities of the committee and the managing director can be found in the community regulation.

The authority of the DCMR is based on authorization from the competent authorities in the Rijnmond area. This authorization is different for every competent authority and that is why the tasks and responsibilities are different for the competent authorities. The Authorisation for the tasks at the Seveso companies are the same. The competent authorities provide the necessary funds to carry out the duties in the authorisation. This is a yearly process of negotiation but it has been agreed that changes in funds may vary by a maximum of plus or minus 5% a year.

Main tasks DCMR

1. Licensing, inspection and enforcement at about 27.000 companies in the Rijnmond area.
2. Monitoring the environmental quality in the Rijnmond area
3. Monitoring safety in the area together with partners Rotterdam-Rijnmond Safety region and delivering support and advise 24/7 in case of environmental incidents
4. Advise on several environmental related issues like spatial planning

Additional tasks[1] specific to Seveso

- Authorized coordination task for Seveso companies in one of the six regions (Zeeland and South Holland provinces).
- Informal National coordinating task for Seveso for Competent Authorities for environmental regulation in the six regions.

[1] The DCMR has different additional task like licensing for military installation in NL for the Ministry of Defence, one of assignments on review on licensing and//or inspection in other regions etc.

The last two specific tasks make it possible to improve the level playing field and work more efficiently. But they are also a big challenge to implement; there is a high number of municipalities and provinces that are responsible and that is not changing!

Window of opportunity: From old to new

The DCMR organisation will change in 2014. A rough outline of the new organisation was developed during the first half of 2014. The new organisation will be implemented the second half of 2015. One major change is that inspection and enforcement tasks will be concentrated in one unit separate from the licensing and advice task. The division of these two tasks will be put at unit level instead of sub-unit level. This international review is timely since possible improvements can be built into the new organisation more easily.

Position Seveso and IED related tasks

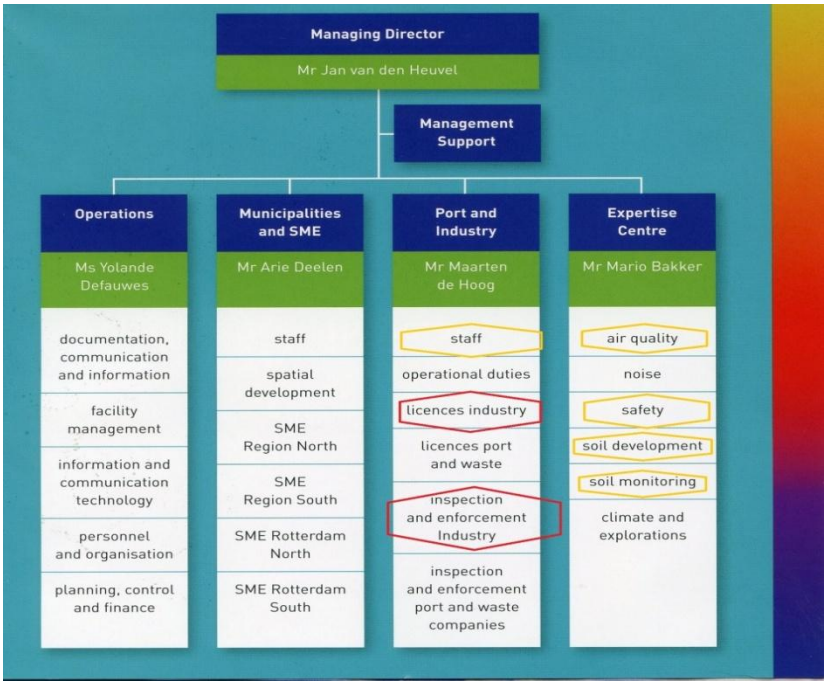


Figure 3: Structure of Seveso and IED related tasks

The organisation graph shows the four units with the sub-units at the DCMR. Seveso and IED related tasks are focused in the Port and Industry unit (120 staff). All subunits are involved in Seveso. The unit licenses industry (25 staff) and inspection and enforcement industry (22 staff) deal with Seveso higher tier companies and technically complex industries like refineries, chemical production and tank storage. The other two operational sub-units (licenses 16 and inspection 21 staff) deal with Seveso lower tier companies. For instance dangerous good storage, transhipment and waste treatment. The staff of this unit (outline in orange) have different

preparing and coordination tasks in this area and a coordinating role on regional and national level as mentioned above at Seveso specific task two and three. For the IED and Seveso tasks the expertise unit (outline in orange) is also of importance. For IED companies the soil, air and noise sub-unit and for Seveso the safety sub-unit are relevant.

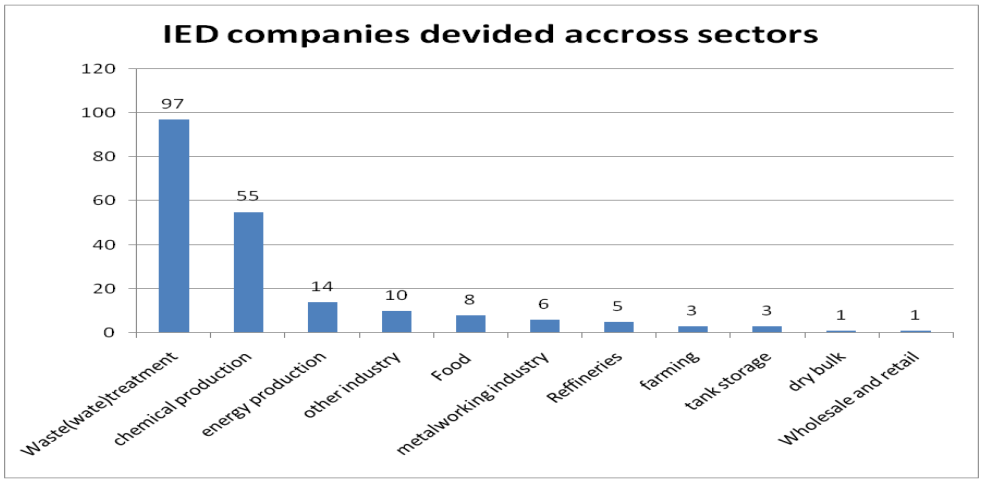


Figure 4: Overview IED and Seveso companies

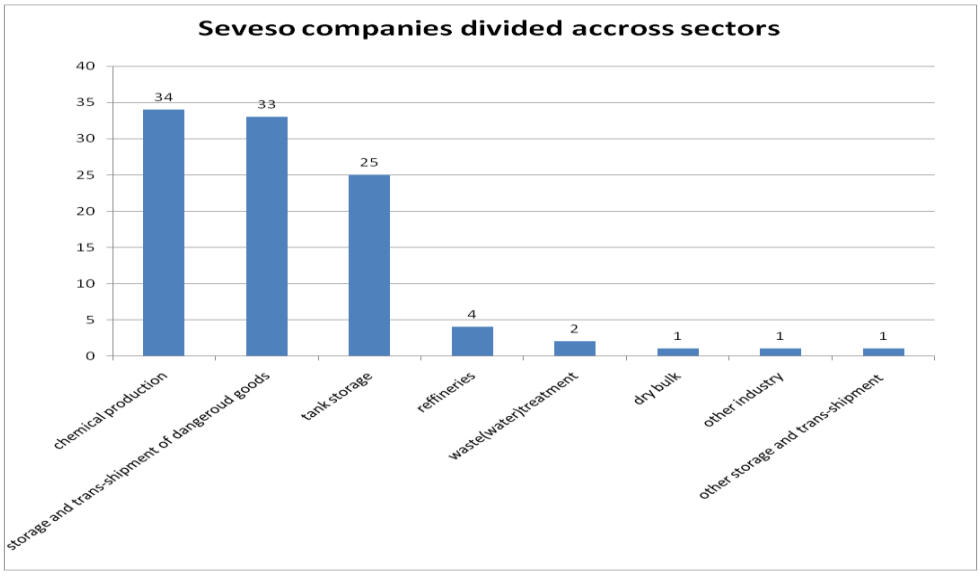


Figure 5: The Seveso companies and their sector

The tables above show the sectors and number of companies that have an IED and/or Seveso obligation. In total there are about 200 IED companies in the Rijnmond area. For about 40 of them Seveso is relevant. For 60% of the total of a hundred Seveso companies the IED does not apply.

Cooperation with other inspection agencies in the region
Besides working closely together with Seveso Partners as mentioned above, DCMR inspectors also work in cooperation with many agencies such as the Police, Harbour authority, Customs, tax authorities, Human Environment and Transport Inspectorate (Inspectie Leefomgeving en Transport (ILT)) and others.

The co-operation between these organizations takes place at operational and at tactical level. This co-operation is formalised in an agreement in which physical co-operation as well as information and data exchange are included. The physical co-operation takes place by means of performing surveillance for and reporting to each other and joint inspections.

An example of a coordinated approach was the situation around the arrival, storage, cleaning and transport of the radioactive containers coming from the Fukushima area.

The co-operation at the tactical level is executed by data sharing and structural joint analysis searching for possible criminal activities. Detected criminal activities will be followed by an optimal governmental response. This reaction can be a administrative, tax related, criminal prosecution or a combination.

Social developments that have an impact on the implementation of enforcement are critically monitored.

One of the projects, commissioned by the DCMR and executed in co-operation with Erasmus University and Customs, concerns a study in the fields of cyber security, cybercrime and cyber resilience. It focuses on the responsibilities, knowledge and skills of the governmental enforcement agencies and the environmental and safety risks at high risk companies (Seveso).

Production processes and safety measures of these companies are almost entirely automated. Hackers and malware can cause incidents with major environmental impacts.

It is also detected that companies manipulate their own data to hide violations.

Budget

Roughly 30% of the DCMR budget is used for inspections and 15 % for licensing.

