## Title: The Heavy Fuel Oil (Amendment) Regulations 2014 Impact Assessment (IA) IA for amending COMAH 1999 to align the thresholds for Heavy Fuel Oil with those of Petroleum Products. IA No: to be completed.

Lead department or agency: Health and Safety Executive Other departments or agencies: Scottish Environment Protection Agency

**Environment Agency** 

impaict is committee (ii i)	
Date: 7 <sup>th</sup> November 2013	
Stage: Final	
Source of intervention: European	

Type of measure: Secondary legislation

Contact for enquiries: Gary Lang:

RPC Opinion: Green

## Summary: Intervention and Options

Cost of Preferred (or more likely) Option					
Total Net Present Value  Business Net Present Value  Net cost to business per year (EANCB on 2009 prices)  In scope of One-Out?				Measure qualifies as	
£1.43m	£1.43m	-£0.14million	No	N/A	

What is the problem under consideration? Why is government intervention necessary? The UK is required to implement Article 30 of the new Seveso III Directive (replacing Seveso II Directive) into UK law by 15 February 2014. We propose doing this by minor amendment to the Control of Major Accident Hazards Regulations 1999 (COMAH). This amendment will take a significant number of sites out of scope of COMAH. The EC classification ('dangerous for the environment' - DFE) of Heavy Fuel Oil (HFO) causes problems for industry under consequential requirements of COMAH. UK lobbied and secured Article 30 in the Seveso III Directive, enabling HFO to be treated under COMAH as 'petroleum products'; relaxing significantly the demands on UK industry.

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

(i) Implement the change proposed in the Seveso III Directive to the classification of HFO into UK law: (ii) Enable many UK industry stakeholders to be removed completely from legislative requirements and others to have simpler compliance duties (iii) Giving clarity and legal certainty to UK businesses on how HFO should be treated; (iv) Deliver a 'level playing-field' in the EU where the same thresholds will be used; and (v) Ensure no gold plating and that British businesses are not put at a competitive disadvantage; (vi) Avoid infraction and associated costs for failure to implement Article 30 of the Directive.

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

Option 1: Amend the Control of Major Accident Hazards Regulations 1999 (COMAH) (recommended option)

Option 2: Using non-legislative means to implement the changes necessary.

Option 1 is the preferred option because it is achievable, benefits industry by enshrining in law the reduced burden for compliance, provides the legal clarity sought by industry, meets EC obligations (so avoiding infraction) and maintains HSE's reputation. The 'do nothing' option is not a viable option as we are obliged to meet the European obligations. However, it is the notional baseline against which the other policy options are compared.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: Within 5 years of 15 <sup>th</sup> Feb 2014						
Does implementation go beyond minimum EU requirements?  No						
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Small Yes	Me Yes	dium s	<b>Large</b> Yes		
exempted set out reason in Evidence Base. Yes Yes Yes Yes Yes Yes What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions?  (Million toppes CO <sub>2</sub> equivalent)  N/o						

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 Minister	Mike Penning	Date:	9/01/14
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## **Summary: Analysis & Evidence**

Description: Amend the Control of Major Accident Hazards Regulations (COMAH) 1999

#### **FULL ECONOMIC ASSESSMENT**

Price Base	PV Base	Time Period	Net Benefit (Present Value		e (PV)) (£m)	
<b>Year</b> 2012	<b>Year</b> 2013	Years 10	Low: £1.16m	High: £1.73m	Best Estimate: £1.43m	

COSTS (£m)	Total Tra		Average Annual	Total Cost
` '	(Constant Price)	Years	(excl. Transition) (Constant Price)	(Present Value)
Low	0		0	0
High	0	1	0	0
Best Estimate	0		0	0

#### Description and scale of key monetised costs by 'main affected groups'

It is estimated there could be a familiarisation cost to those sites storing HFO. The maximum familiarisation cost is estimated to be less than £300. Being less than £1 thousand this cost has been rounded to zero in these summary tables.

#### Other key non-monetised costs by 'main affected groups'

It is not expected that there are any other non-monetised costs.

