

The Regulatory Policy Committee (RPC), an independent advisory non-departmental public body providing scrutiny on the evidence and analysis supporting the estimates of costs and benefits in regulatory proposals, considered this draft impact assessment. The RPC were not satisfied the impact assessment provided sufficient evidence to support the proposals, and required that it is further reviewed (see Section 5 in part A of the consultation for more details). We will review the impact assessment to address RPC concerns alongside the consultation. We will also use the responses to the consultation to improve the analysis. The revised impact assessment will only be published alongside the final government response to the consultation once it has received a fit-for-purpose opinion from the RPC.

|   |   |  |  |                                 |
|---|---|--|--|---------------------------------|
| <b>Title:</b> Strengthening the regulators assessment and enforcement of operator competence in the waste sector<br><br><b>IA No:</b><br><b>RPC Reference No:</b><br><b>Lead department or agency:</b> Defra<br><b>Other departments or agencies:</b> | <b>Impact Assessment (IA)</b>                 |  |  |                                 |
|   | <b>Date:</b> 20/04/2017                       |  |  |                                 |
|   | <b>Stage:</b> Development/Options             |  |  |                                 |
|   | <b>Source of intervention:</b> Domestic       |  |  |                                 |
|   | <b>Type of measure:</b> Secondary legislation |  |  |                                 |
| <b>Contact for enquiries:</b><br>william.wakefield@defra.gsi.gov.uk   |   |  |  |                                 |
| <b>Summary: Intervention and Options</b>  |   |  |  | <b>RPC Opinion:</b> Red Opinion |

| Cost of Preferred (or more likely) Option |                            |   |                   |                               |
|---|----------------------------|---|-------------------|-------------------------------|
| Total Net Present Value                   | Business Net Present Value | Net cost to business per year (EANDCB in 2014 prices) | One-In, Three-Out | Business Impact Target Status |
| £42.39m                                   | -7.68                      | 0.7   | Not in scope      | Qualifying provision          |

Waste sites that are seriously can mismanaged have significant consequences for the wider public. They cause pollution to the natural environment and nearby communities are adversely impacted by vermin, fly infestations, fires, smoke, litter, dust and odours. Evidence from the industry trade association, Environmental Services Association, estimates the cost to the UK economy as being in the order of magnitude of hundreds of millions of pounds. Strengthening the regulators assessment and enforcement of a waste site operator's competence will increase compliance levels and decrease the number of waste sites being abandoned and reduce the externality costs to the environment and community.

**What are the policy objectives and the intended effects?**

The overall policy objective is to improve compliance levels at waste sites and reduce the abandonment of sites by strengthening the regulator's ability to assess and enforce operator competence regulations. The appraisal will focus mainly on four elements: 1) past operator performance, 2) management systems, 3) technical competence, 4) financial competence, but it will also allude to a possible future option of financial provision. The intended effect is to reduce risks to the natural environment and local communities and to lower costs to the tax payer. The removal of seriously mismanaged sites that regularly breach the regulations will reduce unfair competition which will bring benefits to compliant and responsible waste operators and the wider economy.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

The policy options include amending core guidance and regulations or amending permit conditions to strengthen the assessment and enforcement of each of the four elements.  
Option 1: is the do nothing option, under this base case there will be no changes to the rules that apply to operator competence. Option 2: This option would improve the four elements of operator competence. Option 3: is a full financial provision mechanism for waste permits.  
Having assessed the relevant options, the preferred option is Option 2, which involves amending the core guidance and regulations, because it fulfils the policy objective and provides the highest relative value of NPV.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** 09/2023

|   |  |                     |                     |                      |                     |
|---|--|---------------------|---------------------|----------------------|---------------------|
| Does implementation go beyond minimum EU requirements?  |  | N/A                 |                     |                      |                     |
| Are any of these organisations in scope?  |  | <b>Micro</b><br>Yes | <b>Small</b><br>Yes | <b>Medium</b><br>Yes | <b>Large</b><br>Yes |
| What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions?<br>(Million tonnes CO <sub>2</sub> equivalent) |  | <b>Traded:</b>      |                     | <b>Non-traded:</b>   |                     |

*I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.*

Signed by the responsible SELECT SIGNATORY: \_\_\_\_\_ Date: \_\_\_\_\_

# Summary: Analysis & Evidence

# Policy Option 1

Description: Do nothing - maintain status quo

## FULL ECONOMIC ASSESSMENT

| Price Base<br>Year 2017  | PV Base<br>Year 2017                              | Time Period<br>Years 10 | Net Benefit (Present Value (PV)) (£m)                        |               |   |     |
|--|---|-------------------------|--|---------------|---|-----|
|  |   |                         | Low: -496.49   | High: -257.49 | Best Estimate: -376.99                  |     |
| <b>COSTS (£m)</b>  | <b>Total Transition</b><br>(Constant Price) Years |                         | <b>Average Annual</b><br>(excl. Transition) (Constant Price) |               | <b>Total Cost</b><br>(Present Value)    |     |
| Low  | 0   |                         | 28.1   |               | 257.5                                   |     |
| High   | 0   |                         | 54.3   |               | 496.5                                   |     |
| Best Estimate  | 0   |                         | 41.2   |               | 377.0                                   |     |
| <p><b>Description and scale of key monetised costs by 'main affected groups'</b></p> <p>This option will result in costs to the regulators and society. It will continue to cost regulators £3.5m per year from dealing with pollution incidents at poor performing sites. The current average cost of £41.8m per year to society through damage to the environment and disamenity impacts will also continue.</p> |   |                         |  |               |   |     |
| <p><b>Other key non-monetised costs by 'main affected groups'</b></p> <p>This option will continue to result in losses and thereby cost to legitimate waste businesses. Non-compliant businesses are able to undercut compliant businesses since they are able to operate with lower costs because they are currently not adhering to the operational standards required by the regulations.</p>                   |   |                         |  |               |   |     |
| <b>BENEFITS (£m)</b>   | <b>Total Transition</b><br>(Constant Price) Years |                         | <b>Average Annual</b><br>(excl. Transition) (Constant Price) |               | <b>Total Benefit</b><br>(Present Value) |     |
| Low  | 0   |                         | 0  |               | 0                                       |     |
| High   | 0   |                         | 0  |               | 0                                       |     |
| Best Estimate  | 0   |                         | 0  |               | 0                                       |     |
| <p><b>Description and scale of key monetised benefits by 'main affected groups'</b></p> <p>This option would not increase the levels of compliance in the waste sector and there would be no benefit from this option.</p>   |   |                         |  |               |   |     |
| <p><b>Other key non-monetised benefits by 'main affected groups'</b></p> <p>There are no non-monetised benefits.</p>   |   |                         |  |               |   |     |
| Key assumptions/sensitivities/risks  |   |                         |  |               | Discount rate (%)                       | 3.5 |
| <p>Although the Environmental Services Association suggests that the level of waste crime may be increasing<sup>1</sup>, in the absence of conclusive proof of such a trend, for this analysis the conservative working assumption was adopted that the cost to the regulators and society will remain the same over the next 10 years.</p>  |   |                         |  |               |   |     |

