

DIRECCION GENERAL DE CALIDAD Y EVALUACIÓN AMBIENTAL

# Spanish report on the Information on implementation and evidence base pursuant to Article 18(1) in conjunction with Annex VI of Directive 2004/35/EC

**April 2022** 



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### 1. INTRODUCTION

Directive 2004/35/EC, of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, established in article 18 of its original version, Reports and review:

"Member States shall report to the Commission on the experience gained in the application of this Directive by 30 April 2013 at the latest. The reports shall include the information and data set out in Annex VI."

In accordance with this requirement, Spain sent its report to the Commission in April 2013, following the template agreed within the "ELD government expert group", that works together with the European Commission. This report was updated in April 2014.

The Directive has been amended four times, the last one through Regulation (EU) 2019/1010 on the alignment of reporting obligations in the field of legislation related to the environment, that adapted the reporting requirements.

The current drafting of Directive 2004/35/EC establishes in its article 18, Information on implementation and evidence base:

- "1. The Commission shall collect information from Member States, that has been disseminated in accordance with Directive 2003/4/EC of the European Parliament and of the Council (\*), and as far as available, on the experience gained in the application of this Directive. That information shall cover the data set out in Annex VI to this Directive and be collected by 30 April 2022 and every five years thereafter."
- (\*) Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (OJ L 41, 14.2.2003, p. 26).
- 2. On the basis of the information referred to in paragraph 1, the Commission shall carry out an evaluation of this Directive and publish it before 30 April 2023 and every five years thereafter.
- 3. By 31 December 2020, the Commission shall develop guidelines providing a common understanding of the term "environmental damage" as defined in Article 2.

Annex VI of Directive 2004/35/CE, information and data referred to in article 18(1), establishes:

"The information referred to in Article 18(1) shall cover cases of environmental damage under this Directive, with the following information and data for each instance:

- 1. Type of environmental damage, date of occurrence and/or discovery of the damage. The type of environmental damage shall be classified as damage to protected species and natural habitats, water and land as referred to in point 1 of Article 2.
- 2. Description of the activity in accordance with Annex III.

Member States shall include any other relevant information on the experience gained from the implementation of this Directive."



In 2016, the European Commission published the Commission's report to the European Parliament and to the Council in the context of Article 18.2 of Directive 2004/35/EC, together with the European Commission's working document REFIT, which assess the implementation of Directive 2004/35/EC.

This report establishes that the two main objectives of the Directive are to prevent significant environmental damage when there is an imminent threat, and to remedy such damage when it occurs.

In this sense, recital (2) of the Directive establishes that "The prevention and remedying of environmental damage should be implemented through the furtherance of the "polluter pays" principle".

Furthermore, Law 26/2007 says in its first recital that the environmental liability regime established is based on the prevention and the "polluter pays" principles.

The 2016 European Commission's report emphasises that these objectives are sought by first, incentivising operators within the scope of application of the Directive to take a preventive approach, such as establishing an environmental management system, environmental safety measures, carrying out risk assessments, investing in risk abatement technology and taking out sufficient financial security.

And second, establishing that in the case of imminent threat of, or actual significant damage, the operators are liable to take the necessary preventive or remedial action and to bear all costs.

Therefore, in order to evaluate the Directive, it is necessary to take into account the different elements and measures taken in order to implement the environmental liability legislation and meeting its objectives, ensuring the compliance with the prevention and the "polluter pays" principles:

- Elements that allow the evaluation of the prevention of environmental damage, such as the fostering of environmental risk analysis and risk management measures, that are important in order to reduce accidents that can cause environmental damage and to limit their consequences, the development of guidance documents, protocols and technical tools, or the implementation of information, dissemination and training actions.
- Elements that allow the evaluation of the remedying of environmental damage, such as the cases of environmental damage processed under this Directive, the implementation of financial security schemes that guarantees that the costs of the necessary measures are borne by the liable operator, or the development of protocols and guidance documents.

In this sense, it is important to highlight that the evaluation of the Directive cannot be carried out taking into account only and exclusively information on the cases of environmental damage processed.

In order to comply with the requirements established in article 18.1 and Annex VI of Directive 2004/35/EC, and to present the elements that are necessary to evaluate it, this report includes the following information:

- A section with all the information required in article 18.1 and Annex VI (1 and 2) of Directive 2004/35/EC regarding the cases of environmental damage processed under this Directive in Spain, since April 2007.
- II. A section with other relevant information on the experience gained from the implementation of Directive 2004/35/EC in Spain since April 2007, in accordance with the last paragraph of Annex VI of Directive 2004/35/EC.



### Main objectives of Directive 2004/35/EC

- Prevent significant environmental damage when there is an imminent threat
- Remedy such damage when it occurs

### Elements necessary to take into account to evaluate Directive 2004/35/CE

- Elements that allow the evaluation of the prevention of environmental damage, such as the fostering of environmental risk analysis and risk management measures, that are important in order to reduce accidents that can cause environmental damage and to limit their consequences, the development of guidance documents, protocols and technical tools, or the implementation of information, dissemination and training actions
- Elements that allow the evaluation of the remedying of environmental damage, such as the cases of environmental damage processed under this Directive, the implementation of financial security schemes, that guarantees that the costs of the necessary measures are borne by the liable operator, or the development of protocols and guidance documents



## 2. INFORMATION REQUIRED IN ARTICLE 18.1 AND ANNEX VI OF DIRECTIVE 2004/35/EC

As mentioned before, Annex VI of the Directive, information and data referred to in article 18(1), establishes:

"The information referred to in Article 18(1) shall cover cases of environmental damage under this Directive, with the following information and data for each instance:

- 1. Type of environmental damage, date of occurrence and/or discovery of the damage. The type of environmental damage shall be classified as damage to protected species and natural habitats, water and land as referred to in point 1 of Article 2.
- 2. Description of the activity in accordance with Annex III.

In the report Spain sent to the Commission in April 2013, and updated in April 2014, there were 12 cases.

Since 2013 and until the end of 2021, 49 cases of environmental liability have been processed.

Since there have been some updates on the cases reported in 2013, the following table includes the information required in article 18.1 and Annex VI (1 and 2) of Directive 2004/35/EC, regarding the 61 of environmental liability processed in Spain since April 2007, until de end of 2021.

Case	Date of occurrence	Date of discovery	Type of environmental damage	Annex III Directive 2004/35/EC Activity code	Annex III Directive 2004/35/EC description of the activity
1	15/03/2010	15/03/2010	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
2	Unknown	2010	Protected species and water	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
3	08/06/2011	08/06/2011	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
4	Unknown	May 2007	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
5	September 2012	31/10/2012	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
6	20/10/2011	20/10/2011	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
7	14/05/2008	14/05/2008	Protected species, water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods



Case code	Date of occurrence	Date of discovery	Type of environmental damage	Annex III Directive 2004/35/EC Activity code	Annex III Directive 2004/35/EC description of the activity
8	07/12/2011	15/12/2011	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
9	25/02/2011	25/02/2011	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
10	14/10/2007	14/10/2007	Land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
11	30/06/2010	30/06/2010	Water and land	3	All discharges into the inland surface water, which require prior authorisation in pursuance of Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances, discharged into the aquatic environment of the Community
12	17/10/2008	17/10/2008	Water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
13	05/09/2013	05/09/2013	Natural Habitat	6	Water abstraction and impoundment of water subject to prior authorisation in pursuance of Directive 2000/60/EC
14		2015	Natural Habitat	5	The discharge or injection of pollutants into surface water or groundwater which require a permit, authorisation or registration in pursuance of Directive 2000/60/EC.
15	26/08/2017	26/08/2017	Water, land and natural habitat	2	Waste management operations, including the collection, transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and aftercare of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
16	25/03/2013	25/03/2013	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
17	Unknown	20/08/2009	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
18	01/03/2014	01/03/2014	Land and habitat	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
19	Unknown	2014	Water	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
20	Unknown	08/10/2015	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
21	Unknown	2016	Natural Habitat	2	Waste management operations, including the collection, transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and aftercare of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
22	November 2010	November 2010	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products



Case code	Date of occurrence	Date of discovery	Type of environmental damage	Annex III Directive 2004/35/EC Activity code	Annex III Directive 2004/35/EC description of the activity
23	01/06/2010	01/06/2010	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
24	08/02/2011	08/02/2011	Water, land and natural habitat	2	Waste management operations, including the collection, transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and aftercare of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
25	02/09/2011	02/09/2011	Water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
26	23/11/2011	23/11/2011	Water	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
27	17/03/2013	17/03/2013	Water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
28	04/10/2013	04/10/2013	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
29	09/02/2014	09/02/2014	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
30	05/02/2015	05/02/2015	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
31	19/12/2016	19/12/2016	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
32	End 2013	End 2013	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products



Case code	Date of occurrence	Date of discovery	Type of environmental damage	Annex III Directive 2004/35/EC Activity code	Annex III Directive 2004/35/EC description of the activity
33	2011	2011	Land	2	Waste management operations, including the collection, transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and aftercare of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
34	2013	2013	Land	2	Waste management operations, including the collection, transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and aftercare of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
35	2018	2018	Water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
36	August 2018	August 2018	Protected species	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
37	15/01/2016	15/01/2016	Protected species	6	Water abstraction and impoundment of water subject to prior authorisation in pursuance of Directive 2000/60/EC
38	06/02/2017	06/02/2017	Protected species	Non Annex III	
39	06/02/2017	06/02/2017	Protected species	Non Annex III	
40	06/02/2017	06/02/2017	Protected species	Non Annex III	
41	25/10/2018	25/10/2018	Land	Non Annex III	
42	January 2018	25/01/2018		Non Annex III	
43		01/10/2016	Water and land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
44	11/10/2012	11/10/2012	Land	8	Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road (5) or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (6) or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods
45		01/07/2017	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
46	25/09/2017	25/09/2017	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
47	27/01/2016		Water and land	2	Waste management operations, including the collection,



Case code	Date of occurrence	Date of discovery	Type of environmental damage	Annex III Directive 2004/35/EC Activity code	Annex III Directive 2004/35/EC description of the activity
					transport, recovery and disposal of waste and hazardous waste, including the supervision of such operations and after-care of disposal sites, subject to permit or registration in pursuance of Council Directive 75/442/EEC of 15 July 1975 on waste (2) and Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.
48		2017	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
49		June 2009	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
50	13/10/2020	14/10/2020	Water	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
51	20/04/2021	20/04/2021	Water	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
52	06/02/2020	6/02/2020	Water and land	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
53		27/10/2008	Water and land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
54	31/05/2019	11/06/2019		7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
55	11/12/2019	11/12/2019	Water, land, protected species and natural habitat	1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
56	14/01/2020	14/01/2020		1	The operation of installations subject to permit in pursuance of Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (1). That means all activities listed in Annex I of Directive 96/61/EC with the exception of installations or parts of installations used for research, development and testing of new products and processes
57	17/08/2020	25/11/2020	Land	7	Manufacture, use, storage, processing, filling, release into the environment and onsite transport of (a) dangerous substances; (b) dangerous preparations; (c) plant protection products; (d) biocidal products
58	12/08/2021	12/08/2021	Protected species	Non Annnex III	
59		29/10/2021	Land and natural habitat	Non Annex III	
60	May 2018	18/02/2020	Protected species	Non Annex III	
61	October 2019	08/11/2020	Protected species	Non Annex III	

Table 1. Information required in article 18.1 and Annex VI (1 and 2) of Directive 2004/35/EC, regarding the cases of environmental damage processed in Spain since April 2007, until de end of 2021



In addition to this information required in article 18.1 and Annex VI (1 and 2) of Directive 2004/35/EC, the following tables provide additional information available on these cases.

Table 2 shows information on the dates of beginning and end of the procedure, prevention, avoidance and remedial measures, as well as the state of the procedure.

