Briefing Document: Review of IMPEL's Risk-Based Waste Inspection Plan (2022-2024)

This briefing document summarizes the key themes, important ideas, and significant facts presented in the provided excerpt from the IMPEL report "2022-24iiiwg9-wmce-risk-based-inspection-plan-waste (1).pdf".

## **Report Details:**

- Title: Minimum Content Risk Based Waste Inspection Plan
- Report Number: 2022(III)WG9
- Date of Report: 31/12/2024
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## Introduction to IMPEL:

- **Purpose:** IMPEL (European Union Network for the Implementation and Enforcement of Environmental Law) is an international non-profit association of environmental authorities from EU Member States and other European countries.
- **Objective:** To promote more effective application of environmental legislation through awareness raising, capacity building, information exchange, and international enforcement collaboration.
- **Recognition:** IMPEL is a widely known organization mentioned in EU legislative and policy documents, including the 8th Environment Action Programme and the EU Action Plan: "Towards a Zero Pollution for Air, Water and Soil".
- **Expertise:** The network's participants possess unique qualifications in both technical and regulatory aspects of EU environmental law.

## Main Themes and Important Ideas:

1. **Strategic and Risk-Based Approach to Waste Inspections:** The central theme of the report is the necessity of a strategic, planned, and risk-based approach to environmental inspections at waste treatment facilities. This is driven by the requirements of EU legislation, particularly Recommendation 331/2001/EC and

Directive 2008/98/EC (Waste Framework Directive - WFD) as amended by Directive 2018/851. The report states that "an effective and efficient inspection system can derive exclusively from strategic planning. It defines the reference context, the priorities, the objectives and available resources." The report defines a "minimum content Inspection Plan" that can serve as a blueprint for inspection bodies.

- 2. **Compliance with EU Legislation:** The report directly addresses the obligations set forth in EU environmental law.
- **Recommendation 331/2001/EC:** This recommendation establishes minimum criteria for environmental inspections, emphasizing the need for publicly accessible inspection plans and periodic inspections. The report explicitly states that the plan is prepared "in accordance with the requirements defined in the Recommendation... which establishes minimum criteria for environmental inspections in the Member States".
- **Directive 2008/98/EC (WFD):** Article 34 mandates "appropriate periodic inspections by the competent authorities" for establishments carrying out waste treatment operations. The report highlights that its plan "declines the objective of the above mentioned Article 34 of the WFD delegated to the Inspection Body."
- Directive 2018/851 (amending WFD): Recital 17 emphasizes ensuring that waste that has ceased to be waste (End-of-Waste - EoW) complies with Union law and prioritizes inspection of waste streams posing higher risk, innovative recovery processes, and waste recovered for use in other Member States. The report incorporates these priorities into its risk assessment methodology.
- 1. Integration of Inspection Activities with Planning and Prevention: The report advocates for a new approach based on the "integration between planning of inspection activities, prevention activities and from the awareness that an effective and efficient inspection system can derive exclusively from strategic planning." This implies a shift from reactive responses to a proactive strategy aimed at preventing environmental violations.
- 2. **The Planning Cycle of Environmental Inspections:** The report outlines a four-stage planning cycle:
- **Planning:** Drafting the inspection plan, defining objectives and priorities, and gathering information. Risk assessment is crucial at this stage to determine inspection frequency.

- **Execution of inspections:** Implementing routine and non-routine inspections using established tools and procedures.
- **Reporting:** Preparing reports on inspection results and storing them in an accessible database.
- **Evaluation:** Verifying the achievement of objectives using indicators and making necessary adjustments to the plan.
- Risk Assessment as a Prioritization Tool: A core element of the plan is the systematic environmental risk assessment to prioritize inspection activities. The report states, "One of the main issues of the inspection planning is risk assessment." The primary goal of risk assessment is "to set the frequency of site visits at waste treatment facilities by the Inspection Body." This ensures that limited resources are directed to facilities with the highest potential environmental risks.
- 2. **The Integrated Risk Assessment Method (IRAM):** The report adopts and adapts the IRAM methodology, developed within the IMPEL network, for risk assessment at waste recycling installations. IRAM defines risk as a function of the severity of the consequence (effect) and the probability.
- Impact Criteria: These measure the potential impact of the source (facility) on the receptor (environment/human health). Examples include facility type, evidence of incidents, quantity of waste input (Hazardous and Non-Hazardous), transfrontier shipment of waste, sensitivity of the surrounding environment, social perception, and emissions to the environment. The report notes that these criteria are based on the priorities defined in Recital 17 of Directive 2018/851.
- **Performance (or probability) Criteria:** These measure the likelihood that an impact may occur and consider factors like compliance with permit requirements, presence of an Environmental Management System (EMS), and the attitude of the operator.
- **Methodology Principles:** Inspection frequency is determined by the highest score achieved in impact criteria, adjusted based on operator performance.
- 1. **Defining Inspection Frequencies Based on Risk:** The risk assessment results are used to assign facilities to different risk classes (high, medium, low) and determine the frequency of routine inspections. The report provides a proposed definition of frequencies, suggesting different approaches for each risk class (e.g., on-site inspections every 1-3 years for high-risk, every 4-5 years for medium-risk, and primarily non-routine for low-risk facilities, potentially relying on self-assessment questionnaires).