## BUSINESS ASSESSMENT (Option 1)

|  |               |          |  |
|--|---------------|----------|--|
| <b>Direct impact on business (Equivalent Annual) £m:</b> |               |          | <b>Score for Business Impact Target (qualifying provisions only) £m:</b> |
| Costs: 0.0   | Benefits: 0.0 | Net: 0.0 |  |
|  |               |          | 0  |

<sup>1</sup> Rethinking Waste Crime, Environmental Services Association, 2017

# Summary: Analysis & Evidence

# Policy Option 2

Description: Amend EP core guidance & regulations

## FULL ECONOMIC ASSESSMENT

| Price Base<br>Year 2017  | PV Base<br>Year 2017                              | Time Period<br>Years 10 | Net Benefit (Present Value (PV)) (£m)                        |             |   |     |
|--|---|-------------------------|--|-------------|---|-----|
|  |   |                         | Low: 38.96   | High: 45.82 | Best Estimate: 42.39                    |     |
| <b>COSTS (£m)</b>  | <b>Total Transition</b><br>(Constant Price) Years |                         | <b>Average Annual</b><br>(excl. Transition) (Constant Price) |             | <b>Total Cost</b><br>(Present Value)    |     |
| <b>Low</b>   | 7.6   |                         | 0.1  |             | <b>7.7</b>                              |     |
| <b>High</b>  | 7.8   |                         | 0.1  |             | <b>8.5</b>                              |     |
| <b>Best Estimate</b>   | 7.7   |                         | 0.1  |             | <b>8.1</b>                              |     |
| <b>Description and scale of key monetised costs by 'main affected groups'</b>  |   |                         |  |             |   |     |
| <p>This option will result in costs to waste site operators and the regulators. There will be £7.7m in transition costs for operators to become technically competent, produce management systems and to cover familiarisation time. Ongoing costs are £35,000 (approx.) per year to operators for a financial competence report and £52,500 (approx.) per year to the regulators from the additional time to check financial competence reports in permit applications and transfers.</p>                                     |   |                         |  |             |   |     |
| <b>Other key non-monetised costs by 'main affected groups'</b>   |   |                         |  |             |   |     |
| There are no non-monetised costs identified.   |   |                         |  |             |   |     |
| <b>BENEFITS (£m)</b>   | <b>Total Transition</b><br>(Constant Price) Years |                         | <b>Average Annual</b><br>(excl. Transition) (Constant Price) |             | <b>Total Benefit</b><br>(Present Value) |     |
| <b>Low</b>   | 8.1   |                         | 5.1  |             | <b>47.5</b>                             |     |
| <b>High</b>  | 9.1   |                         | 5.8  |             | <b>53.5</b>                             |     |
| <b>Best Estimate</b>   | 8.6   |                         | 5.5  |             | <b>50.5</b>                             |     |
| <b>Description and scale of key monetised benefits by 'main affected groups'</b>   |   |                         |  |             |   |     |
| <p>The option would result in a reduction in the number of poor performing sites. This would result in benefits to society from avoided environmental damage and disamenity impacts that are caused by poor performing sites, of £8m transition benefits in year 1 and £5m per annum thereafter. In addition, there is approx. £0.5m in transition benefits (year 1) and approx. £0.35m benefits per annum thereafter to the regulators from <del>dealing with fewer pollution incidents from poor performing sites</del>.</p> |   |                         |  |             |   |     |
| <b>Other key non-monetised benefits by 'main affected groups'</b>  |   |                         |  |             |   |     |
| <p>Certain benefits have not been possible to quantify, including improving human health, less groundwater contamination, improved reputation to the waste industry and regulators. There will also be a benefit to waste businesses as it will create a level playing field where non-compliant waste operators will be less able to undercut legitimate and compliant operators. We are currently unable to quantify this and will seek <del>information in the consultation</del>.</p>                                      |   |                         |  |             |   |     |
| Key assumptions/sensitivities/risks  |   |                         |  |             | <b>Discount rate (%)</b>                | 3.5 |
| <p>A number of assumptions were made when calculating the costs and benefits. The key assumptions were: estimating the proportion of waste operators impacted by the intervention, the costs to the waste site operators, and the decrease in the number of poorly compliant sites from the intervention. We will confirm these assumptions with the waste industry during the consultation.</p>   |   |                         |  |             |   |     |

## BUSINESS ASSESSMENT (Option 2)

|  |             |          |  |
|--|-------------|----------|--|
| <b>Direct impact on business (Equivalent Annual) £m:</b> |             |          | <b>Score for Business Impact Target (qualifying provisions only) £m:</b> |
| Costs: 0.7   | Benefits: 0 | Net:-0.7 |  |
|  |             |          | 3.5  |

## Evidence Base

### 1. What is the problem under consideration?

Since the introduction of the EU Waste Framework Directive in 2008, the waste sector in England and Wales has changed; more waste has been diverted away from landfill and put to beneficial use, with clear benefits to the environment and the taxpayer. Waste sites operating under a permit play a critical role in managing waste safely and under controlled conditions. Most of these sites operate responsibly and meet the required standards. However, certain permitted waste sites act illegally by not complying with the conditions of their waste permit, resulting in poor compliance and sites being abandoned.

These non-compliant sites have many negative impacts. They cause serious pollution to the natural environment and disamenity for nearby communities in the form of odour, litter, dust, vermin, fly infestations and fires. External sources have indicated that this issue has had a substantial impact on the economy. The figures quoted in the ESA report<sup>1</sup> give an indication of the scale of the problem. Waste crime also hampers resource efficiency by creating illegal shortcuts for disposing of waste cheaply, and so undercutting compliant businesses who seek to recycle or recover resources and feed them back into the economy.

These impacts are partly attributed to non-compliance as a result of poor operator competence. The environmental regulators' (Environment Agency and Natural Resource Wales) Operational Risk Appraisal (Opra) assessment It categorises all permitted waste sites into bands from A to F. These are bands are based on site performance and compliance levels in the previous year. In this categorisation Bands A, B and C constitute well run sites which are compliant with the environmental permitting regulations. Bands D, E and F are considered poor performers and are not compliant with the regulations or the regulators enforcement efforts.

In 2015, Opra found 465 (4%) of the around 11,700 permits in the waste industry showed poor compliance with permit conditions and were rated D, E or F band. Of these, 203 were persistent poor performers who have been rated D, E or F for two years or more. In the same year 73% (69) of serious pollution incidents were caused by permitted waste sites rated DEF. In a sample of 14 waste sites which were designated as 'sites of high public interest'<sup>2</sup> in 2015 by the regulators, 64% (9) had a DEF rating.

