

NDA Strategy

Integrated Impact Assessment Post-Adoption Statement Final

March 2016



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1.0 Introduction

1.1 Background

This document is the Integrated Impact Assessment (IIA) Post-Adoption Statement to accompany the NDA Strategy (2016) ('the Strategy'), which has been adopted after taking into account feedback from public consultation.

The NDA has undertaken its second five-year review of its Strategy in accordance with the Energy Act 2004. The first iteration of the Strategy was published in 2006, with the first review cycle completed in 2011. This second review cycle commenced during 2015, and a revised draft Strategy was published for public consultation in January 2016. The Strategy has now been finalised, taking into consideration representations made during the public consultation.

The Strategy reviews the NDA's strategic position, establishing and maintaining its strategic direction on activities across the sites which comprise its estate. The strategies that have been selected are implemented by Site Licence Companies (SLCs), which manage the sites on the NDA's behalf and under its strategic guidance.

Whilst the direction of the revised 2016 Strategy is consistent with the Strategy published in 2011, it builds on significant changes which have occurred in the UK's nuclear landscape and across the NDA estate. It is important that the Strategy remains fit-for-purpose until the next review cycle and beyond.

An IIA of the Strategy was undertaken in 2015 in accordance with requirements of the EU Strategic Environmental Assessment (SEA) Directive and transposing UK SEA Regulations.¹ The NDA also wished to adhere to good practice by conducting a Health Impact Assessment (HIA) and Socio-economic Impact Assessment (SeIA), and the findings of these three assessment strands were reported in the IIA Report issued for public consultation alongside the draft Strategy in January 2016.

1.2 Purpose of this statement

The purpose of this Post-Adoption Statement is to document how environmental, health and socio-economic considerations, the views of consultees, and the outcome of the IIA carried out for the Strategy (as presented in the IIA Report) have been taken into account in the adopted Strategy.

This Statement includes the following information in line with requirements set out in the SEA Regulations:

- how environmental, health and socio-economic considerations have been integrated into the Strategy;
- how the findings of the IIA Report have been taken into account in the Strategy;
- how any opinions expressed in response to consultation on the draft Strategy and its accompanying IIA have been taken into account in finalising the Strategy for adoption;
- the reasons for choosing the Strategy as adopted, in light of other reasonable alternatives dealt with during development of the Strategy; and
- the measures to be taken to monitor the potentially significant effects of implementing the Strategy.

The IIA Report has been updated since the public consultation and is available in its final form together with the adopted Strategy and this Post-Adoption Statement on the NDA's website.

¹ SI No. 1633. Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations')

2.0 Environmental, health and socio-economic considerations

2.1 How environmental, health and socio-economic considerations have been integrated

2.1.1 Stakeholder Engagement

Following publication of its previous Strategy in 2011, the NDA re-examined its approach to stakeholder engagement as part of strategy development and identified a clear need to regularly engage with key stakeholders.

Development of the NDA Strategy (2016) involved extensive engagement with stakeholders which began in 2014. This engagement included a number of targeted and focused strategy groups with a wide range of organisations representing government, regulators, SLCs, the broader nuclear industry and the public.

Environmental, health and socio-economic considerations were specifically integrated as part of the IIA process, which included a scoping workshop that was held early on with statutory and non-statutory consultees with an interest or expertise in nuclear, environmental, health or socio-economic issues. The involvement of these stakeholders in the formulation of the scope of the IIA meant that environmental, health and socio-economic considerations were an integral part of its development from the outset.

These now well-established forums will continue to support strategy development and delivery over the coming years.

2.1.2 IIA Findings

The IIA process consisted of five stages (A-E) and was undertaken to meet the requirements of the SEA Regulations. At each stage, information collected to inform the IIA was also fed back to the NDA to inform development of the Strategy.

Stage A of the process involved defining the scope of the assessment, which was informed by a review of baseline information and relevant policy and legislation. This exercise enabled a number of IIA objectives to be determined, along with a set of assessment guide questions to help frame the assessment. The scope and approach to the IIA, including the objectives and guide questions, were consulted upon with statutory consultees and other key stakeholders in March 2015.