External interaction

- Involvement of the general public in decision making within the regulatory process:
  - The decision on whether to carry out an environmental impact assessment (EIA) has to be made for activity with possible major impact on the environment. Another compulsory publication is the decision after an EIA has been carried out. The public can make objections and remarks on this and go to court. They can also appeal after a court decision.
  - The final and/or draft permit will be published. The public and also the company can make objections and remarks on this and go to court. They can also appeal after a court decision. The competent authority have to comment or make modifications following these remarks in the final permit.
  - NGOs and other pressure groups are very active in influencing environmental legislation and policy. These groups often get involved in the legislative process itself. However, they are probably more active in objecting to proposed decisions (such as environmental, spatial planning or construction decisions) that may have a negative impact on the environment. It is compulsory to have these consulting periods.

- Provisions & procedures for operators or the general public with regard to access to information and involvement in decision making within the host organisation:

Access to information;

Administrative Transparency Act (Wet openbaarheid van bestuur (Wob));
According to the Act on administrative transparency (1980) everybody can ask administrative bodies information related to administrative issues. The administration has to make a decision if this information can be provided. There are only a few limitations to this right like names of persons, commercially sensitive information, personal opinions, privacy information such as criminal law documents or names of persons.

Involvement in decision making

- Community council (burenraad). DCMR organizes these informal meeting place between a company and its neighbourhood. Concerns can be expressed which the company can answer, the company can explain their future plans and also give the cause of and actions taken after recent incidents resulting in peaks of complaints.

- Provisions and procedures for operators or the general public to file complaints and lodge appeals related to the inspectorate activities within the host organisation and/or higher authorities;

    - Request to enforce (Verzoek tot handhaving)
    - Complaint at the emergency response room (Klacht via meldkamer)
    - Juridical means via the court (Zienswijze en bezwaarschrift/beroep)

- Responsibility for trans-boundary issues;

This is mainly a task for the Human Environment and Transport Inspectorate (ILen T). But more and more there is close cooperation on information exchange with them and customs. So it is possible to prevent at an early stage possible illegal shipments into the harbour going to illegal places. An important task of DCMR is checking whether waste streams are in line with what was intended in the permit system. An important task is to check the handling of wastes at all companies and at waste treatment plants.

Part B– Permitting activities

Objective

Explore the permitting activities of the environmental authority.

Permits and licences

There are two types of permits:

- The all-in-one permit for physical aspects (*omgevingsvergunning*) (APPA).
- The water permit (WP).

APPA All-in-one permit for physical aspects

On 1 October 2010, the Environmental Management Act (*Wet Algemene Bepalingen Omgevingsrecht*) (EMA) came into force. This enables an applicant to apply for an all-in-one permit for physical aspects (*omgevingsvergunning*) (APPA), which covers a range of 25 former environmental permits, and regulates air, land waste and energy efficiency (but not water, *see below, WP*). The permit applies to companies and institutions, as well as individuals.

Whether a full APPA or simple notification is required depends on the environmental activities of the company concerned. A company is classified into one of the following categories (*Activities Decree (Activiteitenbesluit)*):

- **Type A.** This is for companies with no impact or a negligible impact on the environment. The general rules of the Activities Decree apply, but the company is not required to make a report to the competent authorities and does not have to apply for an APPA.
- **Type B.** This is for companies with a substantial impact on the environment. These companies must inform the authorities of their commercial activities by notification, and may need to apply for an APPA. Existing environmental permits issued prior to new regulations automatically qualify as APPAs.
- **Type C.** This is for companies that have extensive impact on the environment, for example, companies subject to Directive 96/61/EC concerning integrated pollution prevention and control (IPPC Directive). These companies must apply for an APPA. Larger, more polluting installations must be regulated by an APPA based on the use of best available techniques (BAT).

Permits and regulator

The APPA can be applied for electronically at a service desk on the following website, *www.omgevingsloket.nl*. Notifications under the Activities Decree must be made separately at *http://aim.vrom.nl*. Subsequently, individual applications are referred to the competent authorities for each individual permit comprising the APPA. The

competent authorities are the local authorities, such as the municipality or water board involved (or the province in case of large projects or large companies). The competence of the central government, province, water board or municipality to review a permit application and eventually issue the permit depends on the type of permit requested and the applicable regulations. The Minister of Infrastructure and Environment issues permits for cases of specific importance (for example, mining or defence projects). Example: a nuclear power plant at national, a refinery at province and a car dismantling yard at municipal level.

At the end of the process one central order constituting the permit is given.

Length of permit

Generally, permits are issued for an unlimited period of time. However, certain permits must be issued for a limited period as prescribed by governmental decree (for example, temporary facilities). In any case, permits remain subject to review. If a facility undergoes changes, an alteration or expansion permit must be obtained. If the changes are extensive, it may be necessary to obtain a revision permit.

The competent authorities must generally take enforcement action against breaches of environmental regulations. However, in practice priority is given to the more serious and/or recurring breaches. The competent authorities have discretionary powers to impose sanctions. The level of sanctions imposed depends on whether special circumstances exist, such as impending changes in legislation.

Furthermore, due to a recent reform of the law and the regulatory framework, municipalities and provinces must co-operate in the formation of regional agencies (*Regionale Uitvoeringsdiensten*) (RUD) to whom enforcement powers have been transferred. This reform is intended to improve the supervision and co-ordination of environmental enforcement.

Permits and regulator

In 2009 the WA was enacted. The WA regulates the management of surface water and groundwater, and is aimed at aligning water policy and environmental planning. The WA combines eight former Acts . The various permits that originated from those Acts are now combined in one single WP, which is required for any activity that could impact on either the quality or quantity of surface water and/or subsurface water.

The competent authorities to issue WPs for water pollution activities are as follows:

- The water board (*waterschap*) for the regional water system.
- The Directorate-General for Public Works and Water Management (*Rijkswaterstaat*) for the main water system.
- The province for major water extractions or infiltrations and the Transport, Public Works and Water Management Inspectorate for the Directorate-General for Public Works and Water Management's own works.

Applications for a permit can be submitted electronically at one service desk, after which the service desk directs the application to the competent authority. The competent authority decides whether or not to grant a permit for the proposed activity. If the application is submitted for multiple polluting activities, the highest competent authority is the only competent authority.

Process for issuing permits

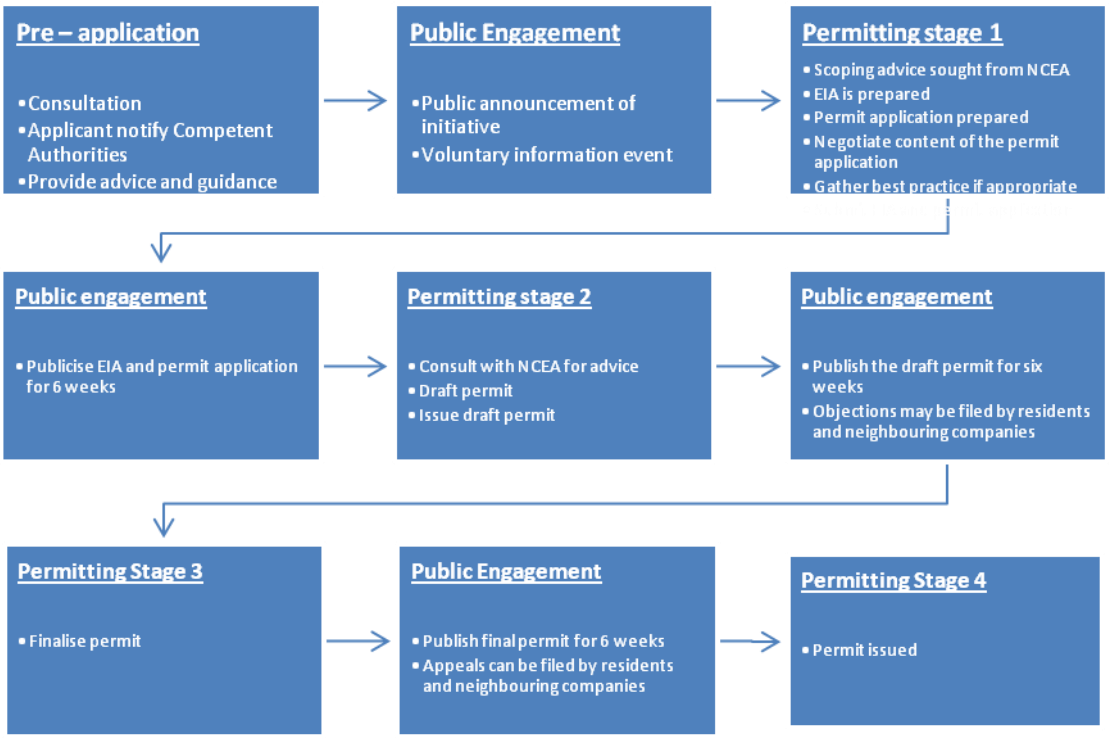


Figure 6 Permitting process

The DCMR are responsible for issuing environmental permits and the water boards are responsible for issuing water permits. In the Netherlands processing a permit can take between 6 -12 months. The applicant has the opportunity to contact the permitting authority early on to understand what is required in their application and can consult with the DCMR prior to contacting the Netherlands Commission on Environmental Impact Assessments (NCEA) to have an Environmental Impact Assessment done if needed.

Key issues discussed during the pre-application consultation include:

- Type of activity (oil terminal etc)
- Whether there is green field land
- Nitrogen deposition
- Odour
- Air emissions
- Fine particles
- Dust

The permitter produces a starting note in which they have to consider whether EIA legislation is applicable, whom they need to consult with, whether other permits are required such as a water permit, who is the competent authority, whether there are any legal difficulties or environmental aspects they need to consider. Usually they also exchanges of experiences with other colleagues.