Dealing with a poor performing site costs the regulator substantially more than it receives in permit fees. The average cost to the regulator of successfully resolving a DEF site is £30,690.

Poor competence can also lead to site operators failing to comply with the regulator's enforcement requirements and ultimately abandoning the site. In these cases government bears the cost of clearing the remaining waste. There are approximately 40 abandoned sites in England and Wales at present, and on average there are around 19 sites abandoned

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<sup>1</sup> [Rethinking Waste Crime, Environmental Services association, 2017](#)

<sup>2</sup> Sites of high public interest are sites that are already generating a lot of public interest, or have the potential to generate high public interest (whether for environmental, legal or political reasons)

each year. The cost of clearing the 40 sites is estimated to be £13m, depending on the type of waste. The waste at abandoned sites is not stored or managed in accordance with the conditions of the permit. It increases the risk of fires and can involve large amounts of waste which can burn for prolonged periods. The cost to the regulators and local services to deal with these fires can be significant. For example, costs incurred by the London Fire Brigade in attending a site in London over the course of 2013 to 2015 were nearly £1m<sup>3</sup>.

## 2. The Base Case

The base case which will act as the counterfactual is different in this IA from that in the generality of IAs. Unlike many others, this IA is addressing an ongoing issue of widespread malpractice, poor performing standards and illegal behaviour. The Environment Agency has observed a definite connection between serious shortcomings in performance and infractions of regulatory and legal requirements<sup>4</sup>. This issue of endemic malpractice and illegality was not envisaged when the current regulatory system was installed.

At that point of developing and implementing the current system it was thought that a 'light touch' approach would be sufficient to ensure general adherence to socially beneficial behaviour. When the current regulatory system was introduced the extent of ensuing malpractice and illegality was not envisaged. This presumption supported the introduction of the regulatory framework that is currently in place, and so provides the idealised and conceptual basis for the counterfactual. However, from an analytical standpoint one must distinguish this idealised expectation of large-scale adherence from the subsequent realisation that there was greater than expected illegal behaviour. The point at which this was initially recognised by Government, some years after the introduction of the regulations, is therefore used as the actual base case yardstick against which the three policy options are compared in the IA. This realisation also followed industry responses to a call for evidence by Government regarding compliance with waste regulations and initial evidence collected by regulators that showed that actual compliance rates were considerably lower than what was originally expected. Thus it was at the stage that the original presumption was superseded as it was recognised that sizeable benefits could be obtained through raising compliance. However, the full extent of such potential benefits was still at that point not fully known.

On the basis of these circumstances, for the analysis in this IA the practical baseline benchmark is taken as the interim compliance level that was understood to apply at the time that these fact-finding measures were being put in place and new evidence gathered on levels of compliance, but before their specific findings emerged. Taking this perspective means that in relation to the baseline the adoption of the 'do nothing' option entails the continuation in the future of poor sub-standard performance, illegality and environmental

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<sup>3</sup> This IA on Operator Competence can be seen in the context of a suite of regulatory reforms, as explained in IAs /RTAs on waste site exemptions and affirmative measures, that are being proposed to address and ameliorate serious problems arising from waste crime and malpractice.

<sup>4</sup> Environment Agency: Opra assessment (email 23.5.17).

damage. The currently 'light touch' regulatory approach is relatively permissive in its provisions on past performance, written management systems, technical competence and financial competence. To have adopted the traditional approach of taking the 'do nothing' option as the base case would have obscured to the point of disguising the ongoing substantial costs of maintaining the existing situation<sup>5</sup>. It is now apparent that the 'do nothing' option entails future acquiescence in illegality and environmental damage. This outcome is accounted for in the IA by this option, i.e. Option 1, having a negative NPV.

Regarding Option 2, which will involve implementing more rigorous entry requirements; this will also be considered relative to the preceding base case, as set out above. When appraised in comparison with this non-prescriptive regulatory regime there is a greater likelihood that the proposed entry requirements will lead to a sizeable increase in adherence to performance standards and thereby to legal stipulations. This in turn will result in a higher probability of beneficial environmental outcomes. This outturn is accounted for in the IA by a positive NPV. It is important to understand that a direct comparison is not being made between Option 1 and Option 2. The relative comparator in each case separately should be the base case of a non-prescriptive regulatory regime

### **3. What is the rationale for intervention?**

The rationale for Government and regulatory intervention is predominantly to rectify the environmental and social effects associated with poor performing permitted sites. Significant shortfalls in performance generate negative externalities associated with market failure, which occurs when economic activities give rise to costs that are not reflected in market prices. These externalities consist of the environmental and disamenity impacts outlined above. Not only do persistent poor performing sites generate externalities, they also compromise fair competition for those sites that operate responsibly by complying with regulations and safety standards.

Intervention is necessary to address these externalities by strengthening the regulator's assessment and enforcement of the competence of waste site operators. As highlighted in the 2015 call for evidence, there are four elements of operator competence outlined in the Environmental Permitting (EP) Core Guidance 2013 that the regulators currently assess and will need strengthening: 1) past operator performance, 2) management systems, 3) technical competence, and 4) financial competence/provision. Evidence collected by the regulator<sup>6</sup> shows these four elements of competence are linked to poor compliance. Changes to the EP Core Guidance in 2013, which expanded the regulators ability to refuse and revoke permits on competence grounds, resulted in a reduction of 6% (217 to 203) of persistent poor performers from 2014 to 2015. Whilst this was clearly beneficial, it did not go far enough to strengthen the ability of the regulators to assess and enforce all four areas of competence to significantly increase compliance levels and reduce the number of abandoned sites.

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<sup>5</sup> The convention for the base case is that it sets the comparator relative to which the costs and benefits of the other options are compared. In practice this involves setting the base case values to zero before recalibrating the corresponding values for the other scenarios.

<sup>6</sup> Environment Agency: '[Regulating the waste industry: 2015 evidence summary](#)'



### **3.1. Past Performance**

The regulator is currently able to take into account an operators past performance when determining whether a permit should be issued, transferred or reviewed. This includes an operator's and persons associated with the waste operations compliance with regulatory requirements and convictions for relevant offences (defined as an offence relating to the environment or the operation of a waste site). However evidence of previous poor compliance or a relevant conviction does not automatically mean that a permit is declined or revoked. It is within the discretionary power of the regulator to assess the risks and decide whether or not to issue a permit. A recent audit by the EA National Permitting Service of 22 permits chosen at random showed that three of the 22 permits (13.6%) should be challenged under the current scope of poor past performance. This suggests that more robust scrutiny of past performance would be beneficial.

The 2015 call for evidence and subsequent engagement with stakeholders revealed considerable support for widening the scope of what is considered "relevant convictions". Extending the range of convictions to be declared would help prevent potentially high risk individuals from acquiring permits under a veil of legitimacy. The EA National Permitting Service is running a project in 2017/18 to gather further information on intelligence/criminal checks in permit applications.