At stage B, credible options under each of the strategic areas or 'themes' that form the Strategy were assessed quantitatively and qualitatively using available design information to determine their potential significant effects across 23 IIA topics. As a starting point, these topics were drawn from those set out in the SEA Regulations and then supplemented with additional topics covering a range of health and socio-economic issues relevant to the NDA Strategy. See the IIA Report: Volume 1 – Chapter 7 for a description of these topics.

By assessing the Strategy in terms of these topics, a wide range of potential effects of the Strategy could be scoped in. Assessing them in an integrated manner allowed the results of one aspect of the assessment to inform other aspects. For example, results of the environmental and socio-economic assessments were used to inform the health impact assessment.

The IIA was underpinned by a clear set of assumptions, recognising uncertainties in the scope of the assessment and the assessment findings. Recommendations were provided to mitigate adverse effects of the Strategy and create or enhance positive ones.

The assessment findings are outlined in Chapter 8 of the IIA Report: Volume 1, and recorded in more detail in Volume 2. Preparation of the IIA report fulfilled stage C of the process.

The IIA report was issued alongside the draft Strategy for public consultation in January 2016 (stage D), and the outcomes of the consultation are outlined in this Post-Adoption Statement which fulfils stage E and completes the IIA process.

2.2 How the IIA Report has been taken into account

The IIA Report was prepared during 2015/2016, in parallel and close collaboration with the development of the draft Strategy. Consultation on the scope of the IIA and the methods and approach to be applied in the assessment was undertaken through a workshop with statutory and non-statutory consultees in March 2015.

The findings of the IIA were reviewed by the Strategic Authorities for Site Decommissioning and Remediation, Spent Fuels, Nuclear Materials and Integrated Waste Management. These authorities are responsible for identifying and selecting the credible and preferred options which form the basis of the NDA Strategy.

It was intended that the assessment should identify likely significant effects of the Strategy (in line with the SEA Regulations) but not foreclose or prejudice a future decision on which options would ultimately be implemented. This was particularly relevant for strategic topics where the Strategy does not identify a preferred option, either because there are a number of credible options which may each be preferred under different circumstances, or because there is currently insufficient information or research to support selection of a preferred option.

The results of the assessment will be used to help direct further assessment work, while the methodology will provide a basis for identifying and selecting preferred options in the future, alongside other considerations such as cost, security and technical feasibility. The assessment topics and guide questions upon which the assessment was based will be incorporated into the NDA's Value Framework (used to identify and select credible and preferred options). The Value Framework will also apply to decisions made across the NDA estate.

Further information on the Value Framework is provided in 'NDA Value Framework: how we make decisions', published on the NDA website at: <https://www.gov.uk/government/publications/nda-value-framework-how-we-make-decisions>

The findings set out in the IIA Report have helped identify potentially significant effects of the Strategy and will provide a signpost for where future assessment could be targeted. This will help to support implementation of topic strategies.

The IIA Report was published as a draft for consultation together with the draft Strategy document. This gave the public the opportunity to comment on the Strategy in light of the findings of the IIA, or on the IIA itself.

The Strategy has now been finalised for adoption based on the findings of the IIA and the representations received during consultation. This Post-Adoption Statement should be read in conjunction with the finalised IIA Report and the adopted Strategy (2016) document.

3.0 Consultation on the NDA Strategy (2016) and the IIA

3.1 How consultation has been taken into account

Revisions to the Strategy were developed through a consultative, iterative process, involving a wide range of stakeholders. The approach to the IIA was developed through a similar consultative process, involving a smaller stakeholder group who attended a workshop during the scoping stage of the assessment. This group comprised representatives of various organisations with an interest in the nuclear industry, environment, health or socio-economic issues, and included statutory environmental and regulatory bodies such as the Environment Agency, Natural England and the Office for Nuclear Regulation.

Public consultation on the draft Strategy and IIA ran from 5th January 2016 to 15th February 2016.