BENEFITS (£m)	<b>Total Tra</b> (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low			£0.13	£1.16
High		1	£0.20	£1.73
Best Estimate			£0.17	£1.43

#### Description and scale of key monetised benefits by 'main affected groups'

It has been estimated that there could be cost savings to HFO sites that will either fall out of scope of COMAH or move from Top Tier to Lower Tier. These savings are estimated to be between  $\mathfrak{L}1.16$  million and  $\mathfrak{L}1.73$  million over 10 years, with a best estimate of  $\mathfrak{L}1.43$ million

## Other key non-monetised benefits by 'main affected groups'

The proposed amendment will also deliver legal certainty to business which in turn will deliver time savings. It is not possible to quantify these savings as they will vary between the different HFO sites.

## Key assumptions/sensitivities/risks

Discount rate (%)

3.5

HSE has estimated on the best available data, the number of sites storing HFO at DFE thresholds to be at least 50. This is based on information from Department of Energy and Climate Change (DECC) Annual Digest of UK Energy Statistics. The savings are adjusted to reflect the likely level of compliance under the baseline which is assumed to be around 25% based on HSE judgement..

#### **BUSINESS ASSESSMENT (Option 1)**

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: £0m	Costs: £0m Benefits: £0.14m Net: -£0.14m		No	N/a

## **Evidence Base (for summary sheets)**

#### **Problem under consideration**

- 1. The Seveso II Directive (96/82/EC), implemented in Great Britain as the Control of Major Accident Hazards Regulations 1999 (COMAH), aims to prevent on-shore industrial major accidents and limit consequences to people and the environment. Application depends on inventories of dangerous substances. Petrochemical and chemical industries are routinely in scope, but other sectors such as large scale fuel, gas and chemical storage and distribution, pharmaceuticals and metal manufacturing can also be subject to COMAH. COMAH applies at 2 levels Top Tier (TT), with the most stringent requirements, and also Lower Tier (LT).
- 2. Heavy fuel oil (HFO) is a viscous liquid petroleum residue used predominantly in power stations, manufacturing and marine transport; it is also used as a primary fuel for industry in remote off-grid locations as well as a back up fuel elsewhere. The Seveso / COMAH regime is triggered by the presence of qualifying quantities of substances classified under other directives as e.g. highly flammable or 'dangerous for the environment (DFE).' Previously HFO was not treated as a dangerous substance and so was not in scope of COMAH regardless of the amount involved. However, in 2009/10 HFO was categorised under other Directives as DFE. This classification had the knockon and unintended effect of triggering the application of Seveso / COMAH at quantities much lower than would be justified by the major accident risk the substance represents. There was much uncertainty in the European Commission (EC), member states and industry about whether the Directive should apply. Recent legal advice confirms that the Seveso Directive and COMAH does apply to HFO in a 'Dangerous for the environment' (DFE) classification, with corresponding threshold quantities of 100t (tonnes) for LT sites and 200t for TT sites. This has increased the range and number of sites that should come into scope of COMAH. It includes sites not usually considered to represent a major accident hazard such as hospitals, industrial laundries etc.
- 3. Following successful negotiations, the new Seveso III Directive (2012/18/EU) adds HFO to the 'Petroleum products' category, with significantly higher and more proportionate threshold quantities at 2,500t LT and 25,000t TT. The Directive has to be implemented in the UK by 1 June 2015, but it includes an article on HFO requiring earlier implementation by 15 February 2014. In making the change, member states and the Commission recognised the unreasonableness of the current DFE requirements. The 2014 implementation date is intended to provide legal certainty to member states by replacing the old DFE thresholds with new proportionate thresholds applicable to a range of petroleum products. In principle then this is a 'deregulatory' measure. Sites with less than 2,500t¹ of HFO which are currently legally in scope of COMAH under the DFE thresholds will fall out of scope of COMAH completely following the proposed amendment (unless they fall within it for

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<sup>&</sup>lt;sup>1</sup> Please read at all places when <2,500t is referenced: 'but more than 100t'. This is to make explicit that this reference means those sites storing HFO that are in scope of DFE thresholds but not Petroleum products thresholds.

other reasons, for example, by having qualifying quantities of other hazardous chemicals on site). Those sites storing more than 2,500t (LT) and 25,000t (TT) of HFO are already captured in COMAH by the DFE threshold and will remain subject to COMAH under the petroleum products thresholds following the amendment.