### **3.2. Management Systems**

Management systems are an important and effective means of ensuring waste is managed without endangering human health or the environment and minimising the risk of fire. Permits issued or varied since 2008 contain a condition which requires a written management system. However this is not a legal requirement so that 2,018 sites are potentially operating without a management system in place. This is a significant contributory factor in poor performance. An audit undertaken by the EA National Permitting Service showed that of five permitted sites that fell into DEF status within a year of being issued, one in five (20%) was due to inadequate management systems and poor technical competence. This highlights the importance of permit holders adopting and implementing a written management system.

### **3.3. Technical Competence**

All permits issued or varied after 2008 contain a condition for the operator to be technically competent through a scheme approved by Defra. There are currently two approved schemes; CIWM/WAMITAB <sup>7</sup>scheme of individual operator competence and the ESA/EU Skills<sup>8</sup> scheme of corporate competence).

There is a requirement in legislation for an operator to be technically competent; however this legislation does not require an operator to show their technical competence through a scheme approved by the regulators. The legislation does not enable the regulators to use the full range of their discretionally enforcement powers on permits issued before 2008 that

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<sup>7</sup> Chartered Institution of Wastes Management / Waste Management Industry Training and Advisory Board

<sup>8</sup> Environmental Services Association / Energy and Utilities Skills

have not been varied. It only enables the regulators to revoke these permits which they choose not to do because it is often too draconian an option and doesn't enable the regulators to suspend or issue compliance notices.

There is also evidence that certain technically competent managers (TCM) are not acting in a proper manner. Some TCMs are spread too thinly by providing cover at many waste sites at the same time, whilst other TCMs are acting in an improperly and can be known to provide poor or wrong advice to waste operators. This loop-hole effectively means that a waste site is able to show the regulators that they meet suitable levels of technical competence because they have employed a TCM, but the TCM will not have the time or ability to influence the running or compliance levels of the site.

Following the 2015 Call for Evidence, the scheme providers and the regulators have worked together to agree the time TCMs should be present on site to enable TCMs to handle multiple sites at the same time in a safe manner. The time a TCM must spend on site depends on the type of permit and the regulatory compliance rating, although a TCM does not need to attend a site for more than 48 hours per week regardless of the type of operation.

There is currently no legal requirement for a waste site to provide the name of their TCM to the regulator to enable the regulator to build up a national picture of TCMs and waste sites.

### **3.4. Finance**

The EP Core Guidance states there is an obligation for permitted waste sites to be financially capable of complying with the conditions of their permit, but regulators are only able to consider financial solvency explicitly in cases they have reason to doubt the financial viability of the activity.

The growing number of waste sites being abandoned has led to significant calls from the waste industry, trade associations and MPs for a financial provision measure to cover removal of all waste, remediation of the land to a satisfactory state, and foreseeable clean-up costs relating to an environmental incident or permit breach. The majority of respondents to the 2015 call for evidence wanted the introduction of a financial provision mechanism.

Prospective measures to strengthen the regulators' assessment of financial competence would decrease the number of sites becoming non-compliant in the first place and enabling them to require operators of high risk waste sites to provide secure financial provision would significantly deter operators from abandoning sites and therefore substantially reduce the number of such occurrences and the ensuing cost to the taxpayer and public purse.

## **4. Policy objectives**

The overall policy objective is to improve compliance levels at waste sites and reduce the abandonment of sites by strengthening the regulator's assessment and enforcement of operator competence. The policy objectives for each element are:

*Past Performance* – reduce the number of waste sites from becoming non-compliant in the first place by widening the scope of convictions when assessing past performance.

*Management System* - increase levels of compliance at all permitted sites by requiring all permitted waste operators to manage and operate in accordance with a written management system.

*Technical Competence* - increase compliance at all permitted sites by enabling the regulators to require suitable levels of technical competence at all permitted waste sites.

*Financial* – reduce the likelihood of waste sites becoming non-compliant in the first place and the number of sites being abandoned because the operator is unwilling or unable to meet their permit obligations. Enable the regulators to require financial provision for high risk sites and so minimise the cost to government and landowners of clearing abandoned sites.

The intended effect is to reduce risks to human health, the natural environment and local communities. It will reduce costs to landowners and the tax payer. The removal of illegal and unfair practices will bring benefits to legitimate waste operators and the wider economy.

## **5. What are the options?**

The options to strengthen the assessment and enforcement of operator competence are set out below. We considered three options, including the do nothing option, to strengthen the regulators' enforcement and assessment of operator competence. Option 1 will not address the impacts to the natural environment and local communities. .

Option 2 is provides the best value for money for the taxpayer while achieving the policy aims. Option 3 will reduce the costs to the regulator, but would be prohibitively expensive to business.

The two main groups that are impacted by the costs are waste site operators and the regulators.

### **5.1. Option 1: Do Nothing**

The first option is for government not to intervene in the waste sector to improve operator competence. In this option the costs and benefits for each element have be considered together.

#### **5.1.1. Description of each element**

*Past Performance* - no change to how the regulators assess past performance. The regulators are currently able to take into account an operator's compliance with regulatory requirements and convictions for relevant offences (defined as an offence relating to the environment or the operation of a waste site) and are not able to take account of offences that are not related to the environment or waste.

*Management Systems* – no change to how the regulators enforce compulsory management systems. All permits issued after 2008, and all pre-2008 permits varied after 2008, will have a permit condition for a management system. Without intervention it will take approximately 20 years for all remaining pre-2008 permits to come up for variation and a management system requirement to be included in these permits.

*Technical Competence* - not change how the regulators enforce technical competence. As with management systems, all permits issued after 2008 permits, and all pre-2008 permits varied after 2008, will have a permit condition of technical competence. It will take approximately 20 years for remaining pre-2008 permits come up for variation and a technical competency requirement to be included in these permits.

*Financial* –there will be no change to how the regulators assess an operator’s financial competence and no requirement of financial provision for high risk sites.

### 5.1.2. Costs

There would be no additional cost to waste site operators if this option is taken forward. Regulators continue to incur costs of £3.5m per annum. This is calculated as the baseline number of incidents per year multiplied by the cost to the regulator of an incident: £24,048 \* 145 = £3.5m. The costs to the environment, ecology, local communities and pollution incidents will continue due to the presence of illegal activity. The following table gives the estimated externality costs per tonne<sup>9</sup> caused by illegal sites.

| Estimates<br>£/tonne | Low          | High         | Central      |
|----------------------|--------------|--------------|--------------|
| Environmental        | £1.86        | £1.88        | £1.87        |
| Disamenity           | £6.02        | £6.18        | £6.10        |
| <b>Total</b>         | <b>£7.88</b> | <b>£8.06</b> | <b>£7.97</b> |

Taking these estimated costs and multiplying by the estimated central (average) tonnage of waste, which is estimated to be about 5.23m tonnes<sup>10</sup>, the total annual costs of current non-compliance by operators and regulator action would amount to around £41.7m. Adding this to the ongoing costs to ongoing costs to the regulator, as identified above, would give overall annual costs of £45m.