In total, 67 representations were received during the consultation, none of which related directly to the IIA. Many of the comments on the Strategy were general in nature, and were framed as responses to questions contained in the draft Strategy document. Although the comments covered various aspects of the Strategy's content, there was a particular focus on site end states, spent fuel reprocessing, waste transport and geological disposal.

The NDA has responded to these comments in a consultation report – available on the NDA website.

For the most part, representations received were generally in support of the Strategy.

In terms of changes made to the Strategy following the consultation, some clarifications have been made around Site Interim and End States, Land Use and Optimised Magnox dismantling. In addition, some text changes have been made to the Spent Oxide Fuel, Plutonium and Radioactive Waste strategies on the basis of consultation responses. Specifically, respondents sought clarification that one of the credible options for Spent Oxide Fuels; interim storage pending a future decision on whether to declare them as waste for disposal in a geological disposal facility (GDF), would not foreclose the option to reprocess in the future. The NDA has confirmed this in the adopted Strategy.

As a result of the consultation, no changes have been made to the strategic direction of the four driving themes.

Finally, some comments such as those regarding geological disposal, related to policy decisions outside of the NDA's remit which would be made by the UK Government and devolved administrations. The NDA continues to support development and implementation of government policy.

A number of comments have been taken on board for future implementation of the Strategy, including clarifications to the Site Decommissioning and Remediation strategy, improvements to the Integrated Waste Management section and the addition of further information covering spent fuel management.

4.0 Reasons for adopting the Strategy

4.1 Introduction and summary of the Strategy as adopted

This section identifies why the Strategy has been chosen for adoption in the light of any reasonable alternatives that have been considered.

‘Reasonable alternatives’ in the context of the NDA Strategy are taken to mean any credible options that could potentially be implemented to help achieve the NDA mission; to deliver safe, sustainable and publicly acceptable solutions to the challenge of nuclear clean-up and waste management.

As described in Chapter 4 of the IIA Report: Volume 1, core activities set out in the NDA Strategy are grouped under four driving themes; Site Decommissioning and Remediation, Spent Fuels, Nuclear Materials and Integrated Waste Management, with a fifth theme covering critical enablers. Within each of the four driving themes, the strategy is further broken down into individual topic strategies.

For each topic strategy credible options were identified in collaboration with the NDA and on the basis of a series of options evaluation papers published over the course of several years of strategic development.

These credible options are outlined below and described in greater detail in Chapters 5 and 8 of the IIA Report: Volume 1. The results of the IIA of these options are also summarised in Chapter 8, with further information provided in the detailed assessment tables contained in Volume 2.

It is important to note that the results of the IIA form part of the basis for decisions, alongside other factors such as cost, security and technical feasibility which fall outside the remit of the IIA, but remain material considerations in NDA strategic decision-making.

4.2 Reasonable alternatives and preferred options

4.2.1 Site Decommissioning and Remediation

This strategic theme is divided into four topic strategies: Decommissioning, Land Quality Management, Site Interim and End States and Land Use.

Decommissioning

There are two broad credible options for Decommissioning:

1. Continuous decommissioning that commences at the end of nuclear operations and continues until final demolition of the facility.
2. Deferred decommissioning that involves one or more periods when the facility is purposely made safe for a period of quiescence, during which only routine maintenance activities would be carried out.

Selection of the Decommissioning options is undertaken on a case-by-case basis, with each credible option being preferred under certain circumstances. Generally, the NDA preference is for continuous decommissioning, except where there are clear benefits to be had from deferring work.

Land Quality Management

Land Quality Management involves managing risks to people and the environment from radioactive and non-radioactive contamination in ground and groundwater. This is achieved through prevention and remediation (including control and monitoring).

Four credible options were identified for the Land Quality Management strategy. These are:

1. *In situ* management without intervention (e.g. monitored natural attenuation or monitored natural decay).
2. *In situ* management with intervention (e.g. enhanced bioremediation or physical treatment).
3. *Ex situ* management for reuse (this may involve a process such as soil washing to make material suitable for reuse).
4. *Ex situ* excavation for disposal (this option involves removing the material from the ground and transferring it to an authorised waste disposal site).