4. Table 1 Threshold Inventories Triggering Seveso Requirements

	SEVESO II i.e. DFE	SEVESO III i.e. PETROLEUM
	(CURRENT)	PRODUCT (PROPOSED BY
	,	ARTICLE 30)
Lower tier (LT)	100t	2,500t
Top tier (TT)	200t	25,000t
		·

## Policy objectives and intended effects

- 5. The policy objectives and intended effects are as follows:
  - Implement European thresholds for HFO in UK law.
  - Enable many UK industry stakeholders to be removed completely from legislative requirements (those storing less than 2,500t of HFO) and others (with between 2,500t and 25,000t of HFO) to have simpler and less expensive compliance duties (as they will be LT under the proposed amendment to COMAH instead of TT under DFE).
  - Ensure proportionality by moving HFO to the 'Petroleum products' category – HFO will have significantly higher thresholds, more consistent with the hazard it and other petroleum products present;
  - Give clarity and legal certainty to industry there has been uncertainty, as some companies are starting to comply with DFE thresholds and others have been making enquiries;
  - Deliver a level playing field in the EU other member states will be using petroleum products thresholds for HFO;
  - Ensure no 'gold plating; and that British businesses are not put at a competitive disadvantage; and
  - Avoid the risk of infraction and its associated costs.
- 6. It is important to emphasise that the Commission endorsed the Article 30 changes. The UK's chief negotiator on the Seveso III Directive has confirmed that there was much agreement (amongst Member States) that the higher thresholds are indeed appropriate and more accurately reflect the major hazard potential of HFO. The UK is not aware of any member state not intending to implement Article 30.

## Policy options considered, including alternatives to regulation

- 7. **Option 1** Amend COMAH to introduce the petroleum products classification and thresholds for HFO to come into effect from 15 February 2014.
- 8. **Option 2** Use non-legislative means (NLM) to implement the changes; apply the petroleum products thresholds by way of a note on the regulator's website from February 2014 but only introduce the change in law when the Seveso III Directive is implemented on 1 June 2015. The note would acknowledge that the DFE thresholds apply to HFO in domestic legislation and that regulators would be unlikely to take enforcement action in respect of HFO below the petroleum products thresholds.
- 9. Both the above options are compared to the notional 'do nothing' option i.e. that COMAH is not changed and so the DFE thresholds for HFO apply. Given that aligning the thresholds for HFO with those of petroleum products is a European requirement, the 'do nothing' option is not a viable option. However, it is presented in this IA as the notional baseline against which options 1 and 2 are compared.
- 10. Five key factors were used to assess the options (see table below):
  - (a) Time there is a tight deadline of 15 February 2014 for changes to be implemented;;
  - (b) Legal transposition of EU legislation must satisfy legal obligations;
  - (c) Reputation the UK pushed hard for an early solution to the low DFE thresholds for HFO so it may harm the UK's credibility if the negotiated amendment was not implemented into law;
  - (d) Enforcement position ability for regulators to take enforcement action; and
  - (e) Ongoing burden ongoing costs of compliance for business.

Table 2: Comparison of options on five key factors

	Option 1	Option 2
(a) Time	Achievable	Achievable
(b) Legal	Satisfied	EC does not accept NLM as appropriate for implementation of Directives. Risk of infraction.
(c) Reputation	Maintained	Likely to be adversely affected.
(d) Enforcement position	Satisfied	Uncertain. If there was an accident involving HFO with quantities less than the petroleum products threshold, the regulator may be under public pressure to take enforcement action (and at risk of judicial review) but this would conflict with the Seveso amendment.
(e) Ongoing burden	Minimised	Costs associated with uncertainty.

