

Annex A – Indicative cost estimates and impacts

This annex provides context to the scale of impacts, were historic levels of non-compliance to persist. It presents a worst-case scenario we consider unlikely to materialise in practice, since it assumes no improvements to company performance or uptake of the opportunity to discharge liability after the notice of intent.

Table 1 and Table 3 set out the modelled industry-level cost of penalties. Table 5 sets out the resulting industry-level impacts on Return on Regulated Equity (RoRE).

Civil standard Variable Monetary Penalties (VMPs)

The EA will have discretion on the penalty value of VMPs imposed to the civil standard of proof, up to a maximum cap amount. For the purposes of this analysis, we assume a £60,000 penalty for a category 3 or 4 incident and a £140,000 penalty for a category 2 incident. This is based on a negligent level of culpability for category 2 and 3 offences for a large organisation as contained in the [Sentencing Council Guidelines](#). In practice, penalties will be higher or lower than these amounts due to, for example, aggravating or mitigating factors, up to the maximum cap amount.

The assumed penalty values have been applied to annual penalty estimates (based on historic levels of non-compliance) to produce the estimates set out in Table 1. The modelling reflects potential penalty costs based on historic levels of non-compliance. It does not account for changes to permit conditions or an uplift in inspections.

Table 1 Modelled annual cost of civil standard VMPs

Offence	Description	Number of penalties	Estimated cost (£)
Regulation 38(1)(a) and (b)	Operating without or other than in accordance with a permit.	316	£19,400,000
Regulation 38(2)	Failure to comply with or contravening a permit condition.	50	£6,200,000
Regulation 38(3)	Failure to comply with the requirements of a notice.	55	£3,700,000
Regulation 38(4)(a)	Failure to comply with a notice under regulation 61(1) requiring the provision of information, without reasonable excuse.	2	£280,000

Offence	Description	Number of penalties	Estimated cost (£)
Regulation 38(5)(a)	Failure to keep required records and make them available to the EA on request.	10	£600,000
Sections 24(4) and 25(2)	Unlicensed abstraction or impounding or failure to comply with condition of an abstraction or impounding licence.	16	£1,760,000
Section 25C(1)	Failure to comply with an abstraction or impounding enforcement notice served under Section 25A.	2	£200,000
Section 80	Contravention of a drought order or permit.	4	£320,000
Section 201(3)	Failure to comply with the requirements of a Section 201 notice.	11	£740,000
Total		466	£33,200,000

Notes on Table 1

Source: Environment Agency

Figures include water and sewerage companies and water only companies. For the estimated number of penalties, data sources are as follows:

- *EPR 2016 offences - this is based on data from the Competence Management System (CMS) for the last 6 years*
- *WRA 1991 offences - this is based on data from the Compliance Categorisation System (CCS) from 2018 to present day*

Civil standard Fixed Monetary Penalties (FMPs)

The EA will be granted powers to impose civil standard FMPs for the substantive offences that automatic penalties rely upon – namely permit and licence breaches under regulation 38(2) of the EPR 2016 and Section 24 of the WRA 1991.

These penalties are not separately modelled within this Annex because the EA has indicated that civil standard FMPs, which typically carry lower penalty amounts, are expected to be used as an alternative enforcement tool for a subset of cases already captured within the civil standard Variable Monetary Penalty (VMP) modelling.

As such, the use of civil standard FMPs is not expected to result in additional costs beyond those already accounted for in Annex A.

Automatic penalties

Using the automatic penalty values being consulted on as set out in Table 2, and applying these values to the estimated annual number of automatic penalties based on historic levels of non-compliance from appropriate years in Table 3, we have modelled the annual cost of automatic penalties for the water industry. This is presented in Table 3 for each of the penalty value options being consulted on when a company does not discharge liability after the notice of intent.