Due to decisions being taken on a case-by-case basis, there is no single preferred option for implementing this strategy. Any of the credible options might be preferred under specific conditions. The NDA strategy is to employ early risk-based decision-making to ensure remediation is proportionate to the level of risk.

Site Interim and End States

Every NDA site will have an agreed end state. The site end state sets out the long-term restoration objectives for the site, considering the land's next planned use or probable future uses.

For the purpose of the assessment, three credible options were identified for the Site Interim and End States strategy:

1. Leave the hazard where it is and prevent use.
2. Make land suitable for next planned use.
3. Remove the hazard completely so that the risk does not need to be controlled.

The NDA's preferred option to achieve this strategy is to take its sites, on a site-by-site basis, to a condition suitable for their next respective planned use (in line with relevant planning requirements) or to their probable future use(s) where remediation occurs before the next use is planned.

This offers the advantage of helping to free up sites for alternative uses, including potential divestment for social, environment or economic benefit, while ensuring that the activities undertaken to remediate the land do not go beyond those required; thereby avoiding or reducing some of the adverse environmental and health effects which might arise from removing the hazard completely.

Land Use

Whilst the Site Interim and End States strategy describes the condition to which designated land and associated structures and infrastructure need to be restored, the Land Use strategy explores how land can be used following the end of decommissioning, or on an interim basis prior to achieving the site end state.

There are three options for Land Use:

1. Retain land as an NDA asset / liability.
2. Retain land on behalf of government as a national asset.
3. Divest the land (leasehold or freehold) for social, environmental or economic benefit.

The NDA strategy is to identify credible uses for its land either when decommissioning and remediation is complete or on an interim basis prior to achieving the site end state. Part of this commitment is an aspiration to encourage the reuse of brownfield land over greenfield land, in line with government policy. The NDA is committed to investigating reuse opportunities, recognising that there is a need to balance the cost of achieving an end state against the socio-economic and/or environmental value the next use will bring.

Whilst the NDA's preferred option is to divest the land for some benefit, it is recognised that there may be situations in which the land may need to be retained as a government asset or as an NDA liability.

4.2.2 *Spent Fuels*

Within the Spent Fuels theme, there are three individual topic strategies, reflecting the three groups of spent fuels for which the NDA is responsible.

Spent Magnox Fuel

Two credible options were assessed for managing the remaining inventory of spent Magnox fuel:

1. Manage entire inventory in existing reprocessing facilities.
2. Curtail reprocessing operations and build storage and immobilisation facilities, disposing of spent fuel to a GDF.

Reprocessing of spent Magnox fuel has been the UK's historic strategic position for over 50 years and remains the current preferred option. It offers a number of advantages compared to the reasonable alternative, including avoiding major environmental construction impacts that would arise from building new storage and immobilisation facilities, as well as maintaining existing jobs at the site in the short term. Health risks associated with the option are well understood and carefully managed, with management routes in place to deal with radioactive waste by-products arising from reprocessing operations.

Spent Oxide Fuel

The three credible options available for managing spent oxide fuel are:

1. Manage in existing reprocessing and storage facilities in line with contractual commitments, with interim storage of unprocessed spent oxide fuel pending a future decision on whether to declare them as waste for disposal in a GDF.
2. Curtail reprocessing operations and build storage and immobilisation facilities, disposing of spent fuel to a GDF.
3. Extend reprocessing capability, building major new support plants.

Following an assessment of these options conducted in 2011, the NDA determined that reprocessing the contracted amount of spent oxide fuel was the most viable and cost-effective option. This remains the preferred option, and it offers advantages compared to the two reasonable alternatives in terms of avoiding potential environmental and health impacts from construction. Placing unprocessed spent fuel in interim storage will not foreclose future options for its management, including the options to dispose of in a GDF or reprocess.

If reprocessing capacity was extended, many of the plants that support THORP's operations would need to be gradually replaced, at great expense and generating a range of adverse environmental impacts. This could potentially divert resources from the NDA's core mission of nuclear clean-up and waste management.