11. Option 1 is recommended as it meets the non-monetised requirements (factors (a), (b), (c) and (d), and minimises costs and reduces burdens (e). Since NLM are not

legally enforceable they do not constitute effective transposition of mandatory measures in a directive and the UK would need to be prepared to risk/defend infraction for failure to implement the directive. Potential reputational damage to UK might prove considerable although its scale and consequences cannot be meaningfully calculated. Option 2 carries another drawback; for so long as the current DFE thresholds remain extant in UK law, the industry and regulator are actually subject to them. Potentially, the regulator may, in certain circumstances (e.g. an incident), face demands to 'enforce the law' under DFE thresholds albeit that law is perceived as inappropriate and other legal remedies are available for such circumstances. Consequently, Option 2 is not analysed any further in this impact assessment.

#### **Costs and Benefits**

#### Risks and assumptions

#### The baseline

12. The baseline is the 'do nothing' option. In other words the DFE thresholds for HFO in Seveso II will continue to apply to any sites storing more than 100t of HFO. However, up until now, the Competent Authority (HSE, Environment Agency, Scottish Environment Protection Agency, Natural Resources Wales) and industry knew that the regulatory landscape in Europe was likely to change for HFO and so a pragmatic, measured approach has so far been adopted to the enforcement of DFE requirements. Therefore up until now many sites (especially those with less than the petroleum products thresholds of 2,500t and 25,000t) might not have been striving for full compliance. However, now that the legal advice has been received that DFE thresholds apply under Seveso II, the CA would enforce the DFE thresholds over the next 10 years and so would assume that business should be striving for full compliance during that time.

## Number of sites affected

- 13. At the negotiation stage of the Seveso III Directive, a research project was carried out to estimate costs for the draft negotiation stage impact assessment (IA) in 2010/11. Despite significant effort, it was not possible to collect evidence on the number of sites that are currently outside of scope of the Directive, but which might move into scope under Seveso III. This is because these sites are not currently known to HSE under Seveso II and so there is no comprehensive data source of these sites. An estimate was provided based on expert judgement and analysis of the types of substances and so what industries might be affected, which in turn allowed an estimate of the number of sites. A similar problem applies in relation to HFO. Those sites that currently fall within DFE thresholds but would otherwise be outside the scope of COMAH 1999 are not readily known to HSE because of the proportionate and pragmatic approach adopted by the CA towards the enforcement of DFE thresholds (see Paragraph 12)
- 14. As our best estimate, we have used information from the Department of Energy and Climate Change (DECC)'s annual Digest of UK Energy Statistics. This

includes statistics of demand for different petroleum products including HFO. It indicates that the key sectors using HFO are, in priority order, shipping, power stations, industry, and public administration. We have estimated that there is a minimum of 50 sites which store HFO at DFE thresholds (20 marine fuel suppliers, 14 power stations and 16 other industrial sites). Energy UK (the trade association for the energy industry) supplied the power station data. The Federation of Petroleum Suppliers and Tank Storage Association (who have members who supply HFO to a wide range of industries) have verified the above estimates and the range of industries. It is important to note that this is a minimum estimate of sites storing HFO at DFE thresholds based on the source data used. Also, the information is not disaggregated by quantity of HFO stored, so it does not tell us whether any of these 50 sites store more than 2,500t of HFO and so as well as being in scope under DFE thresholds will also be in scope under petroleum products thresholds. On the one hand the estimate of 50 sites is thought to be conservative based on the data used. On the other hand the 50 sites may include some that will not be affected by Article 30 (i.e. an overestimate).

15. In the absence of alternative information, the 50 sites has been split into 4 different groups in an even split, as described in Table 3. Proportionality is explained further in paragraph 38 but in brief, because the proposal is deregulatory and is exempt from one in, two out calculations, it is not proportionate to refine this estimate any further. For a full description of some of the reasons further refinement is not possible, see paragraph 13. Case studies have also been collected (see Annex 1) which provide examples of how some of the sites could be affected.