A public notice is made early on in the process to ensure the applicant considers what needs to be included in the EIA and later on in the permit. Environmental considerations are made at an early stage in the process, before the permit is developed and made, and activities required to mitigate environmental issues are incorporated and considered.

If the application relates to green field land the permit writers often make visits to similar plants to see how the operation of those plants affect the environment and use this to highlight issues relating to the environment. If they do not have previous experience with particular plants/issues then these are researched through a fact finding mission, which at times can involve going abroad to see similar plants.

Once the EIA report has been completed it is published alongside the permit application and the public are given 6 weeks to comment. Both are publicised on the DCMR website and in local newspapers. All the municipalities who are in the area of the site (terminal) are given the opportunity to engage and the application can also be accessed in the library, the DCMR and the local municipality office.

Permits for type C companies contain 80-90% standardised regulations and 10-20% tailor made regulations. The municipality gives the planning consent and the DCMR gives the joint environment/planning consent.

Draft permits are subject to legal advice: inspectors and colleagues are also consulted.

The manager of the unit can sign regular permits if there are no objections. Some permits are signed by the Director and really sensitive permits are handled at the political level.

As part of the permitting process, external safety and the risk to human life/safety/societal risk are considered, as well as the risk of more than 40 people dying: they use a standard to determine whether the operations are safe enough.

The higher the risk the more investment that is required from the industry to ensure safety standards are met. It is not a hard criterion which would result in the permit being declined. However, the probability of an incident and the impact of the incident are calculated and considered. There is a guideline which includes the probability and impact which is mandated in BAT. The model calculates different scenarios and the probability which is considered by the permitter as part of the process. The elements of the risk calculation are the definition of loss of

containment scenarios (frequency), dispersion of material (wind direction, speed, stability), toxicity at a specific distance (toxic dose, heat load). The DCMR uses a standard Dutch model to calculate the external risks.

The scenarios are based on past experience. If an incident occurs which is relevant enough to change the methodology this is done on the highest level of the ministry and for the entire country.

Scenarios are developed and calculations are based on scenarios in different sectors. Some companies are familiar enough to be able to do this for themselves.

The DCMR does not charge for permits and an environmental permit lasts forever. An extension of a permit or a revision is generally processed in 6 months if it covers standard issues such as development in green field land, change of operations, or a total revision.

The DCMR processes around 150 permits a year and the main objective at the moment is to check permits older than 10 years. They rely on experts and have internal experts on air quality, odour, external safety, soil, noise and spatial planning.

The DCMR also relies on external experts on issues such as fire and water. Water Boards manage water permits. The DCMR are a statutory consultee and an operator cannot have an environmental permit without a water permit.

Review

Permits are reviewed if they are older than 10 years or if the operator is considering expanding their operations. A formal review of the entire permit is done.

BAT conclusions have contributed towards permits being reviewed more regularly as they need to ensure they are compliant with the new obligation of the IED to implement the BAT conclusions within 4 year after publication.

The DCMR has set up a review cycle for the implementation of new BAT conclusions under IED. Funding for this review cycle has recently been granted by the Province for a limited time period of one year.

Reopening, revoking of permits

If an operator applies for a change to an existing permit or a new permit the inspector will visit the operator with the permitter to explain what needs to be done and ensure the operator understands the obligations under the new permit.

Charging

DCRM do not charge for permits.

Involvement of the public

The Netherlands engage with the public several times during the permitting process. The draft permit is discussed with the organisation and neighbours and objections are filed by residents. The final permit is publicised and again the general public are given the opportunity to protest or raise concerns.

The general public are provided with the opportunity to comment and engage with the process a total of four times during the permitting process.

Everyone can file an objection or react to objections raised which may result in changes to the permit. DCMR are responsible for making the decision.

Individuals, companies, and NGOs may file a complaint or appeal if they have a direct interest. The DCMR (the permitting authority) can reject the appeal but this can be challenged in court and a judge will determine whether or not they are allowed to complain.

Part C – Performing inspection tasks (Environmental Inspection Cycle)

Planning of inspections

Objective
To find out the criteria and procedures for planning of inspections and how this is put into practice.

Describing the context

The DCMR is the environment agency for the Province of Zuid-Holland, the city of Rotterdam and 15 municipalities in the Rijnmond area. It is responsible for environmental, spatial planning and economic concerns. It also monitors and safeguards the state of the Environment for the region's environmental 1.2 million residents. There are around 27,000 companies in the Rijmond area. The organisation's key tasks include:

- Issuing and enforcing permits
- Monitoring and developing knowledge
- Providing advice
- Responding to incidents and managing crisis

The DCMR responds to 20,000 reports per year from residents regarding stench, dust, noise and soil pollution.

When inspections are planned in the Netherlands the following is considered:

- BRZO article 24 (Seveso legislation in the Netherlands)
- Local policy for environment
- Administrative inspection programme
- Cooperation with Labour inspectorate, Fire department (safety regions) and water quality control agencies

Inspections are no longer integrated as this has been tried in the past and was found to not work so well. The DCMR carry out inspections on behalf of the municipalities and is funded by them to do so.

In planning and delivery of inspections the DCMR applies the IMPEL Doing the Right Things approach.
Competent authorities such as the municipalities and the provinces task the DCMR who then apply the above process. The subsequent data and analysis is then used to provide advice on changes to operators/CA's as appropriate.

The DCMR carry out a range of inspection tasks and the number of and types of inspections and follow up actions have been summarised in the below table:

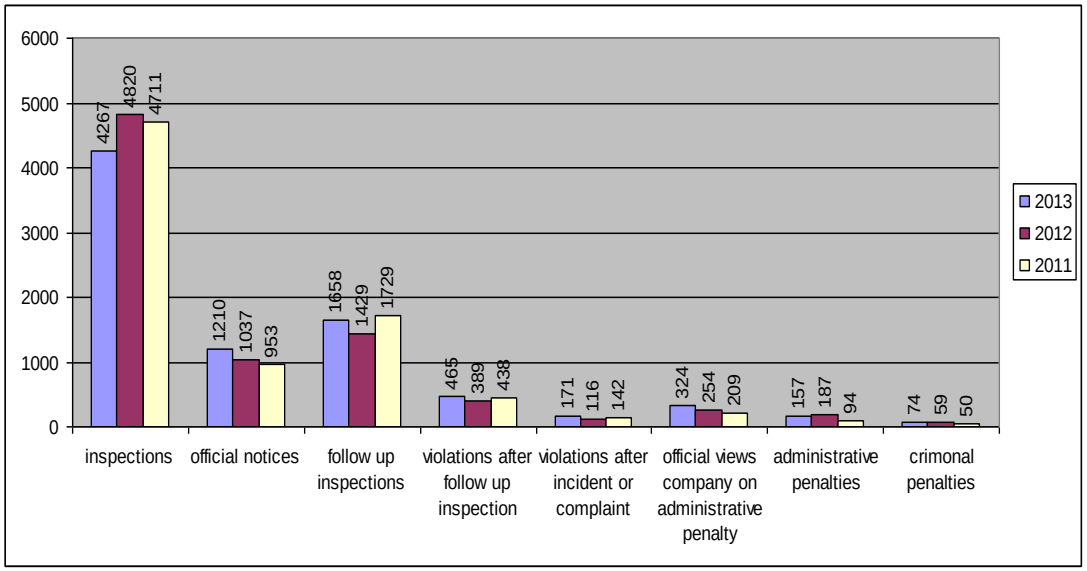


Figure 7 : Number of and types of inspections and follow up actions done by DCMR since 2011

In 2006 the Netherlands introduced a new inspection method for executing Seveso inspections which involved taking a systemic approach from the top down. The process considers legislative requirements, risk (behaviour and effect) and incorporates the bottom up understanding of compliance and feeds in information gathered during inspections. The inspection process used by the DCMR has been summarised below.

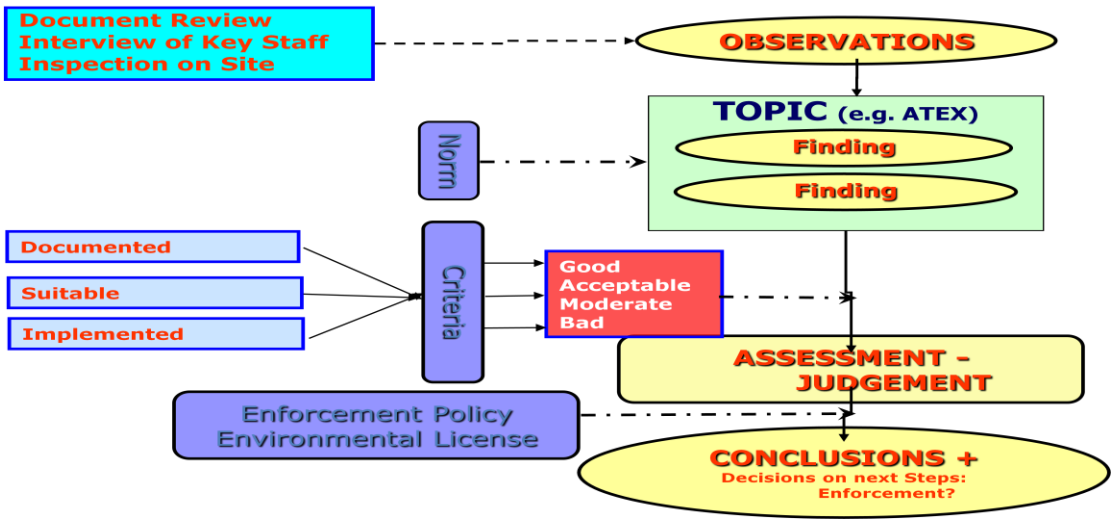


Figure 8: DCRM Inspection process

Setting priorities

Overview

The DCMR has developed a risk model which is used to analyse and inform the planning of inspections called RIAN. The model determines inherent and binding risks. RIAN also considers themes (i.e. water, soil, safety) and assesses the inherent risks associated with each theme. To be able to analyse all 27.000 companies within the Rijnmond area, they have been divided into 36 sectors. The companies within these sectors carry out similar activities (i.e. refineries, hospitality sector). In order to determine and identify inherent risk levels (0-3) specialists were asked to identify and assess the inherent risks from the themes of different sectors on a scale of zero to 3. They were tasked on an individual basis to score and this was then compared on a sector level followed by agreement of an overall risk score for the sector.