Spent Exotic Fuel

The Spent Exotic Fuel strategy differs from the strategies for Magnox and Oxides, primarily due to the unique nature of the inventory, which has mostly been produced from experimental research into nuclear reactor technologies. Within the inventory there are several different forms of spent fuel, some of which are suitable for management alongside spent Magnox and oxide fuel in existing facilities, and some of which will require alternative disposition options to be implemented.

Work is currently ongoing to identify and develop credible options for the disposition of spent exotic fuels that cannot be managed using existing facilities. This means that there were no options under the Exotics strategy to be assessed.

4.2.3 Nuclear Materials

This strategic theme comprises the two topics of Plutonium and Uranics.

Plutonium

Three credible options exist for managing the NDA inventory of civil plutonium:

1. Continued safe and secure storage, renovating and replacing stores as required.
2. Build facilities to immobilise plutonium, interim store the product and dispose of to a GDF.
3. Build facilities to reuse plutonium in nuclear fuel.

In 2011, informed by NDA strategic options work, the UK government proposed a preliminary policy view to pursue reuse of plutonium by converting the vast majority of the UK civil separated plutonium into fuel for use in civil nuclear reactors. Any remaining plutonium whose condition is such that it could not be converted into fuel would be immobilised and treated as waste for disposal.

Whilst reuse of plutonium is the preferred policy position, there is currently an insufficient understanding of the options to confidently move into implementation. In the meantime, the NDA's strategy for plutonium stocks is to continue to safely and securely store them on its sites in suitable facilities in line with regulatory requirements.

Uranics

The credible options for managing the uranics inventory are broadly similar to those for plutonium. These are:

1. Continued safe and secure storage, holding the material as a nil value asset and renovating and replacing stores as required.
2. Build facilities to immobilise uranics and dispose to a suitable facility.
3. Sell the uranics inventory, treating any uranics for which treatment is cost-effective in order to enhance saleability.

Owing to the diverse nature of the uranics inventory there is no single preferred management option for the whole inventory; the preferred option will need to be determined on a group-by-group basis. Where uranics stocks have commercial value, the NDA will return them to the fuel cycle through sale to a third party. At the same time the NDA continues to work with government on identifying credible options for disposal in the event that these materials were to be declared as waste.

4.2.4 Integrated Waste Management

Unlike Spent Fuels and Nuclear Materials where there are clear credible options for how the inventory is managed, for Integrated Waste Management (including management of both radioactive and non-radioactive waste), there are few areas for strategic optioneering from an NDA perspective.

Radioactive Waste

As outlined in the IIA Report: Volume 1 – Section **Error! Reference source not found.**, in the UK radioactive wastes are classified according to the type and quantity of radioactivity they contain and how much heat this radioactivity produces.

The NDA Strategy for radioactive waste management covers two categories of solid radioactive waste: Higher Activity Waste (HAW) and Solid Low Level Waste (LLW).

Higher Activity Waste (HAW)

In England and Wales, the government policy is for HAW to be disposed of in a GDF and using alternative disposal systems. The Scottish government policy is that the management of higher activity radioactive waste should be in near-surface facilities. As the NDA's strategy is selected to meet the requirements of these policies, in effect there is no strategic decision for the NDA to make (although the NDA works closely with government to identify and develop solutions). In other words, the NDA's strategic position is to comply with and deliver government policy regarding the management of HAW.

As the initial stage of the HAW management route is fixed (i.e. retrieve the waste from the sites) and the end stage is also fixed (i.e. geological disposal or alternative systems in England and Wales and near-surface in Scotland), the intermediary stage must involve some form of treatment, conditioning and/or packaging to make the waste suitable for disposal.

Credible management options available during this stage of relevance to the IIA revolve around two issues:

- where the waste is stored; and,
- where the waste is treated.

The assessment considered the treatment and storage of HAW, for which there are three credible options:

1. Storage / treatment at local (on or near site) facilities.
2. Storage / treatment at regional facilities.
3. Treatment at national facilities.*

* Storage of wastes in a single national facility is not considered credible owing to the existence of numerous suitable storage facilities across the country.