16. Table 3 Assumed split of 50 HFO sites currently in scope

Quantity stored	Current scope	Scope under Article	Estimated
	under DFE	30 Petroleum	number of sites*
	thresholds	Products Thresholds	
100t <x<200t< td=""><td>Lower Tier</td><td>Out of scope</td><td>13</td></x<200t<>	Lower Tier	Out of scope	13
200t <x<2,500t< td=""><td>Top tier</td><td>Out of scope</td><td>13</td></x<2,500t<>	Top tier	Out of scope	13
2,500t <x<25,000t< td=""><td>Top tier</td><td>Lower Tier</td><td>13</td></x<25,000t<>	Top tier	Lower Tier	13
> 25,000t	Top tier	Top Tier	13

\*total number of sites in this table does not equal 50 due to rounding for presentational purposes.. Actual number used in calculations is 12.5 sites in each category

#### Appraisal assumptions

17. Impacts are assessed over a period of 10 years and discounted at a rate of 3.5%<sup>2</sup>. This period covers the proposed amendment to COMAH up until 2015

<sup>&</sup>lt;sup>2</sup> Total costs and benefits over 10 years are expressed in 'present value' terms – being the value in today's terms of the future costs and benefits over the 10 year period. The sum of future costs and benefits is adjusted by the discount rate of 3.5% to reflect the time value of money, as per Greenbook guidance..

and then the period thereafter when the remainder of the Seveso III Directive has been transposed into UK legislation. The Seveso III Directive maintains HFO under 'Petroleum product' thresholds and so the impacts associated will continue for the duration of Seveso III in UK law; this is why a 10 year period has been chosen rather than merely from 2013-15. It would be misleading to show only impacts for the remaining 2 years that COMAH 1999 will exist. It is more logical to keep the impacts associated with the HFO amendment in the same IA. All the other changes in the Seveso III Directive will be assessed in a separate IA for its transposition in due course without including HFO.

## Summary of consultation responses

- 18. Prior to formal public consultation (CD262), HSE officials alerted industry stakeholders to the proposed amendment to relax the regulation of HFO under Seveso III and took soundings on their views. This included addressing key conferences and having dialogue with trade associations and individual companies as follows:
  - a) Yorkshire First (Autumn 2012) A conference of about 150 delegates from COMAH related industries to understand Seveso III requirements
  - b) IChemE (London, March 2013) event to alert stakeholders to Seveso III and understand industry's concerns
  - c) Discussion with the Tank Storage Association (September 2013);
  - d) Discussion with Federation of Petroleum Suppliers (Spring 2013)
  - e) Discussion with UK Petroleum Industry Association (2011 onwards)
  - f) Discussion with the British and Irish Association for the Properties of Water and Steam (representing Power Stations 2012-13)
  - g) Many conversations with individual companies from 2011 to Spring 2013.
- 19. The feedback from these stakeholders was the amendment would be very welcome, as it would both reduce the regulatory burden on the HFO industry and provide the necessary clarity putting an end to confusion around the matter.
- 20. When formal consultation was launched, HSE also:
  - a) published a link to the document from its well established COMAH site (RSS feed) (visitor numbers not tracked)
  - b) broadcast the HFO consultation (with link to it) in it's e-Bulletin an electronic newsletter reaching 17,000 subscribers
  - c) sent and email confirming the launch (and including a link to the consultation document) to its full directory of key contacts for Seveso III – including about 70 industry associations and companies, other Government Departments (including devolved administrations). key employee associations / unions and a specific new magazine for the fuel oil sector
  - d) sent and update (and link) to the group of organisations and individuals (23,207 recipients) subscribing to e-alerts for consultative documents
- 21. At the time of closing, the consultation document had received 2,856 unique visitors (organisations and individuals). A total of 11 responses were received

to the consultation, which may indicate the non-contentious nature of the amendment and industry's willingness to see it adopted. The vast majority (9 out of 11) agreed with the analysis in the draft impact assessment. Of the other two respondents, one did not agree or disagree, and the second mentioned two issues, which are not relevant to the impact assessment. The only other question of relevance to the impact assessment asked whether the amendment would be beneficial to companies that are small. The majority of respondents agreed it would. Those that did not think so either demonstrated some misunderstanding in their answer or were not comparing the proposed change to the baseline of enforcement. No other issues were raised at formal or informal consultation with relevance to the impact assessment.