The risk model also takes into account the behaviour of the companies, including past non compliance and disturbances such as complaints, the type of area and major incidents. The inspection frequency of the theme is related to inherent risk scores. Behaviour scores and analysis of the particular sector drivers are used to determine the nature, depth and complementary approaches to inspections. Company specific approaches are also applied based on the sector approach over the longer term.

Safety management systems are also considered under Seveso regulated sites which involves assessing controls and trends. This provides a score which is labelled rejected, acceptable and wanted. The assessment would move the sector/company along the inherent/risk axis.

The highest risk branch is refineries and chemical industry. The lowest risk sectors are offices. DCRM have identified 200 or so high risk companies. The approach is new and has been in place for around a year.

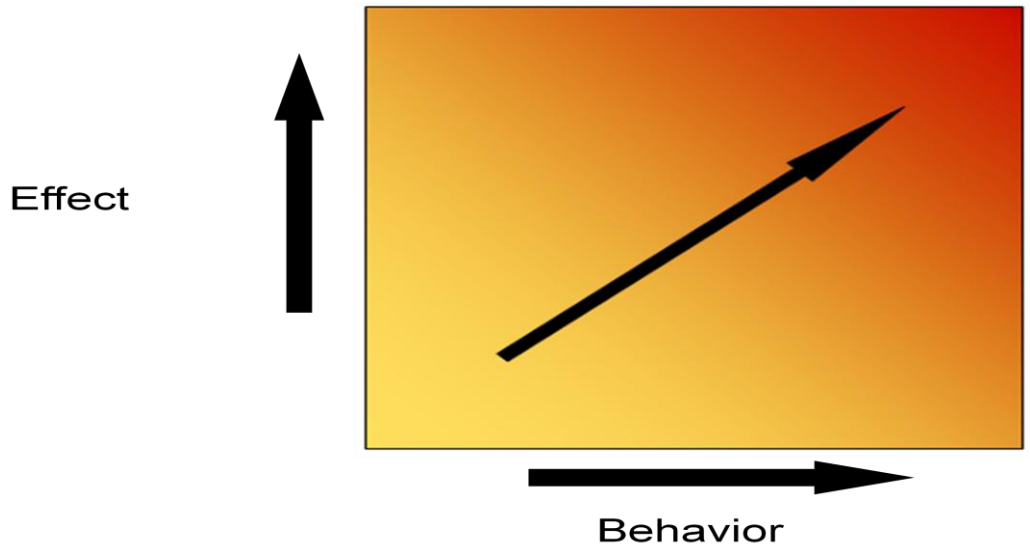


Figure 9: Environmental impact relates to behaviour in the DCMR risk analysis model

Based on the risk analysis done in the risk model the DCRM are currently particularly focused on safety and air with a high risk and behavioural score (3). This includes companies with poor compliance and many complaints.

Less preventive focus is currently given to the following themes:

- Transport
- Energy
- Noise
- Wastewater
- Waste
- Soil
- Smell

Yearly inspection cycle

Generally inspections are done every 4 years and focus on specific issues or a particular theme. Air and Safety are considered high risk and inspections are done on an annual basis. High risk companies and companies with a bad behaviour score receive a tailored approach which is company specific and problem focused.

The inspection plans cover a four year time period. Seveso sites are inspected once a year and the environmental requirements are inspected more often. Inspectors are responsible for the same site for between 3-5 years.

When planning inspections the availability of resource from the authorities is considered, total site refurbishing stops, and special projects.
The inspection process involves an initial inspection in the first year and then followed by 4 follow up inspections within the five year cycle.

Topics covered during an inspection are planned across the 5 year cycle and the number of days spent on site is assessed based on the conditions, inherent risk and safety performance.

Routine and non-routine inspections

Routine inspections are carried out in line with the inspection plans on specific themes identified through the Risk Analysis model. However, inspections are also carried out for other themes by sampling.

Most Seveso inspections are planned and announced in writing and the industry is given advance warning of the inspection. A small number of inspections are not announced with focus on routine jobs done safely and according SMS.

Follow up inspections are also done in order to ensure action has been taken.
The inspectors usually executes one ore more inspections at 13 high risk companies during a year.

Enforcement and penalties

Operators must comply with the requirements of the permit. Compliance is enforced through:

- Administrative action.
- Financial penalties.
- Partial withdrawal of permit or consent.
- Closure

Enforcement is based on two principles effect and behaviour. The impact of the violation on the environment is important as well as considering the operator's behaviour:

- Has the operator taken action to reduce risk?
- Is it a repeat offence or more serious?
- Should a stricter penalty be considered due to the accumulation of non-compliances?

The DCMR will take the following enforcement action in order if a noncompliance is reported or detected:

Administrative law sanctions

1. Provide an official written notice
2. Set a conditional bond to ensure the issue is rectified
3. Invite senior management from the operator to discuss the issues with DCMR management
4. Apply administrative coercion
5. As a last resort withdraw the permit.

Criminal law sanctions
Making an official report to the public prosecutor.
Prosecutions will then be enacted either through the use of a criminal prosecutor resulting in a fine or in rare cases imprisonment.

Formal Civil measures
Additionally a case can be put forward as a civil court case managed by the competent authority.

Incidents and accidents

The DCMR also deals with complaints from all of South Holland through their control room and has an emergency response- room which is manned 24 hours and 7 days a week by staff who is available on phone watch duty. The phone watch role is critical and needs knowledge of the region, companies, current permit and enforcement issues as well as the duties of other authorities.

This also includes close links with the port authority and the emergency services and working procedures.

Rotterdam sees around 100,000 ships coming in and out every year and it can sometimes be difficult to differentiate whether smoke is coming from a ship or installations. The DCMR does a lot of preparatory work with business in order to minimise complaints. Any investigations are done by an inspector but roles are circulated to ensure staff has an up-to-date understanding of issues, businesses and complaints.

The DCMR has adopted a number of new techniques to help them improve, prevent and reduce the numbers of complaints. The organisation has introduced the use of electronic noses which have been placed all around the Rotterdam area. They cost €2,000 each and signal changes in air composition, identifying location and recording data in real time. Any major change in concentrations will trigger red/orange dot on the real time monitoring system.

Figure 10: Electronic nose

This means the DCMR is able to identify potential issues before they are alerted by the public and the location of the breach without actually leaving the premises. So inspectors can be sent out on site to investigate the breach and then speak to the appropriate culprit if necessary.

The fact that DCMR has adopted electronic noses has also encouraged industry to follow, so many of them now also have their own. The operators in the control room are also able to monitor and ensure any issues are investigated in a timely manner as the electronic noses provide real time data.

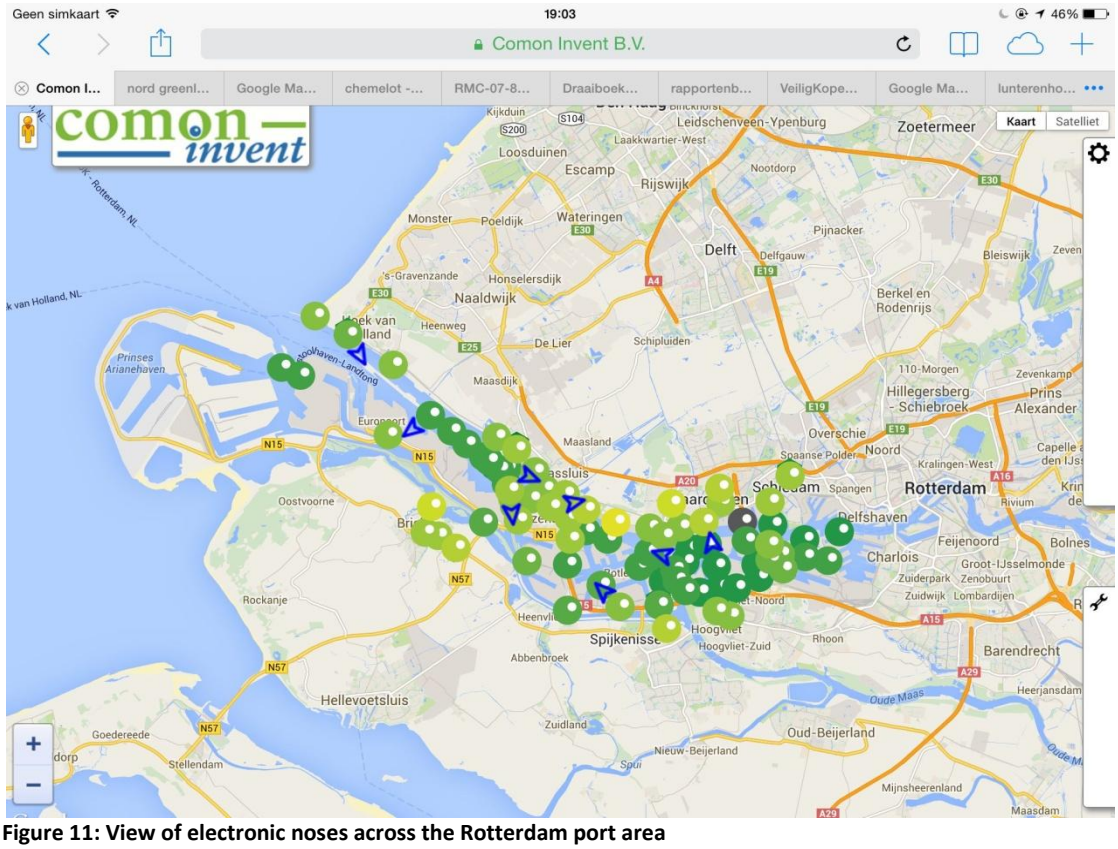


Figure 11: View of electronic noses across the Rotterdam port area

The Field worker on duty is responsible for investigating potential issues, substantiating complaints on noise, smell and other nuisances. They also provide the front office for inspection and enforcement. They have the power to instruct plant supervisors to stop activities and eliminate the issue. There are generally 15 people on the rota and have back-up available in case they are needed.