Owing to the varying nature of wastes requiring management and their location at sites across the UK, decisions regarding the management of HAW are generally undertaken on a case-by-case basis. As such there is no single preferred option, and all of these alternatives are considered implementable.

Solid Low Level Waste (LLW)

The NDA strategy for managing solid LLW, which includes Very Low Level Waste (VLLW), is consistent with the UK Nuclear Industry LLW Strategy, which can be accessed at:

<https://www.gov.uk/government/consultations/consultation-on-an-update-of-the-uk-strategy-for-the-management-of-solid-low-level-radioactive-waste-from-the-nuclear-industry>

Therefore, from an NDA perspective, there are no strategic decisions to make and no credible options required assessment.

Liquid and Gaseous Discharges

The NDA strategy for managing liquid and gaseous discharges is to implement the UK Strategy for Radioactive Discharges, which it helped to develop. Therefore, from an NDA perspective, there are no strategic decisions to make and no credible options were assessed.

Non-radioactive Waste

The UK has a well-established, comprehensive and prescriptive regulatory regime for the management of non-radioactive waste. The NDA adheres to this regime and implements it across its estate. As a result, there are no strategic decisions for the NDA to make and no credible options required assessment.

5.0 Monitoring measures during implementation

5.1 Introduction

A key element of the IIA process, as prescribed by the SEA Regulations, is the identification of an appropriate monitoring programme to monitor the potential significant effects of the Strategy during its implementation.

Monitoring can help to address such questions as:

- were the results of the assessment, including predicted effects, accurate?
- is the Strategy contributing in practice to the achievement of objectives?
- are there any adverse effects (i.e. is the Strategy acting against achievement of the objectives)? If so, are they within acceptable limits or is remedial action required?

Monitoring action should be focused on:

- significant effects that may give rise to irreversible damage, with a view to identifying trends before such damage is caused; and
- aspects where the assessment has identified the potential for significant adverse effects, but where there is uncertainty, and where monitoring would help to resolve that uncertainty and enable preventative or mitigation/remedial measures to be taken.

In the detailed assessment tables contained in the IIA Report: Volume 2 an uncertainty rating was provided against each likely significant effect identified. The use of monitoring to remove or reduce uncertainty is of particular relevance for effects which were given a ‘??’ rating, denoting that the result is highly uncertain and will almost certainly require more detailed assessment at a later stage. This is likely to be as part of project-level Environmental Impact Assessments (EIA) which would be required for certain developments at the NDA sites.

Given the high-level nature of the NDA Strategy, it is not appropriate to set a prescriptive monitoring programme at the site level as part of this IIA. Instead, a monitoring framework is set out below to serve as a *guideline* to aid future assessment and monitoring work during Strategy implementation.

A number of measures were set out in the IIA Report: Volume 1 – Section 9.2 to mitigate or enhance potential effects of the Strategy. Indicators in the monitoring framework could be used to test how successfully these measures have been applied in practice.

Monitoring need not in all cases continue indefinitely. In some cases, monitoring can cease once a trend has been confidently established and uncertainty removed, if it has shown that the previously identified risk of an adverse effect is absent or insignificant. In other cases, monitoring may need to continue indefinitely as environmental performance can vary from year to year.

5.2 Monitoring Framework

Table 5-A sets out a series of indicators which could be used to monitor effects of the NDA Strategy during its implementation. Where up-to-date data is available, monitoring of these indicators should be undertaken at least once during the Strategy review period or as often as considered necessary to enable any unforeseen adverse effects to be identified at an early stage and appropriate remedial action to be taken.