Case code	Procedure beginning	Procedure end	Prevention measures beginning	Prevention measures end	Avoidance measures beginning	Avoidance measures end	Remedial measures beginning	Remedial measures end	State of the procedure
1	13/04/2010	01/03/2011	16/03/2010	01/03/2011	16/03/2010	01/03/2011			Closed
2	12/11/2010	08/10/2012							Closed
3	14/06/2011	02/09/2015	08/06/2011	12/11/2011	08/06/2011		09/07/2011	06/12/2011	Closed
4	23/08/2011	August 2014	23/08/2011	03/04/2012	23/08/2011	03/04/2012	03/04/2012	12/12/2012	Closed
5	16/11/2012	18/11/2015	31/10/2012		31/10/2012				Closed
6	02/11/2011								Closed (evaluation phase)
7	27/10/2008	19/04/2012			14/05/2008	21/05/2008	22/05/2008	23/12/2009	Closed
8	23/11/2011	08/11/2016	07/12/2011	08/04/2012	07/12/2011	08/04/2012	August 2013	September 2014	Closed
9	02/03/2011	29/03/2011			25/02/2011	29/03/2011			Closed
10	19/10/2007	03/03/2008	14/10/2007	14/10/2007	14/10/2007	14/10/2007	14/10/2007	23/10/2007	Closed
11	07/07/2010	19/11/2010			30/06/2010	19/08/2010			Closed
12	07/11/2008	15/06/2015			07/11/2008	07/11/2008	01/12/2008	23/02/2018	Closed
13	04/03/2014	10/11/2014	17/06/2014	31/07/2014					Closed
14	23/12/2015	01/02/2016			04/04/2016	30/06/2018			Closed
15	26/12/2017		26/08/2016	25/08/2017	26/08/2016	07/10/2016			Opem
16	05/06/2013	April 2017	March 2013	April 2017	March 2013	April 2017	March 2013	April 2017	Closed
17	09/12/2013	February 2016	09/12/2013	February 2016	09/12/2013	February 2016	09/12/2013	February 2016	Closed (evaluation phase)
18	25/03/2014	May 2018	March 2014	May 2018	March 2014	May 2018	March 2014	May 2018	Closed (evaluation phase)
19	21/08/2014	20/05/2015							Closed
20	03/12/2015	19/12/2016	03/10/2015	22/03/2016	03/10/2015	22/03/2016	03/10/2015	22/03/2016	Closed
21	24/02/2016	22/11/2016							Closed
22	13/04/2016	07/02/2018	September 2016		September 2016		September 2016	07/02/2018	Closed
23	15/06/2010	09/12/2010			02/06/2010	06/06/2010			Closed
24	08/02/2011	04/04/2012			09/02/2011	30/04/2011			Closed
25	17/10/2011	16/03/2012			03/09/2011	05/09/2011			Closed
26	16/01/2012	16/03/2012			23/12/2011	31/01/2012			Closed
27	03/04/2013	19/06/2013			25/03/2013	31/03/2013			Closed
28	11/10/2013	10/04/2015			16/10/2013	18/10/2013			Closed
29	18/02/2014	04/06/2014	10/02/2014	22/12/2014	10/02/2014	22/12/2014			Closed
30	05/02/2015				15/02/2015				Open
31	22/12/2016				18/12/2016	15/01/2017	0		Open
32	01/09/2014	09/02/2017					September 2014	April 2016	Closed
33	09/11/2011	21/11/2014	2012	2014					Closed
34	11/08/2016	14/06/2017	2014	2014	2014	2014			Closed
35	17/12/2018	March 2019	January 2019	August 2019	January 2019	August 2019	January 2019	March 2019	Closed (evaluation phase)
36	05/07/2019	18/02/2020							Open



Case code	Procedure beginning	Procedure end	Prevention measures beginning	Prevention measures end	Avoidance measures beginning	Avoidance measures end	Remedial measures beginning	Remedial measures end	State of the procedure
37	14/12/2016	26/10/2017	01/01/2017	Permanent measure	01/01/2017	Permanent measure			Closed
38	11/04/2017	09/01/2018	16/01/2018	11/01/2019	16/01/2018	11/01/2019			Closed
39	08/03/2017	14/11/2017	20/11/2017	10/04/2018	20/11/2017	10/04/2018			Closed
40	08/03/2017	09/01/2018	12/01/2018	26/02/2020	12/01/2018	26/02/2020			Closed
41	23/11/2018	05/03/2019	06/03/2019		06/03/2019				Open
42	25/01/2018								Open
43	13/12/2016		October 2017				July 2018	July 2019	Open
44	19/10/2012		05/11/2012	End 2012			01/01/2013	October 2013	Open
45	29/12/2017		January 2018		January 2018				Open
46		September 2018			25/09/2017	September 2018		September 2019	Closed
47	27/01/2016	29/06/2021	27/01/2016	14/09/2016	27/01/2016	14/09/2016			Closed
48	23/01/2018								Open
49	26/12/2014						October 2009	18/05/2017	Open
50	30/12/2020	09/06/2021							Closed
51	Ongoing								Open
52	4/03/2020	9/04/2021	13/02/2020	17/09/2021	13/02/2020	17/09/2021	13/02/2020	17/09/2021	Open
53	28/04/2021	28/10/2021							Closed
54	19/06/2019	10/02/2020	31/05/2019	31/05/2019					Closed
55	12/02/2020		12/12/2019	12/02/2020	12/12/2019	12/02/2020	12/02/2020		Open
56	27/01/2020	29/03/2021	14/01/2020		14/01/2020				Closed
57	23/12/2020	23/03/2022	17/08/2020	17/08/2020	17/08/2020	17/08/2020	14/08/2020	23/03/2022	Closed
58	05/11/2021								Closed (evaluation phase)
59	23/12/2021	04/02/2022							Closed
60	29/09/2020	11/12/2020	16/10/2020	03/12/2020	16/10/2020	03/12/2020			Closed
61	26/11/2021								Open

Table 2. Additional information. Information on the dates of beginning and end of the procedure, prevention, avoidance and remedial measures, as well as the state of the procedure



Table 3 shows information on whether primary, complementary, compensatory remedial measures have been adopted for the cases that required them, specifying the measures adopted.

Case code	Primary remedial measures	Compensatory remedial measures	Complementary remedial measures	Primary remedial measures	Compensatory remedial measures	Complementary remedial measures
1	Yes	No	No	Eliminate or neutralise pollution		
3	Yes	No	No	Eliminate or neutralise pollution		
4	Yes	No	No	Eliminate or neutralise pollution		
5	Yes	No	No	Eliminate or neutralise pollution		
6	Yes	No	No	Removal of the pllutant		
7	Yes	No	No	Eliminate or neutralise pollution		
8	Yes	No	No	Eliminate or neutralise pollution		
10	Yes	No	No	Eliminate or neutralise pollution		
11	Yes	No	No	Eliminate or neutralise pollution		
12	Yes	No	No	Removal of the pollutant		
13	Yes	No	No	Removal and management of contaminated land		
14	Yes	No	No	Removal and management of contaminated land		
15	Yes	No	No	Removal of vegetation affected, and removal and management of contaminated land		
16	Yes	No	No	Removal and management of contaminated land		
17	Yes	No	No	Removal and management of contaminated land		
18	Yes	No	No	Removal of vegetation affected, and removal and management of contaminated land		
19	Yes	No	No	Removal and management of contaminated land		
20	Yes	No	No	Removal and management of contaminated land		
22	Yes	No	No	Removal of the pollutant		
23	Yes	No	No	Removal of the pollutant		
32	Yes	No	No	Removal of the pollutant		
35	Yes	No	No	Removal of the pollutant		
43	Yes	No	No	Removal of the pollutant		
44	Yes	No	No	Removal of the pollutant		
45	Yes	No	No	Removal of the pollutant		
46	Yes	No	No	Removal of the pollutant		
47	Yes	No	No	Removal of the pollutant		
50	Yes	No	No	Removal of the pollutant		
52	Yes	No	No	Removal and management of contaminated land		
55	Yes	No	No	Removal of vegetation affected, and removal and	No	No



Case code	Primary remedial measures	Compensatory remedial measures	Complementary remedial measures	Primary remedial measures	Compensatory remedial measures	Complementary remedial measures
				management of contaminated land. Riparian vegetation remediation		
57	Yes	No	No	Removal and management of contaminated land	No	No

Table 3. Additional information. Information on the remedial measures adopted for the cases that required them



# 3. OTHER RELEVANT INFORMATION ON THE EXPERIENCE GAINED FROM THE IMPLEMENTATION OF DIRECTIVE 2004/35/EC

**Directive 2004/35/EC** of the European Parliament and of the Council, of 21 April 2004, on environmental liability with regard to the prevention and remedying of environmental damage, established a common framework for the prevention and remedying of environmental damage in Member States, based on the "prevention" and "polluter pays" principles.

The Environmental Liability Act, **Law 26/2007**, of 23 October, transposing Directive 2004/35/EC, established an administrative framework for the prevention, avoidance and remedying of environmental damage that requires operators who cause or threaten to cause damage to take the necessary measures to prevent damage, or if the damage has already occurred, to take appropriate measures to avoid further damage and to return the damaged natural resources falling within the scope of the law to their baseline condition (their status before the damage occurred).

In addition, Law 26/2007 establishes the obligation for certain operators of the activities included in Annex III of the law to provide a **financial security** enabling them to meet the costs of the environmental liability inherent in their planned activity.

The **Regulation of Partial development of Law 26/2007**, approved by Royal Decree 2090/2008 of 22 December, define among other aspects, the legal framework of mandatory financial security and the criteria for determining and remedying environmental damage.

The Fourth Final Provision of the Environmental Liability Act, Law 26/2007, of 23 October, establishes that the provision of the mandatory financial security, as set forth in its article 24, will be required in a date determined by Ministerial Order.

Thus, **Order ARM/1783/2011**, of 22 June, established the order of priority and calendar for approval of the Ministerial Orders marking the requirement for the mandatory financial security, according to the Fourth Final Provision of the Environmental Liability Act, Law 26/2007.

According to this calendar, **Order APM/1040/2017**, of 23 October, established the date from which the mandatory financial security was to be provided for the activities in AnnexIII of Law 26/2007, of 23 October, classified as priority level 1 and priority level 2, according to the Annex of Order ARM/1783/2011, of 22 June: From 31 October 2018, priority level 1 activities, and from 31 October 2019, priority level 2 activities.

**Order TEC/1023/2019, of 10 October**, set this obligation from 16 October 2021 for activities classified as priority level 3, except for the activities of intensive poultry or pig farming, which must provide a financial security from 16 October 2022.

This is the applicable environmental liability regulatory framework in Spain, that is available in the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website, on the section legal basis.

As mentioned in section 1 of this report, the two main goals of Directive 2004/35/EC, and therefore of Law 26/2007, are to prevent significant environmental damage when there is an imminent threat, and to remedy such damage when it occurs, through the promotion of the prevention and the "polluter pays" principles.

Therefore, the evaluation of the Directive must take into account all the different actions taken to implement both principles.



Since the information on the cases of environmental damage processed is important, specially for the evaluation of the "polluter pays" principle, it cannot be used as the main or the only element for evaluating the Directive. There are other elements equally or even more important in the implementation of the environmental liability legislation, that contribute to the promotion and implementation of both the prevention and the "polluter pays" principles.

For example, the fostering of environmental risk analysis, that are important in order to reduce accidents that can cause environmental damage and to limit their consequences, the implementation of a financial security system, guaranteeing that the costs of the necessary measures are borne by the liable operator, the development of technical tools, protocols and guidance documents, and the implementation of information, dissemination and training actions.

Another important element for achieving the goals of the environmental liability regulation is the promotion of risk management measures, which are all the actions to be taken during the normal operation of the installations or activity in order to reduce their risk, representing a change to the probability of occurrence of an accident, and/or its consequences.

Thus, the measures to be considered before an environmental damage occurs are those of risk management, to be implemented during normal operation or even at the design stage. These measures should not be mistaken with preventive measures, which are those applied when an imminent threat of damage appears. The dividing line between these measures is the occurrence of an event, act or omission which causes an imminent threat of damage. In other words, the installations are no longer functioning normally.