Electronic noses can be programmed to look for specific components identified through analysis of complaints in particular areas and based on past experiences. The e-nose is then programmed to monitor for specific finger prints which will trigger an alarm in the control room allowing the DCMR to respond quickly to any issues and identify the source. This approach has been particularly effective in preventing complaints on smells.

The DCMR Incident room received 25,000 reports from the region in 2013 (2012):

- 7500 on stench (5500)
- 7000 on noise(8000)
- 6000 (6000) on airplane noise
- 6000 (5500) reports from companies
- 300 (250) incidents

The DCMR also manages complaints relating to noise pollution from bars/restaurants which require them to ensure there is extra staff available at weekends. However, there has been a significant reduction in complaints this year as the municipality has invested in noise sensors for bars and restaurants which allow them to self monitor. These also transmit real time data to DCMR which can see whether they are compliant and trigger a response without having to send someone out.

The equipment is reasonably expensive at €40,000 per venue but the access to real time data, online registration and ability for self monitoring have been effective in reducing complaints.

DCMR are on Facebook and Twitter but the incident room does not report on social media at present.

If there is an incident companies are obliged to report it to the authorities as a requirement of their permit. Companies will register a report when they start non-routine activities such as flaring and incident reports are produced. When they contact the central incident number they are connected to all emergency services at the same time so the first mobile response can be initiated. This can include connecting them to the police control room, emergency control room of the fire brigade, the harbour coordination centre, water board.

Defining objectives and strategies

The DCMR determines and plans inspections on an annual basis. Project based inspections are planned each year (17 in 2014) including around 3400 inspections each year focused on a particular sector or industries with medium to high risk scores which in the past have included the following:

- Recycling and waste
- Petrol stations
- Combustion plants
- Chemical industry
- Dry bulk
- Refineries

The DCMR uses a sector based approach which involves analysis of historical findings in inspections, incidents and complaints as well as previous behaviour and plan the approach accordingly. This includes planning the type of inspections and what complementary approaches to use.

Sector plans exist which include risk analysis of relevant themes which form the basis for the company specific problem approach. For example:

- Chemical industry
- Tank storage and handling
- Refineries

The DCMR Sector-based approach is informed by the following:

- Analysis of historical findings in inspections
- Analysis of historical incidents and complaint
- Analysis of previous behaiour
- Plan with approach on relevant themes

Sector plans are drawn up based on what complementary approaches to use, a quick scan, inspection on administrations, and collaboration with other supervising authorities or sector organisations.

The focus each year is on themes of safety and air which have high scores: this generally includes:

- BRZO (Seveso) audit, PGS 29 storage tanks, critical safety features, safety culture
- Combustion emissions, MVP/VOC emissions and PRTR registrations

The DCMR establish inspection plans which are agreed with the municipalities/province with details around what they will deliver within that particular municipality/province.

Planning and review

The approach is also then evaluated including recommendations for future plans and scores. The DCMR has around 150 inspectors regulating around 27,000 companies including around 100 Seveso sites and 100 other high risk sites.

The RIAN score is monitored for themes and the number of inspections are evaluated in sub categories in terms of how often sites have been visited in the past four years and the types of inspections. This allows the DCMR to make decisions on intensifying inspections if necessary.

The inspectors also get together to discuss objectives, focus, and what areas to follow up on when conducting the inspections. A review is carried out to ensure each topic has been covered at least once in a five year period.

Execution framework

Objective
To find out what provisions, instructions, arrangements, procedures, equipment etc, are in place to enable inspectors and other staff to carry out inspection activities on the ground.

Protocols

The HR policy within the DCMR is based on five principles:

1. Sustainable development of employees
2. Deliver what is expected from our customers
3. Fulfil regional and national (expert role)
4. Maintain the expert role
5. Focus on continuous development of skills and competencies

Qualifications

The DCMR expect Seveso inspectors to have a university or academic degree, preferably chemical engineering or chemical process technology. Experience within the sectors is also highly valued. They should also have audit experience.

The DCMR also have a number of corporate soft skills which Inspectors are also expected to have in addition to the technical skills such as:

- confidence
- flexibility
- persuasiveness
- immune to stress
- decisiveness

There are some corporate competencies as well:

- entrepreneurship
- responsibility

There are also established criteria for everyone doing responsible for permitting, inspection and enforcement tasks. This includes the level of education and the frequency/length of time spent on tasks. It also includes the level of experience, complementary knowledge and work experience.

The Netherlands are in the process of establishing national standards for inspectors regarding the skills and experience necessary to carry out their tasks.

Equipment

All inspectors are equipped with personal protective equipment (PPE) which includes shoes, protective clothing, glasses, helmet and an orange bag for transport.

Training

Field officers and emergency incident operators are specially trained every two years on common issues in the area over the past few years. There is also a 6 month internal training programme available before staff is allowed to work independently in the incident room or go out into the field.

A skills gap analysis has been done to identify gaps and training is being developed specifically focused on these gaps. There are a number of ways which inspectors can receive appropriate training:

- in house training programmes
- external training
- on the job training

The DCMR also have a tool box training which provide 2 hrs sessions on specific topics. There is also a programme for new inspectors where a mentor is appointed and the new inspector do at least 3 inspections as a co-auditor and at least 2 inspections as an auditor with the mentor present as a coach. Inspectors are also encouraged to get certificates and professional registrations in areas such as safety requirements (SCC certificate for SHE checklist contractors and Safety instructions/passport).

Training on particular issues such as soil, water, air and land also exists. The DCMR are in the process of translating the national quality criteria and applying this to the DCMR and will begin filling any gaps by providing training in particular on Seveso as DCRM is one of a number of specialist Seveso centres in the Netherlands.

Communication with public and operators

The DCMR has clear objectives and a mission statement which they share. The mission is to:

Ensure safety and quality of life in Rotterdam

Much work has also been done to better understand the public and their perception on risks. In general people tend to accept fewer risks in their lives. The public believe that the DCMR are in control and the ambition of the organisation is to brand themselves better to ensure people understand what they do.

The DCMR has a keen interest in their local community and encouraging better participation and engagement. In order to better understand the public's attitude to real risk versus perceived risks the DCMR commissioned a study which indicated that:

- 60-75 year olds are the most involved (may have worked in the local petrochemical industry for years, are well informed, have technical know how and are well represented in public engagement meetings
- 35-55 year olds may be self conscious about their position and the environment. They may work in industry, live in the area and are familiar with the risks involved and accept them. They don't worry too much.
- 25-35 year olds have low awareness of the risks involved with Seveso and IED companies. They are more concerned about getting the most out of their social lives.

In order to improve engagement and communication the DCRM has developed a communication strategy and are increasingly using social media channels. The Communication strategy aims to enhance the reputation of the DCMR as a regulatory agency and making the work more visible to the general public. It will also support improving interactions between the agency and the general public by improving the relationship between the two.

The strategy supports a multi channel approach which involves the use of:

- Social media & webcare
- Local newspapers
- The DCMR website
- Local broadcasting station
- Community councils (Shell, City of Vlaardingen, Rozenburg, Hoek van Holland)
- Engagement with interest groups, industry associations and other regulatory bodies.

The DCMR use their website to inform the public about incidents and accidents. The public can also report incidents and register complaints online. They also use twitter

to report what is being done to solve complaints. Twitter is monitored and questions are responded to.

They share information on non-compliance and enforcement with the public as well as publish administrative penalties and decisions regarding enforcement actions. Information regarding what the company should do in order to comply is also shared.

The DCMR shares a lot of information on their website and actively publish the following:

- Complaint information (Real-time and yearly)
- Incidents (on short notice and after 24 hours more info)
- air quality (Real-time and yearly)
- Summary Seveso inspection report
- Financial penalties (administrative law)
- Issued Permits (new and overview on a map)

More information is now also being made available on violations and enforcement action. Seveso inspection report summaries will be made available online including no technical language, covering the results of the inspections. The summary reports will also include violations as well as improvements and good performance. This is a nationwide initiative in the Netherlands.

Execution and reporting

Objective
Find out how routine and non-routine inspection activities are carried out and reported and how data on inspections carried out, their outcomes and follow-up are stored, used and communicated.

Measuring and monitoring of air emissions and ambient air quality

In the Netherlands operators are required by their permits to do continuous monitoring as defined by IPPC/IED or measurements at certain times of the year. Emission reports are done on an annual basis as part of the PRTR report (kg/year). The DCMR check the reports when they receive them and if they are accepted these are submitted to the national database on emissions. Once the report is checked the DCMR will consider whether they are compliant or not. Limits and permit conditions will be checked and if they are not compliant the DCMR will take enforcement action.

The DCMR has 14 automatic monitoring sites and one mobile vehicle which monitor for example but not exclusively SO2, NOx, ozone, CO, and Benzene. The monitoring data is shared on the internet every hour and is made accessible to the general public.