### Cost Savings

### Compliance cost savings

- 22. As noted above, we have estimated that at least 50 sites fall within scope of COMAH under the DFE thresholds. A notional range of +/- 10% has been presented around this to reflect the uncertainty in the estimate. In other words, we assume between 45 and 55 sites currently fall within scope of COMAH under DFE thresholds due to HFO inventories. Under Article 30 thresholds will be raised to those of petroleum products and so the estimated 45 55 sites will either drop out of scope of COMAH, move from Top Tier to Lower Tier, or experience no change. The effect of the change and the estimated number of sites is presented in Table 3. There will clearly be some compliance savings compared to the baseline for those sites moving from Top Tier to Lower Tier or out of scope completely.
- 23. In terms of the cost of compliance with COMAH 1999, HSE has estimated average compliance costs for COMAH 1999 as part of implementation of the new Seveso III Directive, with the estimates being reported by Top Tier and Lower Tier. The estimates are based on a census of 1000+ Seveso sites (which received a 25% response rate) in which questions were asked about compliance obligations. From this survey it has been estimated that the annual cost of compliance for top tier sites is around £27thousand (with a present value of £230 thousand over 10 years); and for Lower Tier sites it is £10 thousand, (with a present value of £85thousand over 10 years).
- 24. There are four categories of sites within the estimate of 50.
- 25. The first, being sites that will move out of scope of COMAH from Lower tier at DFE thresholds (currently store 100 200tonnes of HFO) and so experience potential savings per site with a present value of £85thousand over 10 years.
- 26. The second being sites that will move out of scope of COMAH from top tier at DFE thresholds (currently store between 200tonnes and 2,500tonnes of HFO)

<sup>3</sup> Present value being the value of future costs expressed in todays terms, adjusted to reflect the difference in value of that cost over time due to the time value of money.

- and so experience potential savings with a present value per site of £230 thousand over 10 years.
- 27. The third being sites that will move from top tier under DFE thresholds to LT (those sites that currently store between 2,500tonnes and 25,000 tonnes of HFO) making potential savings of £17 thousand per annum with a present value of £144thousand per site over 10 years.
- 28. The final group being those sites that store more than 25,000t (and so are currently at TT under DFE thresholds) who will experience no change with the implementation of Article 30.
- 29. The assumed number of sites moving within each of these 4 categories is shown in Table 3, and is an even split of the estimated 50 sites. As noted, a range of +/- 10% has been added to the 50 sites to reflect the notional uncertainty in the estimate, and so in other words there will be between 11 and 14 sites affected in each of the 4 categories above.
- 30. Based on these assumptions and the estimated cost savings per site, the total potential cost savings of the proposal are estimated to have a present value of between £4.6million and £6.9million in total over 10 years with a best estimate of £5.7m.
- 31. It is very important to note that these are the **maximum** estimated cost savings for the estimated number of sites and given the assumptions about numbers in each category. The full extent of the cost savings will only be achieved by business if under the baseline scenario there had been full compliance with the DFE thresholds. Although HSE has evidence of sites that have been preparing to comply with the DFE thresholds, it is also aware that other sites may have taken a lighter touch approach to compliance because they thought the quantity of HFO they stored would become exempt from regulatory attention. It is not possible to predict with any accuracy how business would have responded to the DFE thresholds being in place for the next 10 years but HSE would have had to take a position of enforcement over that time. So with this in mind, it is reasonable to assume that many sites would have complied with COMAH under the baseline and so there will be real savings to business as a result of this deregulatory proposal. It is important to note that the savings estimated of between £4.6million and £6.9million in total are the maximum end of the range, based on compliance cost savings. HSE assumes that the baseline level of compliance would be 25% for the reasons outlined above. The total compliance cost savings that will be achieved are estimated to have a present value of between £1.16m and £1.73m with a best estimate of £1.43m. The equivalent annual net cost saving to business is therefore between £0.13m and £0.2m with a best estimate of £0.17m.

## **Legal Certainty**

32. A significant benefit of Article 30 is the legal certainty that this will provide for those sites storing HFO and the certainty for the regulator. Some sites are

aware that DFE thresholds should apply now and a few are taking steps to comply; others are uncertain about the next two year period and so they are speaking to the regulator and consultants. The time taken up by these queries creates a cost to the industry and to the regulator. It is also apparent that some sites are losing business due to the uncertainty. The cost of this uncertainty cannot be quantified because the evidence received is anecdotal; it is not possible to extrapolate as we do not know how many sites might be in similar positions. However, it is reasonable to conclude that the period of uncertainty is demanding industry and regulatory time, and so by introducing Article 30 and providing reassurance to the industry, time will be saved and therefore costs.