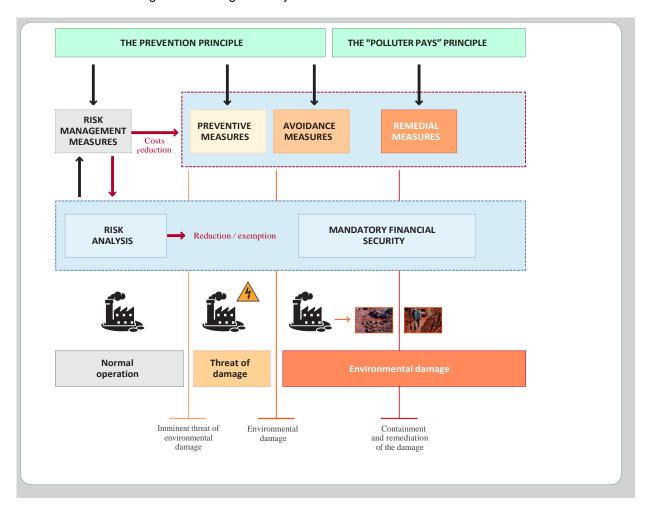


Figure 1: Principles of the environmental liability legislation and main elements for its implementation. Source: Ministry for the Ecological Transition and the Demographic Challenge



This section includes all the relevant information, other than the cases of environmental damage processed described in the previous section, on the experience gained from the implementation of Directive 2004/35/EC in Spain since April 2007, in accordance with the last paragraph of Annex VI of Directive 2004/35/EC: "Member States shall include any other relevant information on the experience gained from the implementation of this Directive".

In this sense, it is necessary to highlight the role of the **Technical Commission for the Prevention and Remediation of Environmental Damages**, created by article 3 of the Regulation of partial development of Law 26/2007, facilitating technical cooperation and collaboration between the State Government, the autonomous communities and local authorities, to share information and advice on preventing and remedying environmental damage. This Technical Commission is attached to the Ministry for the Ecological Transition and the Demographic Challenge through the Directorate-General for Environmental Quality and Assessment.

To achieve the goals of the environmental liability legislation, and facilitate compliance with the obligations established in the law, both for the competent administrations and for operators, the Directorate-General for Environmental Quality and Assessment, in its role as Chair and Secretariat of the Technical Commission for the Prevention and Remediation of Environmental Damages, has fostered the implementation of Law 26/2007 creating a series of technical instruments, guides and protocols for action. It has also organised and participated in training, dissemination, and access to information activities.

The development of these tools, documents and activities is one of several highly effective actions for incentivising operators to adopt a preventive approach, and thus contribute to the goals of the environmental liability legislation.

All the information included in this section is within the **Environmental Liability Information System (SIRMA)**, created in April 2022 to gather all the information related to the Environmental Liability Law 26/2007, as well as access to all the documents, guides and tools developed to facilitate its implementation in Spain.

It also provides access to the Environmental Risk Analysis (ARM), Environmental Damage Index (IDM) and Environmental Liability Supply Model (MORA) computer applications, developed with the aim of helping all operators to carry out their environmental risk analysis and determine the amount of the mandatory financial security foreseen in Law 26/2007. These tools are described in the following sections of this document.

The Environmental Liability Information System (SIRMA), which is available both in Spanish and English through this link: <u>SIRMA</u>





Figure 2. Environmental Liability Information System (SIRMA) main screen. Source: Ministry for the Ecological Transition and the Demographic Challenge



### 3.1 MANDATORY FINANCIAL SECURITY

Law 26/2007 establishes the obligation, for certain operators in Annex III, to provide a mandatory financial security to cover the environmental liability inherent in their activities. This obligation has the following characteristics:

### **Operators obliged**

The operators of the economic activities of Annex III of the law required to provide a financial security are those established in Article 37.2 a) of the Regulation of partial development of the law.

- Operators subject to the scope of application of Royal Decree 840/2015, of 21 September, approving measures to control risks inherent to major accidents involving hazardous substances (SEVESO).
- Operators subject to the scope of application of Royal Legislative Decree 1/2016, of 16 December, approving the consolidated text of the law on Integrated Pollution Prevention and Control (IPPC).
- Waste management operators in the extractive industries, in the case of installations classified as Category A, according to Royal Decree 975/2009, of 12 June.

For the rest of Annex III operators, providing the financial security is voluntary.

### Determination of the financial security and reporting to the competent authority

The determination of the amount of the mandatory financial security for operators required to provide it, must be based on an **environmental risk analysis**, to be performed by the operators or by a third party contracted by them, following the structure established by Standard UNE 150008 or other equivalent standards.

The Regulation of partial development of the law introduces the possibility of producing sectorspecific environmental risk analyses, voluntary instruments on which, following a favourable report from the Technical Commission for the Prevention and Remediation of Environmental Damages, individual environmental risk analyses can be based.

Based on the environmental risk analyses, the operators must perform the following operations, described in Article 33 of the Regulation of partial development of the law:

- a) Identify the accident scenarios and establish the probability of occurrence of each scenario.
- b) Estimate the Environmental Damage Index associated to each accident scenario, following the steps established in Annex III of the regulations.
- c) Calculate the risk associated with each accident scenario based on the probability of occurrence of the scenario and the value of the environmental damage index.
- d) Select the scenarios with the lowest associated environmental damage index representing 95 percent of the total risk.
- e) Set the amount of the financial security as the value of the environmental damage of the scenario with the highest environmental damage index among the selected accident scenarios. This process shall follow these steps:
  - 1. First, the environmental damage generated in each scenario shall be quantified.
  - 2. Second, the environmental damage generated in each scenario shall be monetized, the value of which shall be equal to the cost of the primary remediation project.

The cost of prevention and avoidance measures, representing at least 10% of the cost of the primary remediation project, must be added to the calculated amount.



For helping operators in the elaboration of the environmental risk analysis on which the determination of the amount of the financial security must be based, as well as the estimation of the Environmental Damage Index associated to each accident scenario, and the monetisation of the reference scenario, the Directorate-General for Environmental Quality and Assessment of the Ministry for the Ecological Transition and the Demographic Challenge has developed three software tools, integrated within the **Environmental Liability Information System (SIRMA)**.

These tools are the <u>Environmental Risk Analysis (ARM)</u>, the <u>Environmental Damage Index (IDM)</u> and the <u>Environmental Liability Supply Model (MORA)</u> computer applications, that are described in the next section.

The Regulation of partial development of the law also establish the possibility of developing rate tables (tablas de baremos), which following a favourable report from the Technical Commission for the Prevention and Remediation of Environmental Damage, will enable operators to determine the amount of the financial security without having to perform an individual environmental risk analysis.

Once the financial security has been provided, the operator must submit to the competent authority an **affidavit** stating that it has been determined in accordance with the procedure established in the regulations. The competent authorities shall establish the corresponding monitoring systems enabling them to check operators' compliance with their obligations to determine and provide the financial security.

### Flexibility mechanisms

Once the environmental risk analyses have been performed, the following operators are exempted from the obligation to provide a financial security:

- Operators of activities likely to cause damage remediation which is estimated to cost less than 300.000 euros.
- Operators of activities likely to cause damage remediation which is estimated to cost between 300,000 and 2,000,000 euros, and who can accredit adherence either to the EU Eco-Management and Audit System (EMAS) or to the current UNE- EN ISO 14001 environmental management system.

Nevertheless, these operators must also submit an affidavit to the competent authority.

#### Limited coverage

Preventive, avoidance and primary remedial measures must be covered, to a maximum of 20 million euros.

Voluntarily, operators may provide a financial security for a larger amount. It is important to take this into account, as despite having provided a financial security, which has a limited coverage, unlimited environmental liability is applicable.

### Deadlines for the provision of a financial security

The obligation to provide a financial security is being introduced gradually, as recommended by the European Commission in its report of October 2010 on the application of Directive 2004/35/EC.

Order ARM/1783/2011, of 22 June, established the order of priority and calendar for approval of the Ministerial Orders marking the requirement for the mandatory financial security, according to the Fourth Final Provision of Law 26/2007.

Order APM/1040/2017, of 23 October, complies with the ruling of Order ARM/1783/2011, of 22 June, setting the date from which the mandatory financial security must be provided for the



activities in Annex III of Law 26/2007, classified as priority level 1 and priority level 2, according to the Annex to Order ARM/1783/2011, of 22 June.

According to Order APM/1040/2017, of 23 October, priority level 1 activities must provide a financial security from 31 October 2018, and priority level 2 activities from 31 October 2019.

For priority level 3 operators, Order TEC/1023/2019, of 10 October, establishes 16 October 2021 as the date from which the mandatory financial security will be required, except for the activities of intensive rearing of poultry or pigs, where the financial security must be provided from 16 October 2022.

### Types of financial security instruments

The types of financial security foreseen in Law 26/2007 are:

- An insurance policy meeting the requirements of Law 50/1980, of 8 October, on Insurance Contracts and taken out with an insurance company authorised to operate in Spain.
- A bank guarantee provided by a financial institution authorised to operate in Spain.
- A technical reserve consisting of an ad hoc fund of financial investments backed by the public sector.

The financial security can consist of a combination of any of the above, used individually or complementing each other in terms of amount and guaranteed events.

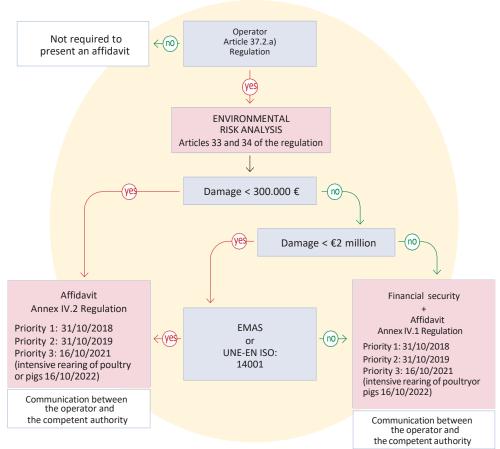


Figure 3: Mandatory financial security.
Source: Ministry for the Ecological Transition and the Demographic Challenge



The mandatory financial security system introduced by Law 26/2007, ensures that measures to prevent and remedy environmental damage and to avoid further damage are taken, and that their financial costs are transferred from society in general to the economic operators responsible for the damage.

This ensures the effective application of the "prevention" and "polluter pays" principles on which the environmental liability regulations are based.

### Benefits of the mandatory financial security system

### Benefits for operators

- A competitive advantage for the operator, improving its corporate image, integrating
  with its corporate social responsibility policies and distinguishing it from others that
  have not covered their risks, leading to lower operational risks and greater viability in
  case of accident.
- In the case of accident, the financial security would cover the remediation costs which would otherwise be borne by the operator and could harm the viability of the business.
- Environmental risk analyses are a tool to help in corporate decision-making, enabling appropriate overall risk management of the facilities.
- It introduces common operating standards for companies with higher potential risk to the environment, ensuring that they cover all their environmental risks. This ensures that the environmental costs of operators are internalised in their production costs.

### Benefits for society

- It promotes the culture of environmental risk management, contributing to a reduction in the number of accidents affecting the environment and minimising their consequences.
- If an accident that cause environmental damage occurs, it is ensured that the prevention, avoidance and remediation costs are not borne by the State and society in general but transferred to the liable operator.

More information on the mandatory financial security system foreseen in Law 26/2007 can be found on the <u>financial security section</u> of the Ministry for the Ecological Transition and the Demographic Challenge web page.



Figure 4. Financial security section of the Ministry web page. Source: Ministry for the Ecological Transition and the Demographic Challenge



### 3.2 TECHNICAL INSTRUMENTS DEVELOPED

This section describes the technical instruments developed since 2007 by the Directorate-General for Environmental Quality and Assessment of the Ministry for the Ecological Transition and the Demographic Challenge to facilitate the implementation of the environmental liability legislation.

### 3.2.1 Environmental Risk Analysis (ARM), Environmental Damage Index (IDM) and Environmental Liability Supply Model (MORA) software tools

As mentioned before, the **Environmental Liability Information System (SIRMA)** provides access to the Environmental Risk Analysis (ARM), the Environmental Damage Index (IDM) and the Environmental Liability Supply Model (MORA) software tools, developed with the aim of helping all operators to carry out their environmental risk analysis and determine the amount of the mandatory financial security foreseen in Law 26/2007.