The DCMR also has a semi-automatic monitoring network which has 11 stations monitoring polycyclic Aromatic Hydrocarbons, Fluor, TSP and heavy metals. The monitoring is done in accordance with strict international quality systems (NEN-norm) and provides DCMR with important air quality data.

Air pollutants have shows a drastic reduction since the 70s in the Netherlands. The use of the electronic noses also provides real time data regarding air concentrations and an alarm is triggered if the concentration of a particular pollutant increases and an investigation is initiated.

The DCMR utilises a number of high tech solutions to monitor air quality on a continuous basis. For example:

- Solar Occultation Flux which provides a continuous measurement of the IR spectrum of the sun by means of an FTIR analyzer in a mobile unit. This technique provides an understanding of the make up of a VOC plume in real time but can only be used in good weather.

- Differential Absorption Lidar (DIAL). Uses a laser technique to detect and quantify VOC plumes.
- Infra red cameras – makes VOC vapours visible but does not measure amounts. The camera can detect a vast number of compounds such as methane, ethane, propane, and benzene.
- Electronic noses – provides real time information on the presence and dispersion of industrial emissions.

Inspection database

The DCMR uses a national inspection system (GIR/Cognos) which contains the inspection plans and supports reporting on Seveso inspections. The Joint inspection register is a national reporting IT Tool which in real time connects the inspectors to the data. The system provides real time information on inspection processes including compliance and enforcement data.

The data system now also includes management information around the safety performance of companies and assessment inspection policies. The system contains the inspection plans and provides monthly updates on inspections, enforcement and evaluation of safety reports which can be accessed by Seveso coordinators from all authorities.

The system will show any ongoing and historic enforcement action for a specific company. It will also highlight if a safety report is overdue being submitted for a particular company.

The Management information on the safety performance of a particular company provides a useful dashboard and provides an automatic email update to users. The management information also includes information on the severity of non compliance and follow-up and who is in the lead for taking enforcement action.

The IBM Cognos tool is used to look at performance and assess the inspection policy regarding whether they are focusing on the right things. Cognos provides very detailed reports for people who are responsible for inspectors. It provides all the details around planned inspections, includes performance indicators and ensures reports are sent to the company within 8 weeks of an inspection taking place.

The system also contains detailed enforcement information, registers the steps in the process and the time allowed to prepare and ensure non compliance is followed up. The system also captures information around Category 1 – 2 pollution incidents.

Non compliances are rated according to severity and then interventions are chosen based on the categories and the seriousness of the incident. Belgium also uses this system in order to ensure enforcement is proportionate to the non compliance.

However, there are no fixed criteria.

Complaints

Incidents and complaints are reviewed and analysed to identify themes and conduct root cause analysis in order to improve operations.

Data analysis in combination with analysis of complaints data has resulted in a number of companies mounting their own electronic noses so they can detect and signal large emissions and take early action. These emissions are not necessarily breaches of permit conditions. This has contributed towards a drop in public complaints for companies using e-noses.

Performance monitoring

Objective
Find out how the environmental authority assesses its performance and the environmental and other outcomes of its activities.

Companies must submit annual environmental reports to the authority that granted the environmental permit and the Ministry of Infrastructure and Environment, if the threshold value of a substance from the substances list of the Pollutant Release and Transfer Register (PRTR) Regulation is exceeded (*PRTR-regulation and Title 12.3 Wet milieubeheer*) (the implementation in The Netherlands of Regulation (EC) No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register).

The report must contain information on:

- The amounts of pollutant released to the air, water and land.
- Off-site transfers of waste and of pollutants in waste water including heavy metals, pesticides, greenhouse gases and dioxins.
- Energy efficiency.
- Fine dust.

In the case of oil, gas and intensive livestock companies more details are required.

Under the PRTR-reports, the national government checks compliance with international agreements and where a company exceeds the rules an environmental permit may be changed or withheld.

Companies and local authorities must report and review their emission details in electronic form (www.e-mjv.nl). Specific rules are set out in the Environmental Reporting Guidelines (*Leidraad Milieurapportages*).

After registration, all relevant public information on the reports is available online (www.emissieregistratie.nl).

DCMR

The DCMR monitors and reports delivery of inspection plans to the municipalities and where unplanned issues arise, discussions are initiated around the requirements for additional resource. The budget is divided into sectors and principles are used to calculate inspection hours using the bad behaviour score. If the municipality has particular issues these will be communicated and the DCMR will take action as required provided additional funding is provided if it is over and above the agreed inspection activities.

The DCMR also benchmark performance on a sector basis such as the chemical industries safety management system performance.

The company specific problem approach also allows the DCMR to determine high risk activities such as the storage with the most significant risk and inspection requirements based on incidents and behaviour.

Sector plans are monitored in regard to the RIAN Score and evaluation of the approach is carried out including recommendations for future plans and scores based on experience.

For example, the DCMR links the number of inspections within a theme with sub categories and the performance with analysis of findings and violations within the different themes in a sector. These analyses are then used to inform the budget setting process and distribution of resources across different sectors.

Part D – Meeting with Business representatives

Objective

To gain an understanding of the relationship between the environmental authority and industry and how this works in practice.

Company engagement

Representatives from a number of businesses regulated by DCMR joined us in their offices, including:

- Huntsman
- Shell
- DHL Supply Chain (Dangerous Goods Storage)

The Review team were interested to explore how DCRM engages with their regulated sites, the frequency, perception and coordination.

The business representatives found that it was easy to have a constructive discussion with DCMR and the staff is knowledgeable. Tightening rules over the past few years have lead to some discussions but in general the relationship is very good.

In the Netherlands there are four separate competent authorities for Seveso who all visit the sites separately. Seveso/IED and other environmental inspections are done separately. Most inspections are planned and the site is notified in advance. However, unannounced inspections do happen about once a year for Seveso sites.

However, the number of inspections can be resource intensive for the industry especially in the current economic climate with constantly reducing resources.

A few of the sites also have ISO14001 accreditation and their own internal corporate environmental management systems which can sometimes cause complications as they do not necessarily align with permitting/compliance requirements.

Sites usually renew permits every five years and find that it can sometimes be challenging and costly to extend existing plants. One of the plants referred to a permit application being made in 2006 and not being granted until 2011. Generally it is fairly straight forward to apply and receive a permit particularly for noise and air which generally takes around 13 weeks. A water permit can take up to 9 months.

Generally specialists have to be hired to do reports required for the environmental permits and at times reports have to be redone many times before they are accepted by the regulator.

The sites also have communication groups in place to facilitate an ongoing relationship with the local community and try and ensure any plans for expansion or changes are shared. They also open the plants to the pubic once every two months to explain to the public how the site operates and how it works if there is an incident.

Overall the service from DCRM is good and the industries appreciated having an inspector who knows and understands their site and business. For this reason they are supportive of DCMR not circulating their inspectors too often. Due to the tightening standards the operators have the impression that enforcement is not always proportionate and sometimes doesn't encourage open communication as they are penalised for being open.

An example used was one site having a minor fire which they didn't report within the required 15 mins but a day later. As a result the site received a conditional bond for non compliance. Another example shared involved a site expanding operations to include an incinerator. During the first year of having an incinerator on site the permit stipulates the operator was not allowed to take the unit off line for more than 500 hrs. During the start up phase they had some issues with operations and ended up having to do this but were still complying with emissions limits. However, because the unit was stopped for longer a conditional bond was issued. The incident has very limited impact on the environment as was still under the daily emissions limits. The operators would like DCMR to be more proportional in their regulation and consider the size of the plant and focus on the risk and impact on the environment and human health.

Summary of findings

Good practice

Part B – Permitting Activities

- The Netherlands have established centres of expertise for specific sectors and DCMR will hire people from them if necessary to support their activities on permitting or hire out their staff if needed to others
- Strong public engagement throughout the permitting process
- NCEA (*need to spell out who they are*) gives advice on the Environmental Impact Assessment procedure (third party)
- The level of sign-off depends on the level of public objections
- Fact finding throughout the permitting process
- The responsibility for permitting and inspections have been concentrated in 28 Execution bodies from over 400 Municipalities and 12 Provinces

Part C – Performing Inspection Tasks

Planning of inspections

- Planning of inspections combines risk assessments made in RIAN with facts and figures in the national GIR database which supports the expert judgement of the inspectors.
- Use risk based assessments to classify sectors and inform inspection frequency based on RIAN for all installations, from Seveso and IED installations to bakeries
- Rank installations in accordance to risk and link the frequency of inspections to the risk assessments
- The use of different approaches depending on the inherent risk such as a sector based approach, complaints driven for the lowest risk, and customised approach for the highest risk sites

Execution Framework

- Time spent on inspections is linked to the risk assessment and company/sector behaviour
- Good planning and clear inspection process
- Joint visits by inspectors and permit writers to the company when expanding/changing permits to ensure all parties are clear on the obligations under the permit

Training and Development

- Specific person who is responsible for managing professional development for inspectors and all staff
- Use of personal safety passports show companies that DCMR take health and safety seriously and makes access to sites more efficient

- Approach to training – for example, setting criteria for inspectors, assessing current skills and identifying training needs before devising training, use of mentors
- Formal evaluation of inspectors following coaching
- Focus on continuous development for staff
- Having clear established criteria for the recruitment of permit writers is useful

Enforcement

- Engage with senior managers within industries who are not compliant for discussion to incentivise change and improvements
- Use a clear enforcement strategy and take account of the willingness of the industries to comply and the environmental impact/risk to human health and environment to determine the type of sanction used.
- Developed a joint enforcement strategy which is applied by all competent authorities involved in Seveso regulation