Table 5-A: IIA Monitoring Framework

Topic	Monitoring Indicator	Potential Source of Information
Air quality	Discharges of pollutants to air (e.g. NO _x , PM ₁₀)	NDA annual site specific baseline reporting; SLCs/facility operators; Defra.
Biodiversity, flora and fauna	Condition and any changes in condition of designated sites within 2km (local, national, European, international) If there are any wildlife monitoring programmes, updated status If there is a site Biodiversity Action Plan, updated status of relevant habitats	NDA annual site specific baseline reporting; SLCs/facility operators; Waste management site operators; Natural England; Scottish Natural Heritage; Natural Resources Wales.
Climate change and energy	Energy consumption Emissions of greenhouse gases Vulnerabilities to climate change/flooding/extreme weather and any local incidents	NDA annual site specific baseline reporting; SLCs/facility operators; Waste management site operators; DECC; Environment Agency (incl. Nuclear Sector Plan); Scottish Environmental Protection Agency; Natural Resources Wales.
Coastal change and flood risk	Change in flood risk zones Changes in sea level, wave patterns etc.	Environment Agency; SLCs/facility operators.
Cultural heritage	Changes in the condition, integrity or setting of historic buildings, archaeological remains or historic landscapes within or adjacent to a site	Historic England, Historic Scotland or Cadw; Local Historic Environment Records or equivalent; Any site-related development proposals and EIAs.
Geology and soils	Changes in status of any existing contaminated land on or adjacent to the site, or any new contamination Changes in condition of any agricultural or other topsoils on or adjacent to the site	NDA annual site specific baseline reporting; SLCs/facility operators; Waste management site operators; Environment Agency; Natural England; Scottish Natural Heritage; Natural Resources Wales; Any site-related development proposals and EIAs.
Landscape and visual	Changes in the visual appearance of the facilities or the condition of the surrounding landscape/seascape/townscape	NDA; SLCs/facility operators; Waste management site operators; Any site-related development proposals and EIAs.

Topic	Monitoring Indicator	Potential Source of Information
Materials and Waste	Radioactive and non-radioactive waste arisings Waste management facility capacities	UK Radioactive Waste Inventory; Environment Agency.
Noise and vibration	Noise levels at site boundary and at key receptors Any new sources of noise or existing sources removed Noise complaints	NDA annual site specific baseline reporting; SLCs/facility operators; Waste management site operators.
Radiological Emissions and Discharges	Authorised radioactive gaseous and particulate discharges to air Authorised radioactive discharges to water	RIFE annual reports; NDA annual site specific baseline reporting; SLCs/facility operators; Environment Agency; Waste management site operators; Scottish Environmental Protection Agency; Natural Resources Wales.
Water resources and quality	Ecological and chemical status of surface water near to site Water quality monitoring Changes in status of any groundwater bodies underlying the site or adjacent land	Environment Agency; Scottish Environmental Protection Agency; Natural Resources Wales; NDA annual site specific baseline reporting; SLCs/facility operators; Waste management site operators.
Economy, employment, education and skills	Unemployment levels, levels of qualifications etc. in local communities Changes in employment at the site	National statistics; NDA; SLCs/facility operators; Waste management site operators.
Local and national assets	Changes in health and community facilities and transport infrastructure surrounding sites	Local authority development plans; SLCs/facility operators.
Health	Results of local community health surveys Incidences of cancer and heart-related conditions	Office for National Statistics; Cancer Research UK; Public Health England.

On behalf of the NDA, the SLCs which operate its sites will carry out monitoring work in the course of implementing the Strategy, for example, as part of project-level EIAs. The indicators set out above are intended to serve as a guide to inform this work. It is important to note that not all indicators may be relevant to all sites.

A review of monitoring activities, and this framework, should be undertaken within the next review cycle (i.e. within the next five years) in line with other ongoing NDA monitoring of key performance indicators. Monitoring work will feed into future strategy development and IIA assessment cycles.

6.0 Concluding comments

This document is the Post-Adoption Statement for the IIA of NDA Strategy (2016). It forms the final stage of the IIA process and serves as a record of how the IIA influenced development of the adopted Strategy with regard to environmental, health and socio-economic considerations.

Representations received on the Strategy and IIA Report during public consultation are discussed in Chapter 3 of this document and addressed in the NDA Response to Consultation document, available at [XXX](#)

For more information on the Strategy or the IIA, please see:

- The NDA Strategy (2016) document, available at [XXXX](#); and
- The IIA Report – volumes 1, 2 and 3, available at: [XXX](#)