### - Environmental Risk Analysis (ARM)

It helps in the elaboration of the environmental risk analysis, allowing operators building the "events trees" in which they should be based on, as established in the UNE 150.008:2008 on environmental risk analysis and evaluation Standard.

### Environmental Damage Index (IDM)

It allows the calculation of the Environmental Damage Index or Índice del Daño Medioambiental (IDM), foreseen in article 33 of the Regulation of partial development of Law 26/2007, for one or several accidental scenarios identified within the environmental risk analysis. It allows estimating an order of magnitude of the environmental damage caused of each accident scenario and selecting the reference scenario for calculating the financial security.

### Environmental Liability Supply Model (MORA).

It calculates the economic value of the primary, compensatory and complementary remediation costs of environmental damages that operators may cause in the context of Law 26/2007 in the different accidental scenarios.

The primary remediation costs of the reference scenario will be the amount of the financial security, adding to it the costs of prevention and avoidance measures.

It also provides the best available remediation techniques to restore the resources damaged (and their services) to their baseline condition.

The following table shows the main functionalities of these three tools integrated in SIRMA in relation to the obligations established in article 33 of the Regulation that develops Law 26/2007.



Section of article 33 of the Regulation that develops Law 26/2007	Source of information or SIRMA module
Identify the accident scenarios of the facility and establish their probability of occurrence	ARM module
Estimate the Environmental Damage Index (IDM) of each risk scenario following the steps of annex III of the Regulation of partial development of Law 26/2007	
Calculate the risk associated to each scenario multiplying its probability of occurrence and its IDM	IDM module
Select the scenarios with lowest IDM associated that account for 95 per cent of the total risk	
Establish the amount of the financial security as the environmental damage of the scenario with the highest IDM among the selected in the previous step	Environmental risk analysis
First, quantify the environmental damage generated by the reference scenario in terms of extension, intensity and temporal scale	Environmental risk analysis
Second, calculate the recovery cost of the primary remediation project of the reference scenario	MORA module
Add to this amount the prevention and avoidance costs (10% default)	Environmental risk analysis

Table 4. ARM, IDM and MORA modules included in SIRMA and basic functionalities. Source: Ministry for the Ecological Transition and the Demographic Challenge.

These tools integrated into SIRMA offer other additional functionalities to operators that helps in the implementation of the prevention principle on which Law 26/2007 is based on, and provides operators with a risk management tool of their facilities:

- Operators can use the results of the ARM module to identify elements with a high risk, due to a high probability of occurrence, or the magnitude of the agent involved in an incident. With this information, the operator can implement risk management decisions, e.g., decide to change certain equipment for other with lower failure probability, substitute certain substances for other less pollutant, etc to reduce the probability of occurrence and/or the risk.
- On the other hand, the IDM module can be used as an estimator of the magnitude of the environmental damages linked to each risk scenario. Using it with the probability of occurrence of each scenario (ARM tool) the operator can also take risk management decisions.
- Using the MORA module to evaluate incidents that already happened, to help in the design of the remediation project, with the adaptations needed for each case.

The ARM, IDM and MORA software tools integrated in the Environmental Liability Information System (SIRMA), help in the implementation of the prevention principle on which Law 26/2007 is based on and provides operators with a risk management tool for their facilities.

There are currently 4.879 users registered, and 18.911 ARM, IDM and MORA projects have been created.



These three tools are now interconnected and can be used to create a global project for a facility, but can also be used independently, and are all available through the Environmental Liability Information System (SIRMA), both in Spanish and English, through this link: <u>SIRMA</u>

To help operators, a user's guide has been drafted and is available both in Spanish and English:

SIRMA user's guide

**Annexes** 

SIRMA user's guide (English version)

Annexes (English version)

Finally, it is important to highlight that although the ARM, IDM and MORA tools have been designed for helping operators in the determination of financial security foreseen in Law 26/2007 in Spain, they can also be used for operators in other Member States of the European Union.

### 3.2.1.1 Environmental Risk Analysis (ARM) software tool

This software tool enables the elaboration of environmental risk analysis report, according to UNE 150.008:2008 standard for environmental risk analysis and assessment, by helping in the construction of the event tree analysis: selection of the sources of danger; determination of the initiating events; introduction of the conditioning factors; and obtaining the accident scenarios with their respective associated probability and, where appropriate, the amount of pollutant released.

It is available on the Ministry for the Ecological Transition and the Demographic Challenge website since December 2020.



Figure 5: ARM software tool.
Source: Ministry for the Ecological Transition and the Demographic Challenge



### 3.2.1.2 Environmental Damage Index (IDM) software tool

Royal Decree 183/2015, of 13 March, amending the Regulation of partial development of Law 26/2007, of 23 October, approved by Royal Decree 2090/2008, of 22 December, amended the wording of Article 33 of the Regulations, introducing a new method which made it much simpler for the operator to determine the amount of the financial security.

This simplification is based on introducing an environmental damage index which the operator must estimate for each accident scenario identified in its environmental risk analysis, following the steps established in the new Annex III of the regulations.

The Environmental Damage Index (IDM) allows operators to estimate an order of magnitude of the environmental damage caused in each accident scenario. This lets users compare different scenarios and choose a reference scenario as the basis for calculating the financial security.

This calculation is supported by a set of estimators of primary remediation costs, deduced from the methodology costs equation of the Environmental Liability Supply Model for each agent-resource combination.

With this new procedure, to establish the amount of the financial security, operators just need to quantify and monetise the environmental damage caused by a single selected reference scenario, rather than for all the identified scenarios, as had been stipulated in the previous wording of Article 33 of the Regulation of partial development of Law 26/2007, representing a substantial simplification and savings on resources.

The Directorate-General for Environmental Quality and Assessment developed a software tool for estimating the IDM associated with each accident scenario, within the procedure to determine the amount of the financial security, available on the Ministry for the Ecological Transition and the Demographic Challenge website since April 2015.



Figure 6: IDM software tool.
Source: Ministry for the Ecological Transition and the Demographic Challenge



### 3.2.1.3 Environmental Liability Supply Model (MORA)

Economic evaluation of environmental damage plays a key role in the implementation of Directive 2004/35/EC and Law 26/2007.

Article 33 of the Regulation of partial development of Law 26/2007 of 23 October establishes the procedure for determining the amount of the financial security required of certain operators of the activities included in Annex III of the law.

The procedure takes into account the requirement for these operators to perform an environmental risk analysis, in order to identify possible accident scenarios, and to establish the value of any environmental damage which might occur, and thereby determine the amount of the mandatory financial security.

In this context, the Directorate-General for Environmental Quality and Assessment, in order to offer all operators and industrial sectors a tool to help them meet these requirements, created a methodology for calculating remediation costs, the Environmental Liability Supply Model, enabling a monetary value to be assigned to the risk scenarios identified by the operators in the environmental risk analyses of their premises.

This methodology was approved by the Technical Commission in its meeting on 13 April 2011, and the summary document is available on the Ministry for the Ecological Transition and the Demographic Challenge Website:

### Environmental Liability Supply Model methodology document

As mentioned above, economic evaluation of environmental damage plays a key role in the implementation of Directive 2004/35/EC, and the Directorate-General for Environmental Quality and Assessment developed also a software tool based on the Environmental Liability Supply Model methodology, in order to offer all operators and industrial sectors a comprehensive tool with the following applications:

### "Ex-ante"

- Support for the determination of the <u>financial security</u>, calculating the monetary value of the environmental damage associated with a given risk scenario, in accordance with the evaluation methodology established in the Regulation of partial development of Law 26/2007.

This helps operators to determine if they are required to provide a financial security and calculate its amount.

- Support for the adoption of risk management measures. Knowing the recovery costs of the
  potential environmental damages, is a very useful information that can be used for the
  adoption of risk management measures, to minimize the potential risks
- Provide operators the remedial measures (primary, compensatory and complementary), together with the available technical improvements needed for returning the natural resources and the services they provide to their base-line condition.

In this sense, the Environmental Liability Supply Model is a decision-making tool.

### "Ex-post"

Support operators in the establishment of remedial measures. It provides the remedial
measures (primary, compensatory and complementary) when an accident with environmental
damages has occurred, needed for returning the natural resources and the services they
provide to their baseline condition.



Therefore, the Environmental Liability Supply Model (MORA), is a tool for helping operators and the competent authorities to comply with the requirements of the environmental liability legislation.

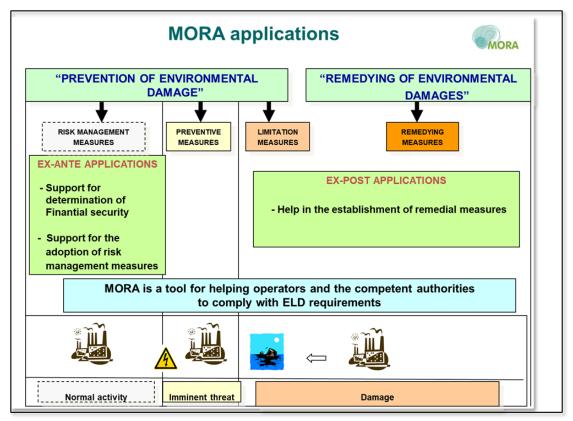


Figure 7: MORA applications.
Source: Ministry for the Ecological Transition and the Demographic Challenge

It should be clarified that the Environmental Liability Supply Model is a voluntary tool to support the process of monetising environmental damage in the context of the Environmental Liability Law, and its results are not legally binding.

The software tool based on this methodology was made available to the public in April 2013, on the website of the Ministry for the Ecological Transition and the Demographic Challenge.





Figure 8: MORA software tool.
Source: Ministry for the Ecological Transition and the Demographic Challenge

### 3.2.1.4 Interconnexion of ARM, IDM and MORA software tools

With the implementation of SIRMA, new capabilities have been developed that allow the interconnexion of the ARM, IDM and MORA tools, allowing the creation of a global project that guides operators in the process for the determination of the financial security.

This functionality contributes to integrate the most relevant results of the respective software applications in a single document. Through the "ARM-IDM-MORA Global Project" menu, SIRMA users have the option of developing projects that sequentially incorporate all the phases of the environmental risk analysis that can be carried out in an assisted way through the ARM, IDM and MORA applications.

By creating a "Global Project", the tool will facilitate the incorporation of the information resulting from each of the applications that can serve as input data for the following phases for the determination of the financial security.





Figure 9: ARM-IDM-MORA global project Source: Ministry for the Ecological Transition and the Demographic Challenge

In addition, it provides with a very useful tool for operators to plan and optimise the implementation of **risk management measures**, since it allows to:

- Identify those accident scenarios defined in the environmental risk analysis that have a higher probability of occurrence, and those that can cause higher environmental damage.
- Simulate the changes in the probability of occurrence or the environmental consequences of these accident scenarios due to the implementation of risk management measures.

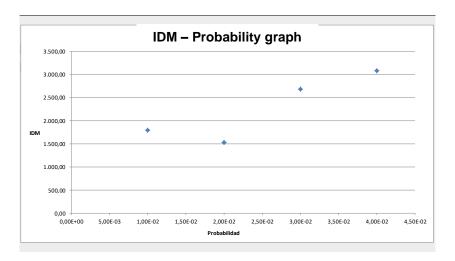
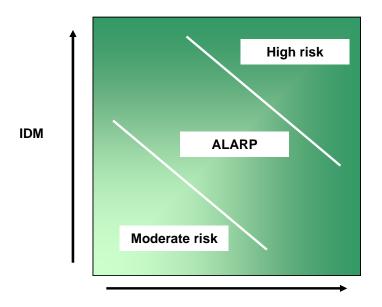


Figure 10: Example of IDM-Probability graph Source: Ministry for the Ecological Transition and the Demographic Challenge





### Probability of ocurrence

Figure 11: Risk zones in the IDM-Probability of occurrence graph Source: Ministry for the Ecological Transition and the Demographic Challenge

This information helps in the identification of the most suitable risk management measures in a facility, that allows reducing or minimising the possible environmental damages the facility can cause, therefore contributing to the implementation of the prevention principle.