Communication with the public

- Communication strategy and identification of target groups
- Incidents are published within 24 hrs along with actions taken on joint website with other emergency services
- Good consultation with the public in the permitting process
- Summaries of Seveso inspection reports and enforcement action taken are published on the internet

Execution and reporting

- Use of electronic noses and infrared cameras to identify vapour leaks
- The use of e-noses has led to industry following suit (and self monitoring) as some companies now use this approach in order to mitigate environmental emissions
- Use of innovative techniques to monitor air pollution and noise pollution
- Concentrate on solving problems and using data to inform identifying issues rather than focusing on the number of controls
- Companies have to report on incidents and flares through CIN
- Good incident processes in place
- Have a centralised incident management team which operates 24/7

Performance Monitoring

- Use of electronic noses with programmed prints which signal large emissions in order to enable early action. E-noses on the public roads signal changes in air composition and their readings can be used to identify the source of the emissions.
- Central system for performance reporting for inspections
- Use of quantity indicators for inspections

Part D – Meeting with Industry

- Good relationship with industries they regulate
- Operator understands their enforcement measures and processes
- The operators respect DCMR staff and consider them to be well qualified

Opportunities for development

Part B – Permitting Activities

- Do not regularly review permits or have a regular review cycles for permits – for instance there could be a risk that industries are not compliant with new BAT within the timescales set by Europe (IED). In order to deal with this the DCMR has now set up time limited review cycle for the implementation of new BAT conclusions under IED. Consideration should be given to make this permanent.
- Processing permits takes a minimum of 6 months and can take up to 18 months for complicated permits. For permits which include new build or expansions the 6 months term is met.
- Could consider streamlining the permitting process for water and environmental permits to one to ensure the industry has one process to follow

Part C – Performing Inspection Tasks

Planning of inspections

- Should consider applying risk criteria such as emissions and environmental criteria on an installation level (IED)
- Should consider using Environmental Management Systems as an indication of good behaviour for IED industries
- Could consider using IDepend to identify appropriate interventions for specific companies and evaluate the effectiveness of these interventions

Execution Framework

- Could consider charging the companies for inspections and permits
- Could consider having a national IT system which would allow inspectors to share experiences and information on the performance of different companies
- Should consider distinguishing between new and existing installations
- Should reconsider the use of standardised and elaborate tools and guidance (be clear about what is needed for legal compliance) for Seveso inspections in order to ensure consistency across the Netherlands for industry
- Should consider peer reviews within the Netherlands between the new execution bodies

Training and Development

- Could consider increasing the number of joint inspections done by new inspectors with a mentor
- There is an opportunity to expand the safety passport concept to cover other areas, for instance safety measures in the event of an incident with chlorine
- Should consider being more flexible with recruitment criteria, for example not make criteria a legal requirement

Enforcement

- Should consider applying judgement in the application of the enforcement strategy to ensure proportionality
- Consider streamlining enforcement instruments and penalties under the Seveso regime
- Should explore the possibility of closer engagement with policy makers (ex ante and ex post evaluation)

Communication with the Public

- Should consider publishing summaries of all inspection reports on the internet (IED)
- Consider more use of social media
- Could consider following up public reactions/levels of understanding of the public to inspection reports/enforcement notifications to ensure these are suitable/appropriate
- Could consider publishing notes on when/if the company becomes compliant as part of the summary

Execution and reporting

- Could consider using the data to develop action plans to reduce complaints from the public
- Could consider using the data and the analysis to target repeat offenders through campaigns for example

Performance Monitoring

- Could consider using additional results orientated indicators
- Should consider using collected data more effectively

Part D – Meeting with Industry

- Industry suggested that inspectors should consider focusing more on high risk activities
- The operator suggested that permit writers should remain the same for a longer period and inspectors could be changed more frequently

Conclusions

It is a testament to the hard work of the review team and the hosting country that the review went very well. The review was characterised by the very open and generous atmosphere in which discussions with the review team took place. The excellent presentations and notes produced in advance as well as the site visits considerably enhanced the understanding of the review team.

The review team's broad conclusions are that the objectives of the area of EC environmental law within the scope of the review of the DCMR are being delivered in Rotterdam, and that arrangements for environmental inspection and enforcement are broadly in line with the RMCEI.

Lessons learnt from IRI process

Lessons learnt from this IRI are:

- The DCMR value and prioritise public engagement
- The DCMR has a strong focus on improvement and use innovative approaches and technology to support them in their work to improve the environment.
- Having a clear focus for this IRI enabled the project team and IMPEL to tailor the team of inspectors with appropriate experiences from across Europe which contributed to enhancing discussions.
- The thorough preparation by the project team and the DCMR enabled interesting exchanges of experiences.

Considerations to be made for future IRIs:

- Could be useful to explore all key milestones and timescales for these in more detail during the pre-meeting.
- Balancing experienced IRI reviewers with new participants who were experienced Seveso inspectors worked well.
- Future IRIs should consider asking the presenters to consider key discussion points to frame the exchange and enhance the learning between the visiting inspectors and the host nation as was the case with the DCMR IRI.
- Identifying a clear focus for the IRI is important as it enables the IRI project team to ensure appropriate experiences within particular sectors is present.

Annex 1 Terms of References for IMPEL Project

TERMS OF REFERENCE FOR IMPEL PROJECT

No	Name of project
2013	*IMPEL Review Initiative of the Dutch Environmental Agency "DCMR" in the Rotterdam region*

1. Scope

1.1. Background	The IRI scheme is a voluntary scheme providing for informal reviews of environmental authorities in IMPEL Member countries. It was set up to implement the European Parliament and Council Recommendation (2001/331/EC) providing for minimum criteria for environmental inspections (RMCEI), where it states: "Member States should assist each other administratively in operating this Recommendation. The establishment by Member States in cooperation with IMPEL of reporting and advice schemes relating to inspectorates and inspection procedures would help to promote best practice across the Community." The potential benefits of the IRI include: -providing advice to environmental authorities seeking an external review of their structure, operation or performance by experts from other IMPEL member countries -encouraging capacity building in environmental authorities in IMPEL member countries -encouraging the exchange of experience and collaboration between these authorities on common issues and problems -spreading good practice leading to improved quality of the work of inspectors and other officials working within environment authorities -environmental authorities and contributing to continuous improvement of quality and consistency of application of environmental law across the EU ("the level playing-field").
1.2. Directive / Regulation / Decision	The European Parliament and Council Recommendation on Providing Minimum Criteria for Environmental Inspections in Member States (2001/331/EC)
1.3. Article and description	Recommendation 2001/331/EC – Scope and definition. Article 4: "In order to promote best practice across the Community, Member States may, in cooperation with IMPEL, consider the establishment of a scheme, under which Member States report and offer advice on inspectorates and inspection procedures in Member States, paying due regard to the different systems and contexts in which they operate, and report to the Member States concerned on their findings."
1.4 Link to the 7th EAP	Priority objective 4: To maximize the benefits of Union environment legislation by improving implementation within the 7th EAP calls for extending binding criteria for effective Member State inspections and surveillance to the wider body of Union environment law, and further developing inspection support capacity at Union level, drawing on existing structures, backed up by support for networks of professionals such as IMPEL, and by the reinforcement of peer reviews and best practice sharing, with a view to increasing the efficiency and effectiveness of inspections

1.5.Link to MASP	The IRI satisfies 3 out of the 4 main goals and priorities of IMPEL's MASP 2013-15: "1. Promoting more coherent design and implementation of environmental law"; "2. Building the capacity of IMPEL members," and, "3. Collaborating with partners and stakeholders". "In the coming three years, IMPEL's projects will focus on the following areas: • assisting members to implement new legislation, • **building capacities in member organizations including through the IMPEL review initiatives,** • trans-frontier shipment of waste, • 'problem' areas of implementation identified by IMPEL and the European Commission."
1.6 Benefits	To undertake an IRI of the *Dutch Environmental Agency "DCMR" in the Rotterdam region* as described under point 2.5 The benefits of the project are: □ DCMR will benefit from an expert review of its systems and procedures with particular focus on conformity with the RMCEI, □ the participants in the review team will broaden and deepen their knowledge and understanding of environmental inspection procedures □ other Member States will benefit through the dissemination of the findings of the review through the IMPEL network. DCMR will, in particular, benefit from an expert review of the risk based planning of inspections at IED and Seveso installations which is currently being developed in the DCMR region, taking into account the criteria in the RMCEI and the IMPEL Guidance book on IED inspections. The DCMR will use these recommendations to improve their internal procedures.
1.7 Definition	The IRI will focus on companies with IED permits and companies that have to comply with the Seveso Act, and is expected for the second half of 2014. The IRI will be undertaken by a review team consisting of maximum 8 IMPEL members who will carry out the review mentioned above and identify good practice and opportunities for development. This particular IRI will include the following aspects: □ give an overview of the main national environmental policies applicable to the authority, □ legal and constitutional setting of the agency, □ structure and managerial organization, including funding, staffing and lines of authority and responsibility for regulatory and policy functions, □ procedures for assessment of training needs and provisions for training and maintaining current awareness, □ qualifications, skills and experience of inspection staff, □ overview of the environmental permitting regime, including permitting procedures, resources, and permit structure, amongst others, □ workload related to IED and Seveso sites & other industries in terms of permitting and compliance requirements, □ setting the priorities for IED and other installations: the evaluation aspects, the risk assessment and classifications of risk, □ procedures, criteria and guidance for the development and revision of inspection plans and inspection schedules, □ procedures for carrying out of routine and non-routine inspections, including follow-up and reporting, □ procedures related to penalties in cases of non-compliance with permits or illegal activities,

	? performance monitoring: evaluation of the output and where feasible environmental outcome of inspection activities. The arrangements for internal assessment of the quality of inspection performance and for improvement if appropriate, ? relationships between public environmental authorities in charge of controls and self-check / self-monitoring systems, ? systems used to collect and store data on the Inspectorate's activities and the use of these data.
1.8	In addition to the benefits listed in Section 1.6, tangible products will include: ? A written report of the review for DCMR, ? Relevant extracts from the review report, as agreed with DCMR, for dissemination to IMPEL members and the European Commission, Training and Educational material on "lessons learned" and on examples of good practice for incorporation into training schemes of IMPEL member country inspectorates.