### 5.1.3. Benefits

This option would not increase the levels of compliance in the waste sector and there would be no benefit from this option.

## 5.2. Option 2: Improving four elements of operator competence

The second option is improving four elements of operator competence. It would involve a combination of amending the EP core guidance and EP legislation. The preferred mechanism for each of the four elements is outlined below, but industry’s views will be sought on the use of guidance or legislation to achieve the policy objectives. In this option,

<sup>9</sup> Ricardo - AEA Consultants Report: Technical Report on the Waste Crime Intervention and Evaluation Project (Environment Agency, 2016).

<sup>10</sup> Environment Agency estimate

the costs for each of the elements have been set out separately, however the benefits of each element have been combined to show the total impact of the reduction in the number of poor performing sites.

### **5.2.1. Options for each element**

*Past performance* - amend the EP Core Guidance to strengthen the regulator's assessment of past performance by widening the scope of relevant offences that regulators can take into account in order to suspend, revoke or decline a permit. The definition of relevant offences will be widened to include all offences.

*Technical Competence* - amend EPR legislation to strengthen the regulator's assessment and enforcement of technical competence by: 1) making it more explicit in legislation that operators need to become technically competent through a scheme approved by the regulator to operate a permitted waste site, and 2) enable the regulators to require operators to inform them who the Technically Competent Manger is at their waste site.

*Management Systems* - amend EPR legislation to strengthen the regulator's assessment and enforcement of management systems by including a requirement for all permitted waste sites to have a management system. It would require all operators to manage and operate the activities in accordance with a written management system.

*Financial Competence* - amend the EP Core Guidance to strengthen the regulators ability to determine an operator's financial competence by requiring all applicants for new permits and transfers of existing permits, to submit an independent financial report.

### **5.2.2. Costs**

These consist of regular and transitional costs

#### **Past performance**

##### *Costs to waste site operators*

We do not anticipate any direct cost on current waste site operators. Operators already have to provide information of convictions when applying or transferring a permit so this will not increase the time to do this.

##### *Costs to regulators*

A permitting officer would have to spend additional time checking a permit application or transfer against the widened definition of relevant convictions. This cost would only be marginal because permit officer already checks applications against the current definition of convictions. It currently takes a permit officer around 20 minutes to review the past convictions during a permit application and the regulators expect to spend a similar time again, or slightly less, to review the wider convictions. Through discussions with the regulators it has been estimated that it would take a permit officer an extra 10 to 20 minutes to check a permit against the widened definition of relevant convictions. The standard manpower cost of a permit officer is £90/hr including overheads. Based on an average of 1,167 new permit applications and transfers per year it will take an additional 194.50 hours

to 389 hours to check the permits. These costs range from £17,500 to £35,000 (approx.) per year.

## **Management Systems**

### Costs to waste site operators

There will be a transitional cost to a proportion of waste site operators to develop a system or amend their current working plan to comply with the modern format. As set out below, we estimate that 2,018 waste operators do not currently have any system in place. Of the current 11,775 permits, 6,698 (57%) were issued before 2008 and do not contain a management system condition unless they have since been varied. According to the regulator, 7,186 waste permits have been varied since 2008, and we have assumed that 57% of all permits varied are pre-2008 permits, meaning 4,096 of the 6,698 pre-2008 permits now include a management system condition. Additionally, the Environment Agency has indicated that large scale operators (1,184) are likely to have developed and implemented a management system even if they do not have this condition in their permit. About half of the large scale operators (592) would have already had their permit varied to include a technical competence condition because large scale operator's permits are varied more frequently. The remaining 2,018 sites, which will be predominantly smaller less complex sites, the Environment Agency estimates that around 50% (1,009) would contain a permit condition that requires a working plan (the predecessor of a management system) and the other 50% (1,009)<sup>11</sup> would have to create an entirely new management system.

From discussions with the regulators and waste management consultants we have estimated that the average cost of revising a working plan so it complies with the modern management system condition is £1,000 and the cost of producing a new management system is £3,000. We will use the consultation to confirm these costs. The transitional cost for the 1,009 operators to revise their working plans is (1,009 x £1000) approx. £1m and it will cost the other 1,009 operators to produce a new management system (1,009 x £3,000) approx. £3m. The total cost is around £4m.

### Costs to regulators

There will be no additional costs to the regulators to assess the additional management systems because the process for checking is already accounted for in the subsistence fee during the inspection of sites.

## **Technical Competence**

### Costs to waste operators

There will be a transitional cost for a proportion of waste site operators to become technically competent through a scheme approved by the regulators. We estimate that 2,018 waste operators will need to gain this qualification<sup>12</sup>. As with management systems, we estimate

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<sup>11</sup> The source of the figures in this paragraph is the Environment Agency and the Natural Resources Wales.

<sup>12</sup> Ibid.

that permits issued and varied after 2008 and to large scale operators do not contain a technical competence condition in their permit.

There are currently two approved schemes, each of which have been running for about 8 years so all the infrastructure is already in place. The schemes are both industry run schemes and were approved by government. They are used by the majority of permitted waste operators and this proposal will require the remainder to choose and use one of those schemes. The regulators are beneficiaries of the schemes, accepting the qualification/ accreditation frameworks as evidence of technical competence whilst avoiding the need to get involved in the training and assessment process, as independent third party accreditation is utilised. The role of regulators is limited to checking that sites are using one of the schemes. The task of checking technical competence forms part of a list of compliance assessment actions that can be carried out during inspections. The annual subsistence fee paid by the operator covers the regulator's costs so there is no additional burden in extending technical competence schemes to all waste operators.

EU Skills Ltd has confirmed that the vast majority of the 2,018 waste operators would train an employee to become technically competent through the individual WAMITAB/CIWM scheme, rather than the corporate ESA/EU skills scheme, as the large scale operators who use the ESA/EU skills scheme are likely to already be technically competent.

WAMITAB and the regulators have not been able to provide information on the proportion of waste operators that will employ a TCM, rather than training a current employee. A key driver of employing a TCM over training a current employee is that it could be the more financially viable option, so for the purposes of assessing the costs in the IA we expect that the costs per waste site should not vary if an employee is trained in-house or a TCM is employed. We will use the consultation to ask industry for this information.

The average cost of a CIWM/WAMITAB qualification varies depending on the level of risk at a site (low risk £1,080, medium risk £1,620, and high risk £3,240). WAMITAB have provided the risk breakdown of operators that have previously gained a qualification (low risk 42%, medium risk 45%, and high risk 13%). The risk profile for the remaining 2,018 operators is likely to be similar and on this basis it has been estimated that the cost to the remaining operators will total £3.2m to gain the relevant qualifications, (low risk operators £0.9m, medium risk £1.4m and high risk £0.8m).