The ARM, IDM and MORA software tools integrated in SIRMA include also a catalogue of prevention, avoidance and remediation measures, reinforcing its usefulness as a global risk management and decision-making tool for operators.

### 3.2.1.5 Web service of the MORA, IDM and ARM software tools

Several industry associations which developed sector-specific risk analyses asked the Directorate-General for Environmental Quality and Assessment to develop a web service to enable them to automatically connect their risk analysis computer tools to the MORA computer application.

In response to these requests, a web service was developed which allows external applications connect to MORA and automatically access the system's functions. This web service was launched in September 2015.

As a result, the monetary value of an environmental damage can be calculated through the MORA software tool either manually, or automatically through the web service, allowing external applications to connect to MORA: Technical specifications of the MORA web service

Likewise, a web service was developed for the IDM tool to allow external applications to connect with it automatically: <u>Technical specifications of the IDM web service</u>

A web service for the ARM tool is being developed and will be made available on the web page of the Ministry for the Ecological Transition and the Demographic Challenge.



### 3.2.2 Analysis of tools to evaluate the dispersion and behaviour of chemical agents

One of the most difficult input parameters to calculate is the quantification of the damage, that is to say, estimating the amount of each resource which would be affected by each damaging agent.

The environmental liability regulations, and more specifically the Regulation of partial development of Law 26/2007, offers the option of using models to simulate the transport and behaviour of the damaging agent in dispersion mediums and in receptors. For this purpose, the document "Analysis of tools to evaluate the dispersion and behaviour of chemical agents in the context of environmental liability regulations" was drafted to help operators choosing the most suitable models for their case, from the models available, analysing their potential application to the Environmental Liability Supply Model.



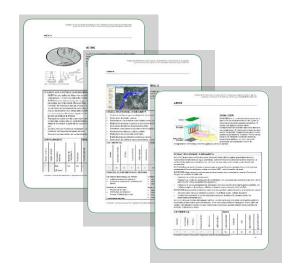


Figure 12: Document "Analysis of tools to evaluate the dispersion and behaviour of chemical agents in the context of environmental liability regulations".

Source: Ministry for the Ecological Transition and the Demographic Challenge

The document can be consulted and downloaded at this link:

Analysis of tools to evaluate the dispersion and behaviour of chemical agents in the context of environmental liability regulations

### 3.2.3 Document "Structure and general content of the sector-specific instruments for environmental risk analysis"

Article 24 of the Environmental Liability Act, Law 26/2007, establishes that the operators of the activities included in Annex III of the law, without prejudice to the exemptions noted in its article 28, must provide a financial security to cover the inherent environmental liability of their intended activity.

The same article determines that the amount of this financial security will be set based on the environmental risk analysis of the activity, to be performed according to the methodology established in government regulations.

Article 34 of the Regulation of partial development of Law 26/2007, approved by Royal Decree 2090/2008 of 22 December and amended by Royal Decree 183/2015 of 13 March, indicates that the environmental risk analyses will be performed by the operators, or a third party contracted by them, following the schema established by UNE 150.008 or other equivalent standards.



In order to facilitate the evaluation of risk scenarios and to reduce costs, the Regulation of partial development of Law 26/2007, of 23 October, introduces two voluntary instruments: sector-specific environmental risk analyses and rate tables (tablas de baremos in Spanish).

Sector-specific environmental risk analyses may consist of model environmental risk reports, known as MIRAT, or Guides to methodology, depending on the degree of homogeneity of the sector in terms of environmental risk.

Rate tables are envisaged for sectors or small and medium enterprises whose high degree of homogeneity enables the standardisation of their environmental risks.

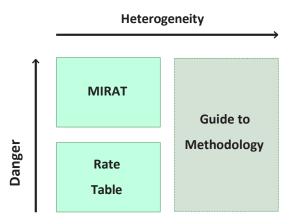


Figure 13: Sector-specific risk analysis and rate tables. Source: Ministry for the Ecological Transition and the Demographic Challenge

Operators can create their individual environmental risk analyses based on these sector-specific risk analysis tools, which must have previously received a favourable report from the Technical Commission for the Prevention and Remediation of Environmental Damages.

This document on the structure and general content of the sector-specific instruments for environmental risk analysis was approved by the Technical Commission for the Prevention and Remediation of Environmental Damages in 2011 and made available on the Ministry's website.

The full document can be consulted and downloaded at this link:

Structure and general content of the sector- specific instruments for environmental risk analysis

A summary version of this document in English can be consulted and downloaded at this link: Structure and general content of the sector- specific instruments for environmental risk analysis (English version)

Examples of a MIRAT and a Rate Table were also created and published on the Ministry's website after their approval by the Technical Commission for the Prevention and Remediation of Environmental Damages.

These documents are available on these links:

**Example MIRAT** 

Example rate table



### 3.2.4 Design of MIRAT (Model Environmental Risk Reports), Rate Tables and Guides to Methodology

The Directorate-General for Environmental Quality and Assessment has funded and developed a set of analytical instruments to support different sectors in the creation of sector-specific risk analyses.

Sector-specific risk analysis instrument or rate table	Date of creation
Rate table for the paint and printer ink manufacturing sector, created for the Asociación Española de Fabricantes de Pinturas y Tintas de Imprimir (ASEFAPI).	2011
Guide to methodology for the polymetallic sulphide and sodium and potassiumsalts mining industry, created for the Confederación Nacional Empresarios Minería y Metalurgia (CONFEDEM).	2012
MIRAT for the olive oil and oilseed industry, created for the Federación Española de Industrias de la Alimentación y Bebidas (FIAB).	2012
Guide to methodology for hazardous and non-hazardous waste management activities, created for the Asociación Nacional de Gestores de Residuos de Automoción (AN- GEREA), Asociación de Empresas Gestoras de Residuos y Recursos Especiales (ASEGRE) and Federación Española de la Recuperación y el Reciclaje (FER).	2015
MIRAT for road freight transport activities, created for the Confederación Española de Transporte de Mercancías (CTEM).	2015
MIRAT for the smelting industry, created for the Federación Española de Asociaciones de Fundidores (FEAF).	2016
MIRAT and rate table for the poultry meat and egg sector.	2018
MIRAT and rate table for the pig sector.	2019

Table 5. Sector-specific risk analyses funded and developed by the Directorate-General for Environmental Quality and Assessment

Source: Ministry for the Ecological Transition and the Demographic Challenge.

The complete documents of these sector-specific risk analyses are available in the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website, in the sectionon sector-specific risk analysis tools.

In addition, several industry associations have developed sector-specific risk analyses and rate tables at their own expense (and therefore only available among the members of the corresponding associations) and submitted them to the Technical Commission for the Prevention and Remediation of Environmental Damages for their approval.

After evaluating all these sector-specific instruments, following the procedure approved by the Technical Commission for the Prevention and Remediation of Environmental Damage, a favourable report was issued for the following 38 sector-specific environmental risk analysis instruments and rate tables:



Sector-specific risk analysis instrument or rate table	Date of favourable report
"Desarrollo y aplicación de un proyecto MIRAT para el sector siderúrgico (SID-MIRAT). Acería eléctrica, laminaciones y tratamientos superficiales" (MIRAT for the steel sector, electric arc furnaces, lamination and surface treatments), by the Unión de Empresas Siderúrgicas (UNESID).	December 2012
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) del sector pasta y papel" (MIRAT for the pulp and paper sector), by the Asociación Española de Fabricantes de Pasta y Papel (ASPAPEL).	February 2014
"Guía Metodológica del sector perfumería y cosmética" (Guide to methodology for the perfumery and cosmetics sector), by the Asociación Nacional de Perfumería y Cosmética (STANPA).	February 2014
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para las actividades desarrolladas por las empresas del sector de fabricación de cemento por vía seca" (MIRAT for the dry process cement manufacturing sector), by the Agrupación de Fabricantes de Cemento de España (OFICEMEN).	March 2014
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para las actividades desarrolladas por las graveras del sector de fabricación de áridos" (MIRAT for the gravel industry), by the Federación de Áridos (FDA).	March 2014
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT)" (MIRAT for public cleaning businesses) by the Asociación de Empresas de Limpieza Pública (ASELIP).	March 2014
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT)" (MIRAT for public cleaning businesses) by the Asociación de Empresas de Limpieza Pública (ASELIP).	July 2014
"Proyecto Piloto Tabla de Baremos del Sector Fabricación de Pinturas y Tintas de imprimir" (Pilot project rate table for the paint and printer ink manufacturing sector) by the Asociación Española de Fabricantes de Pinturas y Tintas de Imprimir (ASEFAPI).	July 2014
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para las centrales térmicas" (MIRAT for thermal power plants), by the Asociación Española de la Industria Eléctrica (UNESA).	November 2014
"Guía Metodológica para la elaboración de los análisis de riesgos medioambientales para plantas de GNL" (Guide to methodology for environmental risk analyses for LNG plants), by the Asociación Española del Gas (SEDIGAS).	May 2015
"Guía Metodológica para la elaboración de los análisis de riesgos medioambientales para el sector gasista" (Guide to methodology for environmental risk analyses for the gas sector), by the Asociación Española del Gas (SEDIGAS).	May 2015
"Guía Metodológica del sector de tecnología sanitaria" (Guide to methodology for the health technology sector) by the Federación Española de Empresas de Tecnología Sanitaria (FENIN).	May 2015
"Modelo de Informe de Riesgos Ambientales Tipo para el sector de producción y comercialización de productos fitosanitarios" (MIRAT for the plant protection product manufacturing and marketing sector), by the Asociación Empresarial para la Protección de las Plantas (AEPLA).	June 2015
"Modelo de Informe de Riesgos Ambientales Tipo para el sector de la cal" (MIRAT for the lime (calcium oxide) industry), by the Asociación Española de Fabricantes de Cal y Derivados (ANCADE).	June 2015
"Guía Metodológica para determinadas actividades de gestión de residuos peligrosos y no peligrosos" (Guide to methodology for certain hazardous and non-hazardous waste management activities), by the Asociación de Empresas Gestoras de Residuos y Recursos Especiales (ASEGRE), the Asociación Nacional de Gestores de Residuos de Automoción (ANGEREA) and the Federación Española de la Recuperación y el Reciclaje (FER).	June 2015



Sector-specific risk analysis instrument or rate table	Date of favourable report
"Guía Metodológica de Análisis de Riesgos Medioambientales en el Sector Químico y Petroquímico" (Guide to methodology for environmental risk analyses in the chemical and petrochemical sector), by the Federación Empresarial de la Industria Química Española (FEIQUE).	December 2015
"Proyecto de Responsabilidad Medioambiental: Realización de MIRAT para Unidad de Separación de Gases del Aire (ASU)" (MIRAT for Air Separation Units) by the Asociación de Fabricantes de Gases Industriales y Medicinales (AFGIM).	January 2016
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para las actividades de transporte por carretera" (MIRAT for road haulage), submitted by the Confederación Española de Transporte de Mercancías (CTEM), Asociación Empresarial Española de Carga Fraccionada (AECAF) and Asociación de Transporte Internacional por Carretera (ASTIC).	October 2016
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para ATEDY" (MIRAT for the plaster industry), by the Asociación Técnica y Empresarial del Yeso (ATEDY).	November 2016
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de patatas fritas y productos de aperitivo" (MIRAT for the potato chips and snack sector), by the Asociación de Fabricantes de Aperitivos (AFAP).	December 2016
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector cerámico" (MIRAT for the ceramics sector), by the Asociación Española de Fabricantes de Azulejos y Pavimentos Cerámicos (ASCER).	December 2016
"Modelo de informe de Riesgos Ambientales TIPO (MIRAT) para el sector de la fundición" (MIRAT for the smelting industry), presented by the Federación Española de Asociaciones de Fundidores (FEAF).	March 2017
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de fabricación de fritas, esmaltes y colores cerámicos" (MIRAT for the ceramic frits, glazes and colour manufacturing sector), by the Asociación Nacional de Fabricantes de Fritas, Esmaltes y Colores Cerámicos (ANFFECC).	March 2017
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de instalaciones de logística y almacenamiento de productos químicos y petrolíferos" (MIRAT for the sector of logistics and storage of chemical and petroleum products), by the Asociación Española de Terminales Receptoras de Graneles Químicos, Líquidos y Gases (ASTERQUIGAS).	May 2018
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector galvanización en caliente" (MIRAT for the hot dip galvanizing sector), by the Asociación Técnica Española de Galvanización (ATEG).	March 2019
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de la avicultura de puesta y de carne", by the Asociación de Productores de Huevos (ASEPRHU) and the Interprofesional Avícola PROPOLLO.	October 2019
"Tabla de Baremos para el sector de la avicultura de puesta y carne" (Rate table for the poultry meat and eggs sector), by the Asociación de Productores de Huevos (ASEPRHU) and the Interprofesional Avícola PROPOLLO.	October 2019
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector lácteo" (MIRAT for the dairy products sector), by the Federación Española de Industrias Lácteas (FENIL).	December 2019
"Guía metodológica para el sector de la minería de sulfuros polimetálicos y minería de sales sódicas y potásicas" (Guide to methodology for environmental risk analyses for the polymetallic sulfides and sodium and potassium salts mining sector), by the Confederación Nacional de Empresarios de la Minería y la Metalurgia (CONFEDEM).	June 2020
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector porcino" (MIRAT for the porcine secor) by the Asociación Nacional de Productores de Ganado Porcino (ANPROGAPOR).	June 2020