.

2. Structure of the project

2.1. Participants	The review team will consist of a review team leader, rapporteur(s) and approximately five experts from different IMPEL member countries. The nomination of the team members will be decided upon in agreement with DCMR and an IRI Ambassador. We suggest to add the colleagues dealing with Seveso related inspection from Flanders (Belgium) to attend this review.
2.2. Project team	See 2.1.
2.3. Manager Executor	The Project manager will be Marinus Jordaan, working as a senior policy advisor on enforcement for the DCMR Environmental Agency.
2.4. Reporting arrangements	The results of the Review will be reported by the team leader and a report will be submitted to the IMPEL General Assembly for approval.
2.5 Dissemination of results/main target groups	Target audience: - IMPEL members, - DCMR. - Other related regional inspection agencies (BRZO RUD) in the Netherlands, concerned with Seveso Directive. Dissemination of the result of the project: IMPEL: The report will contain review background, participants and expenditure and recommendations on its dissemination and follow up. For dissemination the communication strategy of IMPEL will be used as well. DCMR: The Report will be available on the website of the DCMR Environmental Agency. The review host will also ensure that a copy of the final report, including a synopsis/executive summary summarizing the key points will be sent to relevant key stakeholders e.g. the Minister for Environment, Heads of Departments, other related regional inspection agencies (BRZO RUD) and the DCMR Director. The review host will also request, in advance, that a representative from the board of the DCMR and other relevant key stakeholders attend the final day presentation of results by the team leader and have an opportunity to meet with the team leader during the pre-review meeting. Other related regional inspection agencies (BRZO RUD) in the Netherlands:

	A (limited) group of representatives of these agencies will get the opportunity to attend the final day of presentation.

3. Resources required

3.1 Project costs and budget plan	The project will involve the following steps: - Pre-meeting of the review team leader & rapporteur with the host authority to finalise the scope and timing of the review, - Preparation of information on the DCMR Environmental Agency and its activities by the Dutch contact persons (after a previous contact with the Review Team Leader in order to establish the relevant and needed information) and circulation to Review Team members. - Review over a period of 3.5 days comprising - 2.5 days for review and assessment - 0.5 days for comparison and collation of team views - 0.5 days for feedback, discussion and finalization of report. All meetings and the final report will be conducted in English. No interpretation is required. Preparatory meeting: Covered by IMPEL: Travel for team leader and rapporteur: 2x360= €720 Accommodation for team leader and rapporteur (2 evenings) 90x2x2 =€360 total = €1080 Project: Covered by IMPEL: Travel for 7 participants 8x360 = €2880 Accommodation for participants x 4 evenings 90x7x4 =€2520 total = €5400 We estimate that the total costs for the IRI review would be €6480 Personnel costs from the candidate inspectorate are not included in this assessment.	
3.2. Fin. from IMPEL budget	*: € 6480*	
3.3. Fin. from MS (and any other)	*Host country will cover:* *- meeting facilities for the project* *- costs for the hard copies* *- coffee breaks* *- lunches* *- 1 official welcome dinner in Pre-meeting and 1 in Review* *Cost to be confirmed depending on approval but will not exceed €2000*	
3.4. Human from MS	Four people to participate in preparatory meeting and project plus other preparatory work = 4 * 4.5 = 18 days.	

4. Quality review mechanisms

Progress monitoring and quality assessment will be carried out by IMPEL Cluster I. Cluster I will appoint a contact person for this project.

5. Legal base

5.1. Directive/Regulation/ Decision	The European Parliament and Council Recommendation on Providing Minimum Criteria for Environmental Inspections in Member States (300/331/EC)
5.2. Article and description	*Recommendation 2001/331/EC is a substantial element of IMPEL' MAWP.*
5.3 Link to the 7th EAP	Priority objective 4: To maximise the benefits of Union environment legislation by improving implementation within the 7th EAP calls for extending binding criteria for effective Member State inspections and surveillance to the wider body of Union environment law, and further developing inspection support capacity at Union level, drawing on existing structures, backed up by support for networks of professionals such as IMPEL, and by the reinforcement of peer reviews and best practice sharing, with a view to increasing the efficiency and effectiveness of inspections;

6. Project planning

6.1. Approval	At IMPEL 12th General Assembly, December, 2013.
(6.2. Fin. Contributions)	
6.3. Start	Work on composing the Review team can commence after approval. The review itself is expected for september 2014 with a pre-review meeting to be held in june 2014.

Annex 2 Notes from the pre-meeting

European Union Network for the Implementation and Enforcement of Environmental Law

PRE-MEETING DCMR IRI
ROTTERDAM, NETHERLANDS, 1 JULY 2014

Participants: Maarten de Hoog , Jochen, Robert Mout, Marinus Jordaan, Koen De Kruif, Terry Shears, Elen Strale

Objectives for discussion

- Practical arrangements – dates/site visit/programme/ draft agenda
- Invitees – project team/ who will attend the final presentation
- Scope of the review – discuss the checklist and questionnaire in detail
- Useful background information around the system and recent experiences to set the context for the review

Notes of the discussion

Priorities for the IRI

- DMCR would like the IRI team to be as open and honest as possible. It is important the team is comfortable questioning current approaches.
- DCMR are very interested in understanding the participant countries approaches to permitting, enforcement and compliance and the governance thereof. Is it delivered separately or together? What are the experiences of the different ways of delivering these services?
- Terry stressed to DCMR the IRI is not an audit it is a peer review providing an opportunity for technical experts to exchange experiences and discuss challenges. It is an opportunity to take a fresh look at your organization and how you do things.
- DCMR have experienced a lot of press attention and whistle blowers relating to a specific site they manage recently and are interested to learn from others who have had similar experiences. They have a particular focus on improving inspections and enforcement as well as cooperation with industry through permitting. How do you ensure you retain one voice? They are also

very interested in the participants' experiences of change, press and media management. How does monitoring, enforcement, permitting and inspections inter relate? They are also interested in public engagement and complaints management

- DCMR would also like the IRI to specifically focus on Seveso – engagement with industry, processes, planning and inspections. In particular coordinated inspections, how to keep track of efforts. They are also interested in how best to manage IPPC/IED and Seveso industries and how to regulate these.
- Another key focus should be monitoring specifically VOC and air quality. Should DCMR have its own monitoring stations or do you just look at BAT?
- Incident management would also be of interest. When an incident happens how can this be effectively coordinated and managed? What are the participants' experiences of coordinating emergency response? Different solutions to managing this?
- DCMR would also like to share experiences on how the process in the Netherlands compare to other countries in terms of national/regional responsibilities and the benefits and draw backs around this. What works? What doesn't work so well?
- Trans-boundary issues would also be of interest
- Discussions around experience from others around the management of compliance and the implementation of different systems around fines would also be of interest. In particular around administrative, conditional and levels of non compliance.

Background

- Historically Rotterdam has had challenges around air quality in particular around emissions from industries.
- DCMR regulates 27000 businesses which includes anything from refineries to bakeries.
- There are 6 Seveso agencies across the Netherlands which previously were 12 Provinces
- Inspectors can give fines for Seveso
- DCMR have a team of permitters (25FTEs)
- They manage permits from chemistry, refineries, tank installations, oil terminals industries. The biggest sector is chemical storage and chemical refineries
- DCMR manage new and existing permits (including renewal and maintenance). They also assess new permits around spatial planning where they for example would check with harbour authorities if there is noise/natura 2000/SSSI issues. They consider environmental issues and which aspects before approving. Usually economic drivers supersede all other issues.

- The Netherlands consider the effect and the risk by a multiplier and make an assessment of the space required.
- Permits have a 6 week consultation period which allows for public participation. All recommendations and comments will be defined in the final permit.
- The DCMR is also responsible for passing judgment on the Environmental Impact Assessment for new developments. They hold regular platform meetings with residents who are interested where projects are shared and discussed.
- Permit applications often go through a pre-application discussion where they try resolving key issues before the permit is submitted. This involves detailed meetings and discussions to ensure the permit application is viable.
- The official time is 6 months to process a permit which includes 6 week period of public participation and 12 weeks to make a permit. They process 80% of applications within these timescales
- New builds take priority but smaller adjustments are also prioritised. Revision of permits following new legislation takes a lot of time and is a challenge.
- Tools, permit conditions for special sectors have standardization and use EU regulations and other minimum levels detailed in reference documents
- They apply BAT and national BAT Docs exist regarding soil protection, environmental impact and national regulations

Actions

- Koen to review the budget to ensure it allows another participant – savings have already been made by having a shorter pre-meeting
- Koen to speak to Michael about dinner arrangements and the approach to travel arrangements
- Koen to organize lunches for the IRI
- Terry and Elen to send a note to the IRI team to ask for their CV's and travel details. Ensure participants try and arrive on the Monday evening to participate in a pre-meeting in advance of the actual IRI.
- Marinus and Koen to organize hotel accommodation for the IRI in October
- Marinus to make amendments to the draft agenda and programme to reflect discussions and priorities identified through discussions with Maarten.
- Marinus and Koen to circulate all presentations a week in advance of the IRI, this should include information around the legal framework and context within which DCMR operates
- All agenda leads to draft presentations along the lines of our discussions and the questionnaire in advance of the IRI. Presentations to be circulated to IRI

participants in advance where possible. Presentations should be kept short to allow time for discussion.