It also costs employers to take employees off-site to undertake a qualification and reimburse travel costs. It takes an average 0.5 day to undertake a WAMITAB qualification test. As there are many test centres across England and Wales, we have estimated the time to travel to a centre as 0.25 day and £20/day is likely to be spent on travel costs. Based on a TCM average annual salary of £30,000 to £65,000 per annum (according to National Career Service data) a one day salary ranges from £115 - £250. Robust estimation of time and travel costs for the 2,018 operators range from £0.15m - £0.29m.

Time for an employee to train up in preparation of taking the test should not be included as the regulations stipulate that waste site employees should already be technically competent, but not through a scheme approved by the regulator, so only the cost of an employee taking a test should be taken into account. The estimated total transition cost to waste site operators is £3.4m - £3.6m

Operators need to keep up their technical competence by taking a WAMITAB continuing competence test every two years. It will cost operators £130 per test every two years to renew the qualification. Based on the same risk breakdown as above, the target population is 2,018 employees and their continuing competence tests would cost operators £0.13m annually. Employees will be off-site to travel to a test centre and take the test, estimated to take half a day in total. Travel costs are estimated at £20/day, and based on typical day rate TCM salaries, annual time and travel costs are:

- Low:  $0.5 * £115.38 * 2018 + £20 * 2018 = £156,812/2 = £78,406$
- High:  $0.5 * £250 * 2018 + £20 * 2018 = £292,664/2 = £146,332$   
(These are divided by 2 as the renewal test lasts 2 years)

There will be a minimal cost on operators to inform regulators who the TCM is at a waste site. The regulators will likely request this information through an additional field on the quarterly waste returns. It should not increase the time it takes for an operator to complete the form, as the regulators already complete a waste return on an annual basis.

#### Costs to regulators

There will be no additional costs to the regulators to assess the additional number of operators that will undertake a WAMITAB qualification because the process for checking is already accounted for in the subsistence fee during inspection of sites. There will be a minimal cost to the regulator to include a TCM name field in the annual waste return, but the regulators have advised that this is minimal.

### **Financial competence**

#### Costs to waste site operators

It will cost an operator to submit an independent financial report when applying for or transferring a permit. We will consult on the level of detail required in the financial reports; we currently estimate it will cost an operator £10-£50 to produce a report<sup>13</sup>. As there are 1,167 new permits applications and permit transfers per year, the estimated cost to operators range from £11,670 - £58,350 per annum.

#### Costs to regulators

It will also cost the regulators to assess the result of the independent financial report as part of the application or transfer determination process. As the financial report will likely be undertaken by a third party, a permit officer (£90/hr) will spend an extra 15 mins per application to assess the additional information. This would result in an estimated cost to the regulators of £26,257 per year. However, it will be the operator who will pay the third party and this cost has been included in the IA

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<sup>13</sup> This is taken from commercially available examples of company financial reports such as those offered by Experian. These are for different types of report available with varying levels of detail. It will be for regulators to determine which type of report is most appropriate for their purposes



## **General costs**

Familiarisation costs have also been included. Based on discussions with the regulators, we estimate that it will take operators between 3-5 hours to familiarise themselves with the changes in approach. Based on the typical salary of a TCM, we anticipate this will cost £72,661 - £151,378.

### **5.2.3. Benefits**

Option 2 would result in a reduction in the number of poor performing (DEF) sites. We estimate 85 applications by high risk operators will be rejected due to improved assessment of past performance and technical competence, resulting in 85 less DEF sites in future years. Management systems and technical competence will lead to a 20% reduction of permits in DEF status, down from 465 to 372.

#### *Past performance and financial competence*

Strengthening the regulators assessment and enforcement of past performance and financial competence will result in the rejection of applications before they can become DEF sites in the first place. The changes to the assessment of past performance will result in around 2% of permits applications or transfers being declined in the future and DEF site status avoided. This estimate is based on the EA National permitting Service's audit of 22 permits. 3 of 22 permits (14%) would be challenged based on current convictions and an additional 1 (5%) currently considered high risk and would be challenged based on the widened definition of convictions.

Approximately half of the permits that are challenged will be issued and the other half rejected. Therefore, of the 1,167 permit applications and transfers a year 56 permits (5%) will be challenged and 27 (2%) permits will be rejected. Strengthening financial competence will result in 5% of permit applications or transfers being rejected in the future and DEF site status avoided. From discussions with the regulator we have estimated that 5% should not be included into DEF status, meaning of the 1,167 permit applications and transfers a year 58 permits (5%) will not be issued. In total, 85 (27 and 58) applications by high risk operators will be rejected by the regulators.

#### *Management Systems and Technical Competence*

Strengthening the assessment and enforcement of management systems and technical competence would result in a reduction of 20% of the total stock of DEF sites. The EA National Permitting Service recently audited 5 permits that fell into DEF status within one year of being issued. 1 in 5 (20%) had poor compliance because of insufficient management systems. We recognise that this is a small sample; however we are confident that this is a realistic representation, based on this we assume that policy approach will decrease the number of DEF sites by 20% (93).

#### *Benefits to society*

The benefits to society have been calculated as the benefits per tonnes of waste that will no longer be kept at poor performing sites. From discussions with the regulators we estimated that approximately 7,500 - 10,000 tonnes of waste is kept at a DEF site. This estimate is based on the mean volume of tonnes at a DEF site at a specific point in time. Of the 85 sites per year, where applications will now be refused on financial or past performance grounds, this intervention will result in between 636,545 and 848,727 tonnes of waste being diverted away from non-compliant operators. Ricardo's AEs Technical Report on the Waste Crime Intervention and Evaluation Project (to be published shortly), which was produced for the Environment Agency, has provided valuable evidence on the benefits of reducing poor compliance at sites.

The latest data from Ricardo's report estimates the benefits of avoided ecological / environment damage by illegal waste sites are £1.86 - £1.88 per tonne. The benefit to the environment resulting from removal and restriction of tonnages is £1.2m - £1.6m per year. The latest data from the report estimates that the benefits of avoided disamenity per tonne range from £6.02 - £6.18. The total benefit to local communities is £3.8m - £5.5m per year. The total benefits to society are £5m - £6.8m per year.

In addition to this, the technical competence and management system intervention will result in a step change in performance for 1 in 5 DEF sites. At 93 sites a total of between 697,500 and 930,000 tonnes will be diverted away from non-compliant operators. The resulting benefit to the environment will be £1.2m - £1.7m per year. The benefit to local communities is £4.2m - £5.7m per year. Therefore the benefit to society is £5.5m - £7.5m per year. The combined benefits to society of all four elements lie between £9.7m and £13.6m per year.