Sector-specific risk analysis instrument or rate table	Date of favourable report
"Tabla de baremos para el sector porcino" (Rate table for the porcine sector), by the Asociación Nacional de Productores de Ganado Porcino (ANPROGAPOR).	June 2020
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector del anodizado y tratamientos de superficie de aluminio" (MIRAT for the anodized and surface treatments of aluminum sector), by the Asociación Española del Aluminio y Tratamientos de Superficie (AEA).	April 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de fabricación de ladrillos y tejas" (MIRAT for the brick and tile manufacturing sector), by the Asociación Española de Fabricantes de Ladrillos y Tejas Cocidas de Arcilla (HISPALYT).	April 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) sector de la recuperación y reciclaje" (MIRAT for the recovery and recycling sector), by the Federación Española de la Recuperación y Reciclaje (FER) como MIRAT para el sector de la recuperación y reciclaje.	April 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT), sector de fabricación de piensos y premezclas para alimentación animal" (MIRAT for the manufacture of feed and premixes for animal feeding sector), by the Organización Interprofesional Española de la Alimentación Animal (INTERAL), the Confederación Española de Fabricantes de Alimentos Compuestos para Animales (CESFAC) and Cooperativas Agro-alimentarias de España.	May 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector del aceite de oliva y oleaginosas" (MIRAT for the olive oil and oilseeds sector), by the Federación Española de Industrias de la Alimentación y Bebidas (FIAB).	May 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de la química orgánica farmacéutica" (MIRAT for the pharmaceutical organic chemistry sector), by the Asociación Española de Fabricantes de Productos de Química Fina (AFAQUIM).	August 2021
"Modelo de Informe de Riesgos Ambientales Tipo (MIRAT) para el sector de las bebidas refrescantes" (MIRAT for the refreshing drinks sector), by the Asociación de Bebidas Refrescantes (ANFABRA).	November 2021

Table 6. Sector-specific risk analyses with favourable report Source: Ministry for the Ecological Transition and the Demographic Challenge.

These tools help operators required to provide a financial security to determine its amount and have considerable added value for identifying risk management measures, with an emphasis on the prevention principle which is the basis of Law 26/2007.

It should be noted that the development and approval of these sector-specific environmental risk analysis instruments is a significant element to take into account in the evaluation of the implementation of Law 26/2007, mainly in the application of the prevention principle.

As remarked above, environmental risk analysis instruments are tools which provide extremely valuable information for the implementation of risk management measures, reducing the likelihood of environmental damage and its consequences.

### Benefits of the sector-specific environmental risk analysis instruments and rate tables

These 38 sector-specific instruments and rate tables approved by the Technical Commission for the Prevention and Remediation of Environmental Damage represent a great effort in the implementation of the environmental liability legislation.

Specially in the prevention of environmental damage and the fostering of risk management measures in the industry, in accordance with the prevention principle on which Directive 2004/32/EC and Law 26/2007 are based.



## 3.2.5 Development of an environmental risk analysis for an individual operator and estimation of the corresponding financial security

The determination of the amount of the financial security foreseen in Article 24 of Law 26/2007, of 23 October, on Environmental Liability, which certain operators are required to provide, is based on the individual environmental risk analysis of the facility that has to be carried out by the operator.

Article 34 of the Regulation of partial development of Law 26/2007, of 23 October, approved by Royal Decree 2090/2008 of 22 December and amended by Royal Decree 183/2015 of 13 March, indicates that the environmental risk analyses will be performed by the operators, or a third party contracted by them, following the schema established by UNE 150008 or other equivalent standards.

In order to support the operators that according to 37.2 a) of the Regulation of partial development of Law 26/2007 must provide a financial security, and that therefore must determine its amount from the results of the individual environmental risk analysis of the facility, the Directorate-General for Environmental Quality and Assessment has developed an individual environmental risk analysis.

This individual environmental risk analysis was made available in 2015 on the Ministry for the Ecological Transition and the Demographic Challenge website, to provide guidance and assistance in performing their environmental risk analyses, on the following link:

#### Individual environmental risk analysis

A summary version of this document in English can be consulted and downloaded at this link:

Individual environmental risk analysis (English version)

## 3.2.6 Creation of a support service for sectors developing sector-specific environmental risk analyses

Since 2010, the Directorate-General for Environmental Quality and Assessment provides a technical support service for the sectors in Annex III of Law 26/2007 who voluntarily choose to present a sector-specific environmental risk analysis or rate table to the Technical Commission for the Prevention and Remediation of Environmental Damages. The goals of this service are:

- To answer questions on specific aspects of the methodology for creating and planning sectorspecific environmental risk analyses or rate tables.
- To help in the creation of the practical exercise to determine the coverage of the financial security for a specific activity representing the sector, and guidance in quantifying the damage associated with the risk scenarios.
- To advise on the monetisation of the accident scenarios extrapolated from the environmental risk analysis, and answer questions on the use and functioning of the ARM, IDM and MORA tools. This service is also open to individual operators who are developing individual environmental risk analyses.

In the context of this consultation service, which is still available, over 800 queries on environmental risk analyses have been answered, through written consultations or through holding specific meetings with the sectors and operators using this service. All the information on this service is available at: Service to support sectors mailbox

It is also available the Guidance document for the development of environmental risk analyses

A summary version of this document in English can be consulted and downloaded at this link:

Guidance document for the development of environmental risk analyses (English version)



### 3.3 GUIDELINE DOCUMENTS, PROTOCOLS AND ADMINISTRATIVE PROCEDURES

As well as the technical instruments described above, the Directorate-General for Environmental Quality and Assessment of the Ministry for the Ecological Transition and the Demographic Challenge has created a set of guideline documents, protocols and administrative procedures:

### 3.3.1 Guide for drafting Simplified Environmental Risk Management Studies

The main goals of the Environmental Liability Act, Law 26/2007, include the prevention of environmental damage applying the precautionary principle.

The law requires all operators that face an imminent threat of damage, whether their activity is included in Annex III or not, to adopt the necessary measures to prevent damage, or avoid further damage.

To meet these goals, operators must be incentivised to take a preventive approach through the development of tools enabling them to manage the environmental risk of their activity appropriately. Thus, one of the main tools contributing to effective risk management is the environmental risk analysis.

Environmental liability regulations establish that operators of the activities requiring the provision of a financial security, as stipulated in Article 24 of Law 26/2007, must perform an environmental risk analysis of their activity to determine the amount of that financial security.

In the process of performing the environmental risk analyses, these operators have or generate information which can be used to improve the environmental risk management of their activity, and to identify and design possible measures to prevent damage or avoid further damage.

As part of the commitment of the Directorate-General for Environmental Quality and Assessment to support operators within the scope of application of Law 26/2007, it has developed a "Simplified Environmental Risk Management Study" (ESGRA), so that operators exempted from performing environmental risk analyses and not required to provide a financial security can access an instrument enabling them to manage the environmental risks of their activity appropriately.

ESGRA studies focus on risk management, prevention and avoidance, in order to provide assistance for operators exempted from performing environmental risk analyses. This methodology enables them to take the risk management decisions they deem appropriate, in order to minimise as much as possible, the probability of the hypothetical accident scenarios and the value of any associated damage.

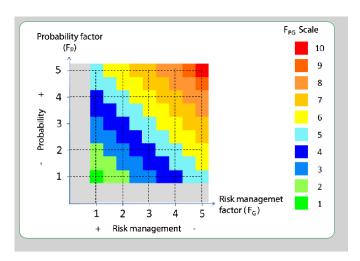


Figure 14: Risk management diagram.
Source: Ministry for the Ecological Transition and the Demographic Challenge



This document was made available in 2015 on the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website. The entire document and its annexes can be consulted and downloaded at this link:

**ESGRA** report

**ESGRA** annexes

### 3.3.2 Study on the usefulness of the environmental risk analysis

The Directorate-General for Environmental Quality and Assessment launched in 2021 an study with the main objective to gather information on the usefulness of the environmental risk analysis among operators.

More specifically, the study tried to:

- Gather information on the number of operators that have used a sectoral environmental risk analysis to carry out the individual environmental risk analysis of their facilities.
- Having feedback from operators on the usefulness of the tools, technical documents and protocols developed up to know, and detect possible new needs they have, in view of planning the development of new instruments to meet these needs.
- Evaluate if the information provided by the environmental risk analysis has been useful for operators to be aware of the risk of the facilities, and to implement new risk management measures o modify the already existing measures.
- Gather the opinion of operators on the usefulness of these instruments in their decision-making process in terms of environmental risk management.
- Evaluate the investment of operators in the performance of the environmental risk analysis, and of the risk management measures implemented.
- Evaluate if the prevention or risk management measures adopted have lowered the amount of the financial security with the possible exemption of the obligation to constitute it.

To meet these objectives, a web questionnaire was designed and made available through the Ministry for the Ecological Transition and the Demographic Challenge website.

The information received from the questionnaires sent by operators was analysed and a report with the results and main findings has been drafted. The main findings are:

- 77 out of 127 operators have carried out the individual environmental risk analysis of their facilities based on a sectoral environmental risk analysis.
- 92% of operators have performed the individual environmental risk analysis through a contract with an external company.
- 72,5% of operators say 1 or 2 employees have been devoted to supervise the performance of the environmental risk analysis.
- The average time to carry out the environmental risk analysis is 4,33 months, and 86,65% have performed it in less than 6 months.
- 73% of operators indicates a budget for performing the environmental risk analysis equal or lower than 6.000 €, being the most common budget between 4.000 € and 5.000 €.
- 40 out of 127 operators indicate they have identified aspect that can improve the risk management of the facility, and 85,11% of them have implemented the measures needed to make this improvement effective.



- 6 operators indicate these prevention or risk management measures implemented have resulted in a decrease of the amount of financial security originally calculated, and for 2 of them this made them exempt from the obligation to get the mandatory financial security.
- 85% of operators consider the environmental risk analysis is a useful instrument in the decision-making process in relation with the environmental risk management.
- In relation with the usefulness of the tools, technical documents and protocols developed up to know, all of them have a mean score higher than 3, in a scale from 1 to 5 (being 1 the lowest score and 5 the highest). The MORA software tool had the best score with a 4,14 mean score.

As a general conclusion of the study, operators say that although the environmental risk analysis foreseen in Law 26/2007 is a relatively complex instrument, it is very useful to analyse and minimize the environmental risk of their facility, and some of the operators have already implemented measures after the particular aspects identified in the environmental risk analysis.