- 2. **Strategy for Promoting Compliance:** The report suggests a multi-faceted strategy beyond just on-site inspections, including:
- Analyzing questionnaires from operators.
- Periodically analyzing self-monitoring data and reports.
- On-site inspections.
- Technical meetings with operators.
- Sending self-assessment questionnaires to operators.
- 1. **Key Environmental Issues (KEIs):** The report recognizes that not all environmental issues at a waste facility have the same relevance. Identifying KEIs can help simplify inspections and improve efficiency by focusing on the most relevant aspects. Examples of KEIs mentioned include fire risk from storing certain waste types, odours and biological contamination from organic waste, atmospheric pollution from incineration, and soil/water contamination and leachate from landfills.
- 2. Accountability by Operators: The report emphasizes the importance of operator accountability and proposes building upon good self-monitoring and reporting practices. Operators should be required to collaborate by sending regular Self-Assessment Questionnaires and compliance reports, preferably through on-line applications. This data can be used to update IRAM calculations, evaluate environmental performance, and focus inspection efforts. The report also suggests classifying operator behavior and considering aggravating circumstances when non-compliance is detected.
- 3. **Objectives and Targets:** The report sets out both short/medium-term internal objectives for the inspection body (e.g., ensuring routine and non-routine inspections, performing sampling, improving inspector skills) and general medium/long-term objectives (e.g., decreasing waste sent for disposal, increasing compliance, decreasing accidents). These objectives are intended to be measurable through indicators and targets.
- 4. **Performance Monitoring and Plan Review:** The report highlights the importance of systematically monitoring input, output, and outcome indicators annually to assess the achievement of goals and identify areas for improvement. The plan is to be reviewed annually.

- 5. **Information Management:** A robust information management system is deemed necessary to store inspection data, facilitate communication with other bodies and the public, and track follow-up actions.
- 6. **Training Needs:** The report recognizes the need for continuous training for environmental inspectors to ensure homogeneity and development of knowledge and skills in areas such as reporting violations, enforcement, sampling, waste categories, End-of-Waste, and safety protocols.

## Key Facts and Data:

- The report provides a framework for a Waste Inspection Plan covering a specific geographical area and time period (e.g., a region for xxxx years, from 1/1/20yy to 31/12/20zz).
- The plan covers "all waste treatment facilities/specific facilities" in the territory, requiring an official list and mapping of these facilities (Annex I).
- Human resources available for inspection activities need to be quantified (days/months/% of time).
- The report lists various instrumental resources needed for inspections, including laboratories, IT applications, sampling equipment, drones, vehicles, and PPE.
- The IRAM methodology utilizes scoring for both impact and performance criteria (ranging from 0 to 5 for impact and -1 to 1 for performance). Examples of evaluation grids are provided in Annex III.
- Annex II details the results of the risk assessment, showing the distribution of facilities into high, medium, and low-risk categories and the resulting inspection frequency (in months). The total number of facilities in each risk category is to be quantified.
- The proposed inspection frequencies vary by risk class (high: every 1-3 years, medium: every 4-5 years, low: only non-routine, potentially with self-assessment every three years). Annual self-reporting is suggested for low-risk facilities.
- The report suggests annual targets for various input, output, and outcome indicators, emphasizing a declining trend for non-compliances, actions taken due to noncompliances, accidents, and exposures, and an increasing trend for facilities in full compliance with BAT and waste recovery percentages.

In conclusion, this IMPEL report provides a comprehensive framework for developing a riskbased inspection plan for waste treatment facilities in Europe. It emphasizes the legal basis for inspections, the importance of strategic planning and risk assessment using the IRAM methodology, and the need for clear objectives, targets, performance monitoring, and continuous improvement. The report aims to enhance the effectiveness and efficiency of environmental enforcement in the waste sector and promote compliance with EU environmental legislation.