#### *Benefits to the regulators of dealing with fewer incidents*

The benefits to the regulators of dealing with fewer incidents have been calculated on a site basis. The EA pollution incidents 2015 evidence summary <sup>14</sup> shows that 145 incidents were caused by waste sites. 72% (104) of these were caused by DEF sites. Meaning 22% (104 out of the 465) DEF sites caused category 1 and 2 incidents. This intervention will result in 93 fewer DEF sites and 85 avoided future DEF sites. Assuming that the same incident rate (22%) applies, it means that there will be 36 fewer incidents a year. The evidence summary shows that each incident generates an average cost of £24,048, so the total benefit is £871,693

#### *Non-monetised benefits*

Certain benefits have not been possible to quantify, but have been included as non-monetised benefits. The main non-monetised benefit is the creation of a more level playing field where non-compliant waste operators will be less able to undercut legitimate and compliant businesses. Other non-monetised benefits include the reduction of:

- Health impacts from incidents
- Risks of surface and groundwater contamination

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<sup>14</sup> Environment Agency: 'Pollution incidents: 2015 evidence summary'.

- Reputational damage to the waste industry from publicity surrounding poor performing sites
- Reputational damage to regulators
- Greenhouse gas emissions from fires

|                            | Y1         |         | Y2   |      | Y3   | Y4   | Y5   | Y6   | Y7   | Y8   | Y9   | Y10  |
|----------------------------|------------|---------|------|------|------|------|------|------|------|------|------|------|
| £m                         | Transition | Regular | T    | R    | R    | R    | R    | R    | R    | R    | R    | R    |
| <b>Costs to business</b>   | 5.93       | 0.04    | 1.78 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| <b>Costs to regulators</b> |            | 0.05    |      | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| <b>Total Costs</b>         | 5.93       | 0.09    | 1.78 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| <b>Benefits to</b>         |            | 0.52    |      | 0.35 | 0.35 | 0.35 | 0.32 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |

The intervention will deter future poor performance through a multiplier effect or scaling, however values were not sufficiently robust to accurately monetise, but could significantly increase benefit estimates of policies.

#### 5.2.4. Summary of costs and benefits

A summary of the costs and benefits over 10 years are set out in Table 2. There will be some transition costs and the table shows a summary of these and regular ongoing costs per year to businesses and regulators, and benefits to the regulators and society. It has been assumed that the transition costs realised in year 1 are familiarisation costs, costs for all necessary sites to develop appropriate management systems, and half of the costs for all necessary sites to become technically competent. Those transition costs for year 2 are half of the costs for all necessary sites to become technically competent. Transition costs are accounted for in this manner as technical competence certifications last for 2 years, so this allows all sites to become compliant. Ongoing regular costs incurred from year 1 through to year 10 are incurred in addition to these, and remain constant over time.

|                     |       |      |       |      |      |      |      |      |      |      |      |      |      |
|---------------------|-------|------|-------|------|------|------|------|------|------|------|------|------|------|
| regulators          |       |      |       |      |      |      |      |      |      |      |      |      |      |
| Benefits to society |       | 8.09 |       | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 | 5.39 |
| Total Benefits      | 0     | 8.61 | 0     | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 | 5.74 |
| Net value           | -5.93 | 8.52 | -1.78 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 | 5.65 |

**Table 2 Costs & Benefits (undiscounted) summary tables of Option 2.**

Benefits are all accounted for as regular, however those accruing in year 1 are attributed to 60% of the total improved and avoided sites rated D, E & F, and those accruing from years 2 to 10 are attributed to 40% of this site population annually. Assumptions on the time apportionment are made on the understanding that regulator and environmental benefits will not be fully realised immediately. The 60/40 split is a reasonable assumption as there is no empirical evidence on the speed of compliance; we have assumed that more operators would comply in the first year. Assumptions made in this consultation IA will be refined after the consultation responses have been analysed, as evidence on this is not currently Available.

### **5.3. Option 3: Financial provision mechanism**

The third option is for waste permit holders to provide some level of financial provision to cover the cost of clearing waste if their site is abandoned. A significant number of respondents to the 2015 call for evidence supported the introduction of financial provision for all waste permits. The economic assessment of a financial provision mechanism for all waste permits is outlined below.

#### **5.3.1. Financial provision for all permitted waste sites**

EP Core Guidance would be amended such that existing waste permits and all new waste permit would be required by the regulators to make financial provision in order to operate. There are a number of established options available for making financial provision which are already used by landfill operators, including surety bonds and escrow accounts. The mechanism would ensure that funds are sufficient, secure in the event of insolvency and available when required.

The value of the financial provision would be sufficient to clear all the permitted waste at a site in the event that the operators abandon the site. When a waste operator closes their waste site, and surrenders their permit, the funds would be returned to the operator. We do not think it is proportionate for the provision to include costs such as the fire service dealing with fires at a site. If a site is abandoned the regulators would be able to draw down funds from the bond or the escrow account to clear the site.

#### **5.3.2. Costs**

These consist of ongoing and transitional costs

##### Costs to waste operators

The target population would be all existing permits (11,775) and all new permits (720 per year) providing financial provision. Operators who surrender their permit (310 per year) would have their provision returned to them.

The value of the provision would cover the average cost of clearing an abandoned waste site. The average cost of provision is calculated by estimating the average cost to clear an abandoned waste site. Based on information provided by the regulators, the average tonnage of the waste across all previously abandoned sites was 2,200 tonnes. The average cost to clear waste £45 per tonne for inert waste and £150 per tonne for non-hazardous wastes. This gives a range of £99,000 to £330,000 per site, with an average of £214,500. The regulators have advised that costs for clearing hazardous waste should not be factored into the calculations. There are a relatively small percentage of sites containing hazardous waste and the quantities of any hazardous waste at these sites are relatively small, for example, only 3% of the 989 illegal waste sites stopped in 2015/16 had hazardous waste recorded as the primary waste type. As the majority of any disposal costs come from landfill tax, the difference between non-hazardous and hazardous is relatively small.

The cost for all existing waste sites to provide a financial provision would therefore be £2,526m and the cost for all new waste permits would be £303m a year. Additionally, the 310 of permits that are surrendered each year means that £66.5m would be returned to operators each year.

There would be a small cost for operators to familiarise themselves with the new option, incurred in the transition period (years 1-2). We estimate this would be between £423,900 and £883,125 across the industry. This is based on it taking between 3-5 hours to familiarise with the change x £12-15 hour for each waste operator.

There would also be a cost supplying the money for the financial provision. The capital used to pay the provision would either be borrowed, or at least not invested and so would cost or not gain interest. Therefore, an annual opportunity cost to business of this capital is estimated at 2.5% and accounted for all sites paying the provision<sup>15</sup>.

#### Costs to regulators

There would be a small administrative cost to regulators to check that each site has paid their provision. We estimate this would be £22.50 per site. This is based on it taking 0.25 hr to check the provision x £90 per hour for a permit officer. For all the exiting permits it would cost the regulators £264,937.50 and £16,200 for new sites per year.