This full report with the results, along with the questionnaire designed is available on the Ministry for the Ecological Transition and the Demographic Challenge website, on the following link:

Study on the usefulness of the environmental risk analysis

# 3.3.3 Protocol for action in the case of incidents and environmental liability enforcement proceedings

The Directorate-General for Environmental Quality and Assessment has developed a "Protocol for action in the case of incidents in the context of environmental liability regulations and administrative proceedings for environmental liability enforcement".

The first part of this document, approved by the Technical Commission for the Prevention and Remediation of Environmental Damage, includes a protocol for action with guidelines, both for operators and for the competent administration, in the case of an incident causing environmental damage or imminent threat of environmental damage, in the context of Law 26/2007.

The second part of the document sets out a procedure for environmental liability enforcement proceedings, covering different phases with interventions by the competent authority, the operators and interested parties, providing minimum criteria to be considered during the administrative proceedings. This is intended to ensure that the instructions and resolution of these proceedings follow environmental liability regulations and Law 39/2015 of 1 October, on the Common Administrative Procedure of Public Administrations.

This document, which includes a catalogue of prevention and avoidance measures, was made available in 2018 on the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website. The entire document and its annexes can be consulted and downloaded at these links:

Protocol for action and environmental liability enforcement proceedings

Annex I. Forms

Annex II. Catalogue of prevention and avoidance measures

A summary version of this document in English can be consulted and downloaded at this link:

Protocol for action and environmental liability enforcement proceedings (English version)

Several examples have been provided to illustrate how the administrative powers of the competent authority are articulated in the context of environmental liability legislation, and the liabilities and obligations of operators.



These examples are merely illustrative and. are not based on real cases where Law 26/2007, of 23 October, was or could have been applied, but they do present a realistic scenario.

### **Examples**

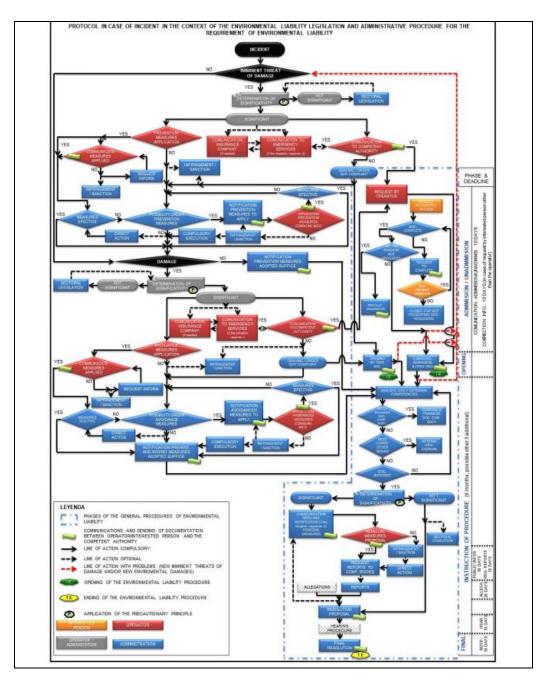


Figure 15: Main diagram of the Protocol for action and environmental liability enforcement proceedings Source: Ministry for the Ecological Transition and the Demographic Challenge



## 3.3.4 Document on the "Structure and general content of environmental damage remediation projects"

Remedial measures are a key issue in the Environmental Liability Act, and its Regulation of partial development, in compliance with the "polluter pays" principle.

Law 26/2007, of 23 October, and its regulations establish the requirement for the operators responsible for causing environmental damage to present a remediation project to the competent authority, containing the remedial measures needed to return the damaged natural resources to their baseline condition.

In this context, the Directorate-General for Environmental Quality and Assessment has produced the document "Structure and general content of environmental damage remediation projects", providing a description, as established in the environmental liability regulations, of the structure and content the operator must consider when drafting their remediation project to be submitted to the competent authority.

This document, approved by the Technical Commission for the Prevention and Remediation of Environmental Damages, gives operators guidelines for the phases of the remediation project and the technical aspects to be considered when drafting it, with Annex I including an index explaining the required parts of the environmental damage remediation project.

Annex II of the document provides a set of forms corresponding to the content which must be included in the remediation project, helping to systematise all the information required.

Finally, Annex III of the document includes the catalogue of remediation techniques included in the Environmental Liability Supply Model (MORA) software tool and the procedure for choosing its recommended techniques.

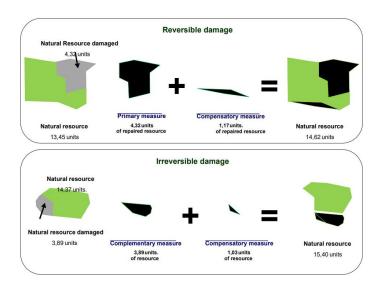


Figure 16: Types of remedial measures according to environmental liability legislation Source: Ministry for the Ecological Transition and the Demographic Challenge

This document and its annexes were made available in 2018 on the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website.



They can be consulted and downloaded at these links:

Structure and contents of remediation projects

Annex II. Forms for remediation projects

Annex III. Catalogue of remediation measures

A summary version of this document in English can be consulted and downloaded at this link:

Structure and contents of remediation projects (English version)

A practical example has been produced to show how an environmental damage remediation project should be presented. It can be consulted and downloaded at these links:

Remediation project practical example

Annex I. Forms

Annex II. Cartography

Annex III. Characteristics of the substances

### 3.3.5 Guidance document on the financial security foreseen in Law 26/2007

The Directorate-General for Environmental Quality and Assessment has drafted the document "Guide to the provision of the financial security stipulated in Law 26/2007, of 23 October, communication and review".

This document contains important information on the procedure for determining the amount of the financial security foreseen in Law 26/2007, including some of the most complex aspects of the environmental risk analysis, the obligations assumed by the operator with the presentation of the affidavit, and the elements of the financial security.

This document was made available to all interested parties in January 2019 on the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website, in a section on the Financial Security for Environmental Liability, which also includes a subsection on the Environmental Damage Compensation Fund, created in partnership with the Directorate-General for Insurance and Pension Funds and the Insurance Compensation Consortium.



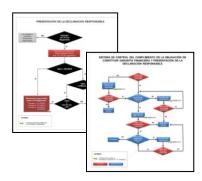


Figure 17: Guidance document on the financial security foreseen in Law 26/2007 Source: Ministry for the Ecological Transition and the Demographic Challenge

This document, and more information on financial security, can be consulted and downloaded in the section: Financial security for environmental liability



#### 3.3.6 Guidance document for determining the significance of damage

Not all damages to natural resources will give rise to environmental liability. For Law 26/2007 to apply, there must be a threat of damage or actual damage causing significant adverse effects on a natural resource.

Article 2 of the law defines the **environmental damages** as those that have significant adverse effects on **waters**, **soil**, **seashore and estuaries**, **species present permanently or temporarily in Spain**, **as well as the habitats**. In any case damage to air are excluded, as well as damage to people or property, unless it constitutes a natural resource.

Therefore, it is necessary to distinguish the concepts of "damage" and "environmental damage" that within the scope of the Environmental Liability Law, refers to those damages or imminent threats of damages that have significant adverse effects on the natural resources protected by the law, and **only in these cases the environmental liability normative can be applied**.

This way, the assessment of the significance of the damage, that has occurred or may occur, is a key and necessary procedure to apply the environmental liability normative, and in consequence to require the operator responsible the implementation of the measures of prevention, avoidance and remediation, as appropriate in each case.

The significance must be evaluated following the criteria established in the Law 26/2007, of October 23, and the Regulation of partial development of Law 26/2007 approved by Royal Decree 2090/2008. Those criteria guarantee the objectivity of the assessment, referring when it is possible, to the provisions of other regulations for determining the significance of the damage on each natural resource.

The assessment must be carried out in on a case-by-case basis, and sometimes the task may have certain complexity, due to uncertainty associated with the forecast of the effects of the agents causing damage on the natural resources, especially in cases of imminent threats of damages.

In this sense, when there are technical difficulties in the assessment of the significance, as well as to simplify it in time and cost, the "**precautionary principle**" can be considered.

The "precautionary principle" is an essential element of the European policy, which basis are developed in the Communication from the Commission on the precautionary principle (2000). The European Commission defends that the precautionary principle is particularly relevant to the management of risk, and that communication is a guidance to the Member States on using this principle in the decision-making process. The communication establishes that: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"

Therefore, taking into account the "precautionary principle", and in absence or lack of accurate data, scientific certainty is not required that the potential damage will exceed the threshold of significance, and a reasonable belief would be enough.

Moreover, it must be noted that article 6.3. of Law 26/2007 considers that if prevention, avoidance or remediation of significant environmental damages has been fulfilled using other laws, it will not be necessary to apply Law 26/2007.



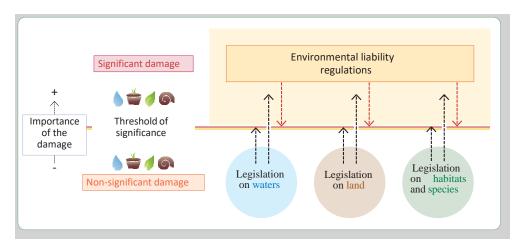


Figure 18: Application of the environmental liability normative and sectoral legislation depending on the significance of the damage.

Source: Ministry for the Ecological Transition and the Demographic Challenge

Law 26/2007, of 23 October, and its Regulation of partial development include a set of criteria for assessing the significance of the damage.

To help in its determination, the Directorate-General for Environmental Quality and Assessment has produced the guidance document "Determining the significance of environmental damage in the context of the Environmental Liability Act, Law 26/2007, of 23 October".

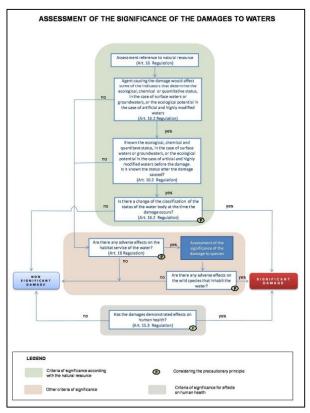


Figure 19: Diagram showing the criteria for assessing significance. Source: Ministry for the Ecological Transition and the Demographic Challenge



This guidance document analyses the concept of environmental damage in order to establish a set of criteria and/or guidelines for determining its significance, taking as reference the sector specific legal framework currently applicable at the national level, in order to facilitate the implementation of Law 26/2007, of 23 October.

This document and an annex drafted specifically for assessing the significance of environmental damage to water resources, can be consulted and downloaded at this link:

Guidance document to determining significance

Annex. Determining significance to water resources

A summary version of this document in English can be consulted and downloaded at this link:

Guidance document to determining significance (English version)

### 3.4 ACTIVITIES ON TRAINING, DISSEMINATION AND ACCESS TO INFORMATION

As well as developing the technical instruments, guides and procedures described above, there has been an intensive work on training in their use, as well as on its dissemination to raise awareness, and to provide information on the environmental liability regulations.

#### 3.4.1 Training and dissemination activities

In order to provide training to State and regional government staff, nine environmental liability courses have been organised by the Directorate-General for Environmental Quality and Assessment. In addition, several Autonomous Regions have organised other specific training courses.

Regarding dissemination activities, the Directorate-General for Environmental Quality and Assessment has participated since 2008 in over 170 courses, conferences, seminars and lectures with industrial associations, consultants, NGOs, insurance companies, and other bodies, to explain the goals of the Environmental Liability Act, raise awareness and encourage the use of the tools developed to facilitate its implementation, and to gather the opinions of all the actors involved in implementing the environmental liability regulations in an open, receptive dialogue. The opinions received have been reflected as much as possible in the regulations and technical tools developed.

In addition, the autonomous communities have also organised and participated in courses, conferences, seminars and other activities.

On the other hand, for helping in the implementation of Law 26/2007 and disseminate all the tools developed and documents drafted, the "Guidance document on the implementation of environmental liability regulations" was published in 2019.

This guidance document summarises the main elements of the environmental liability legislation, its scope, the main obligations for operators, the administrative powers and the distribution of competences. It also includes a summary of all the specific tools developed, guidance documents and protocols approved, and other activities carried out by Directorate-General for Environmental Quality and Assessment.