Table 2 Automatic penalty value options for if a company does not discharge liability after the notice of intent

Company size	Proposed definition	Scope	Option 1	Option 2	Option 3
Very large organisation	A turnover over £250 million	All water and sewerage companies and some water only companies	£20,000	£15,000	£10,000
Large organisation	A turnover over £50 million and up to £250 million	Some water only companies	£14,000	£10,500	£7,000
Medium organisation	A turnover over £10 million and up to £50 million	Some water only companies	£5,000	£3,750	£2,500
Small organisation	A turnover over £2 million and up to £10 million	Some NAVs	£1,000	£750	£500
Micro organisation	A turnover £2 million or less	Some NAVs	£400	£300	£200

Notes on Table 2

Source: [Sentencing Council Guidelines](#) and company Annual Performance Reports.

Table 3 Modelled annual cost of penalties broken down per specified circumstances that would trigger an automatic penalty

Specified circumstances	Number of penalties	Option 1	Option 2	Option 3
Failure to report a significant pollution incident within 4 hours	8	£160,000	£120,000	£80,000
Failure to maintain Event Duration Monitor (EDM) operation at or above 90% of a reporting year	1,500	£30,000,000	£22,500,000	£15,000,000
Failure to report EDM operation data monthly	25	£500,000	£375,000	£250,000
If an emergency overflow discharges more than 3 times in a year	70	£1,400,000	£1,050,000	£700,000
Failure to return abstraction data to the EA within 28 days of being requested	32	£597,000	£448,000	£298,000
Failure to provide records requested by the EA related to maintenance and accuracy of monitoring devices within 28 days	8	£149,000	£112,000	£75,000
Failure to have an accurate and reliable monitoring device in place to measure the quantity of water abstracted	50	£983,000	£737,000	£492,000
Total	1,693	£33,789,000	£25,342,000	£16,895,000

Notes on Table 3

Source: Environment Agency

Water only companies are expected to only attract automatic penalties for the water resources act offences listed as the bottom 3 circumstances in Table 3.

For the estimated number of penalties, data sources are as follows:

- *Failure to report a significant pollution incident within 4 hours: National Incident Recording System (NIRS) data from 2023.*
- *EDM operation less than 90%: storm overflow numbers are based on 2023 data from the Environment Agency. Emergency overflow numbers are extrapolated from 2023 data (also from the Environment Agency) showing the proportion of emergency overflows at less than 90%. Currently monitors are not installed at all emergency overflows.*
- *Failure to report EDM operation data monthly: annual EDM data returns for storm and emergency overflows for 2024.*
- *Emergency overflow discharges more than 3 a year: NIRS and EDM data from 2022 and 2023.*
- *WRA 1991 offences: data from the Compliance Categorisation System (CCS) from 2018 to present day.*

Cumulative modelled cost of penalties

The modelled annual civil standard VMPs and automatic penalty costs, as detailed in Table 1 and Table 3, are summarised in Table 4.

Table 4 Summary of modelled annual costs

Penalty type	Option 1	Option 2	Option 3
Civil standard VMPs	£33,200,000	£33,200,000	£33,200,000
Automatic penalties	£33,789,000	£25,342,000	£16,895,000
Total	£66,989,000	£58,542,000	£50,095,000

Cumulative modelled impact on equity returns

The costs associated with automatic penalties and civil standard VMPs, as illustrated in Table 4, are assessed for their impact on financeability. This is achieved by looking at how these cumulative penalties affect company finances using the RoRE metric.

The impact on RoRE for a given company is estimated as follows:

$$RoRE\ impact = \frac{\text{estimated annual automatic penalties} + \text{regulated equity company value}}{\text{regulated equity company value}}$$

Applying this formula to estimate RoRE impacts produces the median impacts shown in Table 5. We assumed notional capital gearing of 55% in calculating regulated equity company values, consistent with the notional capital structures used by Ofwat in Price Review 2024.

Table 5 Modelled RoRE impact resulting from total modelled annual cost of new penalties

Automatic penalty value option	Total modelled annual cost of new penalties	Industry impact (water and sewerage companies)	Industry impact (water only companies)
Option 1	£67 million	-14	-3
Option 2	£58.6 million	-13	-3
Option 3	£50.1 million	-11	-2

Notes on Table 5

A notional capital structure of 55% debt to capital is assumed when estimating RoRE impacts. The penalty costs in this table may not exactly match the sum of the relevant figures in Table 1, Table 3 and Table 4 due to the effects of rounding.