#### **5.3.3. Benefits**

Option 3 would result in a reduction in costs incurred by the regulators in clearing abandoned waste sites. The option would also likely lead to a reduction in the number of sites being abandoned and increase compliance levels. However we have not accounted for this through the annual number of abandoned sites as we do not have evidence on the reasons of abandonment and therefore do not have evidence on precisely how much of an

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<sup>15</sup> <https://www.gov.uk/government/publications/rates-and-allowances-beneficial-loan-arrangements-hmrc-official-rates/>

effect this policy will have on the annual number of abandoned sites. In particular there may be a lag in effects which should be considered.

We estimate that the regulators costs associated with clearing approximately 19 abandoned waste sites per year will be significantly reduced. This estimate of the annual sites cleared is based on the average annual abandoned sites according to the EA and NRW. The available data shows large annual fluctuations and so to account for this we have used an average over time, with 16 sites per year in England and 3 per year in Wales. However, this option has no direct benefits calculated, as there is no direct benefit to compliant businesses, and the benefit to the regulator cannot be included as a direct benefit of the policy for the purpose of this analysis as it would be double counting. Therefore the NPV of this option does not account for the saving to the regulator and this option has no direct monetised benefits.

#### Benefits to the regulators

There are approximately 19 sites that are abandoned a year in England and Wales per year. This costs the regulators approximately £4.1m to clear per year, depending on the tonnages and types of abandoned waste. Option 3 would mean that the regulators would draw down funds from the financial provision if the site is abandoned. Therefore there would be a reduction in the regulator's costs to clear waste sites.

#### Non-monetised benefits

Option 3 could deter future poor performance in future. Waste operators would be incentivised to run their business more effectively as they would want to avoid losing the provision they made. Additionally, option 3 would result in a reduction of the number of sites being abandoned with a benefit to society and the environment from less waste being abandoned. These values were not sufficiently robust to accurately monetise, but could significantly increase benefit estimates of this policy option.

#### **5.3.4. Summary of costs and benefits**

A summary of the costs over 10 years are set out in Table 3. The table shows the transition costs and regular ongoing costs per year to businesses and regulators. This option has no direct benefits, and the total costs are approximately £3149.76m (PV terms) and a net direct equivalent annual impact on business of £-288.3m.

**Table 3: Costs (undiscounted) summary tables of Option 3.**

|                            | Y1         |         | Y2       |       | Y3    | Y4    | Y5    | Y6    | Y7    | Y8    | Y9    | Y10   |
|----------------------------|------------|---------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| £m                         | Transition | Regular | T        | R     | R     | R     | R     | R     | R     | R     | R     | R     |
| <b>Costs to business</b>   | 1263.20    | 90.14   | 1263.20  | 90.14 | 90.14 | 90.14 | 90.14 | 90.14 | 90.14 | 90.14 | 90.14 | 90.14 |
| <b>Costs to regulators</b> | 0.13       | 0.01    | 0.13     | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  |
| <b>Total Costs</b>         | 12663.33   | 90.16   | 12663.33 | 90.16 | 90.16 | 90.16 | 90.16 | 90.16 | 90.16 | 90.16 | 90.16 | 90.16 |

The assessment suggests that a financial provision mechanism for all waste sites would be prohibitively expensive for business and so is not the preferred option. We will, however, be seeking confirmation of that through the consultation. We will also use the consultation to determine views on a more targeted approach to financial provision. As this aspect of the policy is not yet confirmed, however, we have not included these costs or benefits into the assessment. We will seek input in the consultation on the type of sites that should provide financial provision, for example, persistent poor performance, waste type, market volatility, poor financial competence.

## 6. Wider impacts

### 6.1. SMEs

Around 60% of waste site operators in England and Wales are considered to be SMEs. This intervention will have a disproportionate impact on them; however we have taken into account the size and scale of waste businesses when designing the policy to ensure that the regulators apply the appropriate level of regulation. An operator will be required to produce a management system which is proportional to its size and scale. Smaller sites will be required to complete and implement a less comprehensive system in comparison to a larger complex site, and therefore would have to commit less time and funds to do this.

In addition, an operator's size and scale will be taken into account when undertaking a technical competency qualification. It is a general rule that smaller sites perform lower risk activities and therefore need to gain the cheaper lower risk qualifications, while the higher risk activities are performed by the larger and more complex sites. Whilst there are exceptions to this rule, for example a small site can specialise in higher risk activity such as asbestos removal, but these examples are rare.

## 6.2. Competition

Whilst this regulatory intervention will raise the barrier to entry for waste site operators the detailed measures have been carefully designed to target non-compliant waste operators and prevent them from entering the waste sector, while still enabling diligent compliant operators to obtain a permit. The intervention will create a level playing field in the waste sector by ensuring that all waste sites are operated to the same levels of compliance. Therefore, intervention should increase legitimate competition in the waste sector as non-compliant waste operators will be less able to undercut compliant and legitimate operators.

## 7. Preferred option and implementation

After considering the cost benefit analysis, Option 2 is the preferred option to take forward because it provides the best value for money for the taxpayer while achieving the policy aims. Option 1 is not the preferred option, as the costs to the natural environment, local communities and pollution incidents are not addressed and would remain very substantial. Whilst option 3 will reduce the cost to regulators, the costs prohibitively expensive for business and so is not the preferred option. **Implementation and post implementation review**

The regulators will take a risk based approach to implementing the policy. When implementing technical competence the regulator will expect all sites to take a technical competent qualification within two years and will focus on DEF status sites in year 1. When implementing management systems, all operators will have completed a management system within a year. Past performance will be implemented in year one and will apply to future permit applications and transfers. Similar scheduling would apply to financial competence/provision.

The need for a post implementation review has been recognised and it is intended to use the consultation to obtain more information and data that will assist in the conduct of the post implementation review in due course.



## **Annex 1: Note on Technical Qualifications**

CIWM/WAMITAB: based on individuals demonstrating their competence by attending courses and completing formal assessments. All course content and qualifications are accredited by relevant bodies to ensure high standards. Training and assessment providers are nominated by the scheme providers and offered to waste operators on a commercial basis. Scheme providers and regulators bear no costs. Once qualified an individual is required to be reassessed every two years. The costs of these continuing competence assessments may be borne by the individual or by their employer. The technically competent status resides with the individual and is a marketable asset so in many cases the individual will choose to organise and pay for their assessment.

ESA/EU Skills: is a corporate based competence scheme in which a company develops and implements a competence management system in order to deliver technically competent management at its permitted sites. The initial draft management system is assessed by UKAS<sup>16</sup> accredited auditors and once approved is accepted by regulators as evidence of technical competence. The content and implementation of the management system is reassessed on a regular basis by UKAS accredited auditors. Companies bear the cost of developing, implementing and auditing their schemes. Scheme providers and regulators bear no costs.

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<sup>16</sup> **United Kingdom Accreditation Service** (UKAS) is the sole national accreditation body recognised by Government, which assesses the competence of organisations that provide certification, testing, inspection and calibration services