On the other hand, a brochure was also published in 2019 to divulgate all this information, summarized and with a didactic approach.



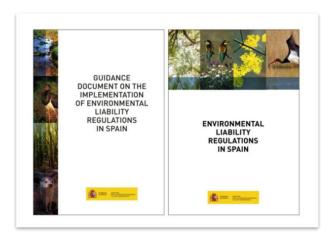


Figure 20: Environmental liability publications
Source: Ministry for the Ecological Transition and the Demographic Challenge

The Guidance document and the brochure can be consulted and downloaded in Spanish and English in the following links

Guidance document on the implementation of environmental liability regulations

Guidance document on the implementation of environmental liability regulations (English version)

Brochure on environmental liability regulations

Brochure on environmental liability regulations (English version)

### 3.4.2 Access to information

Regarding the access of information on the environmental liability regulations and their implementation, the Directorate-General for Environmental Quality and Assessment, in addition to the information on all the technical tools which have been developed and made available to the public via the environmental liability section of the Ministry for the Ecological Transition and the Demographic Challenge website, there is also a publicly available general consultation service to respond to queries and requests for information.

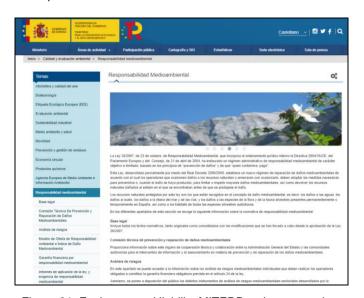


Figure 21: Environmental liability MITERD webpage section. Source: Ministry for the Ecological Transition and the Demographic Challenge



Since 2008, this consultation service has responded to over 1,500 queries on legal and technical matters and requests for other types of information, as well as queries sent to the Autonomous Communities.

The report that Spain sent to the European Commission in April 2013 on the experience acquired implementing the Directive, in compliance with Article 18.1 of Directive 2004/35/CE, is available on the Ministry's website, and includes the information required on the environmental liability enforcement cases processed from 2007 to 2013.

The evaluation reports on the implementation of Law 26/2007, of 23 October, sent by the Ministry to the Environmental Advisory Council in July 2018 and June 2020, are also available on the Ministry's website, in compliance with Additional Provision 11 of Law 26/2007.

Annex II of these reports also included a list of cases of environmental damage from 2013 to 2017, and from 2013 to 2019 respectively, in which Law 26/2007 was applied, following the same format for sending information approved by the European Commission for the report specified in Article 18.1 of Directive 2004/35/EC.

Finally, the Directorate-General for Environmental Quality and Assessment participates since 2016, in the project of the IMPEL network (European Union Network for the Implementation and Enforcement of Environmental Law), "Financial Provision-Protecting the Environment and the Public Purse", to identify what types of financial security are most appropriate for providing sufficient and reliable cover which are available to the regulatory authorities when needed.

This project is intended to increase awareness of the availability and suitability of financial security instruments at the European level. This contributes to improving environmental protection and the public purse by ensuring compliance with the polluter pays principle and encourages operators to invest in preventing environmental damage.

As part of this project, in 2018 of different approaches was performed to determine the amount of financial security for unforeseen events, and to evaluate the potential of applying existing methodologies in Spain, the Netherlands and Ireland, in a wider context, going beyond environmental liability to include other regulations.

The conclusions of this analysis were that the three methodologies share common characteristics, and that the approach of Spain and Ireland took into account the environmental risk of activities. The assessment also concluded that there was potential for a wider application of the three methodologies in different regulatory contexts, and in different Member States, always taking into account the specific objectives for which they were developed.

As Spain's contribution to facilitating awareness and the use by other Member States of the methodology for establishing the mandatory financial security foreseen in Law 26/2007, of 23 October, English-language versions were developed of the **Environmental Liability Supply Model (MORA)** and **Environmental Damage Index (IDM)** tools, available on the Ministry for the Ecological Transition and the Demographic Challenge website since March 2018. **The ARM tool**, developed in 2020 is also available in English through the **Environmental Liability Information System (SIRMA)**.

For more information on this project and to consult the full reports: <a href="https://www.impel.eu/">https://www.impel.eu/</a> projects/financial-provisions/



### 4. CONCLUSIONS

As mentioned in the introduction of this report, the **two main objectives of Directive 2004/35/EC** are to prevent significant environmental damage when there is an imminent threat, and to remedy such damage when it occurs, based on the "polluter pays" and the prevention principles.

The 2016 European Commission report emphasises that these goals are sought by first, incentivising operators within the scope of application of the Directive to take a preventive approach, such as establishing an environmental management system, environmental safety measures, carrying out risk assessments, investing in risk abatement technology and taking out sufficient financial security.

And second, establishing that in the case of imminent threat of, or actual significant damage, the operators are liable to take the necessary preventive or remedial action and to bear all costs.

Therefore, the evaluation of the Directive cannot be carried out taking into account only and exclusively information on the cases of environmental damage processed.

In order to evaluate the Directive, it is necessary to take into account the different elements and measures taken in order to implement the environmental liability legislation, that allows the evaluation of the prevention of environmental damage, and of the remedying of environmental damage, in compliance with the "polluter pays" principles.

The information presented in this report for each of these groups of elements, is summarised below:

### Elements that allow the evaluation of the prevention of environmental damage

- The development of the ARM, IDM and MORA software tools helps operators to determine if they are required to provide a financial security and calculate its amount. It also contributes to the prevention of environmental damage and provides with a very useful tool for operators to plan and optimise the implementation of <u>risk management measures</u>.
- The development of environmental risk analysis instruments, contributes to the prevention of environmental damage, and also provides with a very useful tool for operators to plan and optimise the implementation of risk management measures.
  - The Directorate-General for Environmental Quality and Assessment has funded and developed a set of analytical instruments to support different sectors in the creation of several sector-specific environmental risk analyses:
    - ✓ Rate table for the paint and printer ink manufacturing sector, created for the Asociación Española de Fabricantes de Pinturas y Tintas de Imprimir (ASEFAPI).
    - ✓ Guide to methodology for the polymetallic sulphide and sodium and potassium salts mining industry, created for the Confederación Nacional Empresarios Minería y Metalurgia (CONFEDEM).
    - MIRAT for the olive oil and oilseed industry, created for the Federación Española de Industrias de la Alimentación y Bebidas (FIAB).
    - ✓ Guide to methodology for hazardous and non-hazardous waste management activities, created for the Asociación Nacional de Gestores de Residuos de Automoción (ANGEREA), Asociación de Empresas Gestoras de Residuos y Recursos Especiales (ASEGRE) and Federación Española de la Recuperación y el Reciclaje (FER).
    - ✓ MIRAT for road freight transport activities, created for the Confederación Española de Transporte de Mercancías (CTEM).



- ✓ MIRAT for the smelting industry, created for the Federación Española de Asociaciones de Fundidores (FEAF).
- ✓ MIRAT and rate table for the poultry meat and egg sector, created for the Asociación de Productores de Huevos (ASEPRHU) and Interprofesional Avícola (PROPOLLO).
- ✓ MIRAT and rate table for the pig sector, created for the Asociación Nacional de Productores de Ganado Porcino (ANGROGAPOR).
- In addition, several industry associations have developed sector-specific environmental risk analyses instruments and rate tables at their own expense.
- A total of <u>38 sector-specific environmental risk analyses instruments and rate tables have been approved</u> by the Technical Commission for the Prevention and Remediation of Environmental Damage represent a great effort in the implementation of the environmental liability legislation.
- The Directorate-General for Environmental Quality and Assessment created a support service for sectors developing sector-specific environmental risk analyses, that it is still operative.
- o It has funded and developed an "Individual environmental risk analysis".

Environmental risk analysis is not mandatory in Directive 2004/35/EC. They were introduced in Law 26/2007 as the starting point in the procedure for the determination of mandatory financial security, for the operators obliged.

But they have demonstrated to play also a key role in the implementation of the prevention of environmental damage, providing operators with a very useful tool to take risk management measures.

- The **drafting of documents, protocols and guides** are also key elements in the correct and harmonised implementation of Law 26/2007, more specifically for the <u>implementation of the</u> prevention of environmental damage.
  - ✓ Document "Analysis of tools to evaluate the dispersion and behaviour of chemical agents in the context of environmental liability regulations".
  - ✓ Document "Structure and general content of the sector-specific instruments for environmental risk analysis".
  - ✓ Documents "Example MIRAT form" and "Example rate table form".
  - ✓ Document "Simplified Environmental Risk Management Study".
  - ✓ Document "Protocol for action in the case of incidents in the context of environmental liability regulations and administrative proceedings for environmental liability enforcement.
  - ✓ Document "Structure and general content of environmental damage remediation projects".
  - ✓ Document "Guide to the provision of the financial security stipulated in Law 26/2007, of 23 October, communication and review".
  - ✓ Guidance document "Determining the significance of environmental damage in the context of the Environmental Liability Act, Law 26/2007, of 23 October"



- As well as encouraging sound environmental risk management, the **mandatory financial security and the environmental risk analyses** that must be carried out by operator to determine it, are <u>useful tools for corporate decision-making</u>.
- A **sound regulatory framework**, that has been developed, encourage and reinforce the preventive aspects of Law 26/2007.
- There has been an intensive effort in **training, information and dissemination**, that also contribute to the implementation of the prevention of environmental damage. In addition to other measures taken in this field, the following documents have been published:
  - ✓ "Guidance document on the implementation of environmental liability regulations"
  - ✓ Brochure "Environmental liability regulations in Spain"

All these tools, documents, protocols and guides are integrated in the **Environmental Liability Information System (SIRMA)**.

Although their effect is difficult to quantify, all these measures introduced in the context of Law 26/2007, have had a significant preventive and deterrent effect, and have contributed to the implementation of the prevention of environmental damage.

#### Elements that allow the evaluation of the remedying of environmental damage

- There have been **61 cases** of environmental damage processed under Directive 2004/35/EC in Spain since April 2007.
- The entry into force of the **mandatory financial security system** in Spain, which is voluntary in Directive 2004/35/EC, contribute to remedy environmental damage, and guarantees that the costs of the necessary measures are borne by the liable operator, contributing to the implementation of the "polluter pays" principle.

All the elements described in this report should be taken into account in the evaluation of Directive 2004/35/EC the European Commission has to carry out and publish before 30 April 2023, on the basis of the information provided by Member States by 30 April 2022.

In this sense, it is important to highlight again that the evaluation of the European Commission cannot be carried out taking into account only and exclusively information on the cases of environmental damage processed, but also the other elements described in this report.

These other elements have a higher contribution in the achievement of the Directive's objectives, through the prevention of environmental damage, although their effect is difficult to quantify, and therefore they have to play a key role in the evaluation of the Directive.



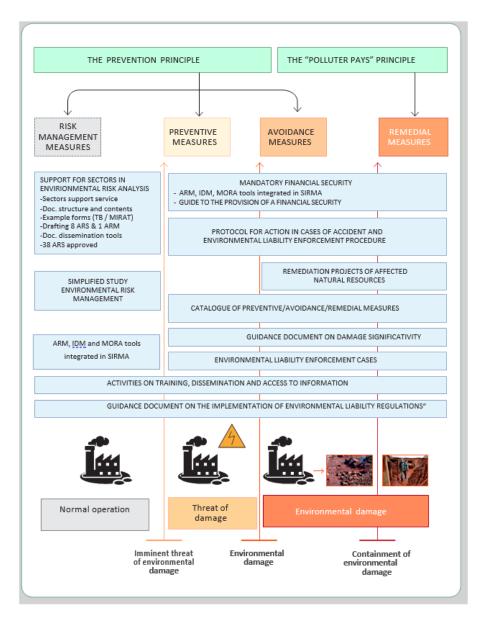


Figure 22: Actions taken for the implementation of Law 26/2007, to consider in the evaluation of the prevention and the remedying of environmental damage Source: Ministry for the Ecological Transition and the Demographic Challenge