#### Costs

#### Familiarisation with the changes proposed

33. For those sites aware of the changes, there will be some time taken to understand that the thresholds for HFO are changing. HSE has looked at the average length of visit to its web page<sup>4</sup> which describes the change proposed by Article 30. The information showed that the average length of time a user spent looking at this page was 2 minutes. This is taken as a proxy for the time spent familiarising with the changes, although it cannot be certain that during that visit the user was spending the time reading the information. However, because many in industry were aware of the issue already, 2 minutes is thought to be a reasonable lower end for the duration of familiarisation. For those sites who are less abreast of developments, it is thought they could spend around 10 minutes reading and understanding the webpage. At a total economic cost of about £27<sup>5</sup> an hour, the total cost of familiarisation for between 45 and 55 sites is estimated to be between £40 and £250. These familiarisation costs are specifically related to understanding the changes proposed by HSE to the COMAH 1999 regulations, and not what they would have to do to comply with COMAH 1999. The savings associated with reduced compliance obligations are captured in the cost savings section of this IA.

#### Impact of consequential amendments to planning regulations

34. The Department for Communities and Local Government (DCLG) considers the proposed consequential amendments needed to planning regulations (England) will not have a negative impact. These amendments will increase the controlled quantity at which the requirement to obtain Hazardous Substances Consent for heavy fuel oils will apply from the current level of 100 tonnes to 2,500 tonnes. Applications above the new threshold will continue to use the existing consent regime. For the presence of heavy fuel oil between 100 and 2,500 tonnes there will no longer be a need for companies to prepare and submit applications for

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<sup>&</sup>lt;sup>4</sup> Link to web page available at: http://www.hse.gov.uk/comah/guidance/hfo-june-2013.pdf

<sup>&</sup>lt;sup>5</sup> According to the Annual Survey of Hours and Earnings (ASHE) 2012 the gross hourly wage rate of a science, research, engineering and technology professional is £20.62 an hour. This is grossed up by 30% to £27 an hour reflect the full economic cost of employing that person (overheads, employer tax and NIC etc

consent. Evidence suggests that the Health and Safety Executive has been consulted on only two applications for Hazardous Substances Consent for heavy fuel oils since the year 2000 and the impact is therefore likely to be negligible. No potential cost saving associated with planning has therefore been estimated.

## Summary of impacts associated with option 1

- 35. Compared to the baseline scenario in which the DFE thresholds would apply over the 10 year appraisal period, total net present value of compliance cost savings to business have been estimated to be between £1.16m and £1.73m over 10 years. This range reflects the assumed likelihood that only approximately 19% of the estimated 50 sites will make real savings compared to the baseline case (i.e. 75% of the 50 sites making savings compared to the baseline as per Table 3, further adjusted by 25% to reflect what might be experienced in reality). The equivalent annual net cost saving to business is estimated to be between £0.13m and £0.2m with a best estimate of £0.17m over 10 years.
- 36. An important consequence of the proposed change is the legal certainty this would provide, being both a benefit for industry and the regulator in terms of time savings from reduced queries and problems and providing assurance to suppliers and customers.
- 37. There could be small familiarisation costs to businesses that follow these changes and spend time understanding what HSE is proposing and engaging with the consultation. Due to the relatively small numbers expected to be aware of these changes and the current understanding of the issue, this familiarisation cost is estimated to be less than £300 in total.

# Rationale and evidence that justify the level of analysis used in the IA (proportionality approach)

38. As part of the Seveso III negotiations, a large scale and costly survey of all COMAH sites was conducted during 2010/11, asking sites about their inventories of chemical substances and the time it takes them to comply with COMAH 1999. The survey received a 25% response rate. This survey data has informed the compliance cost savings in this IA and is proving invaluable to the analysis for the implementation of Seveso III. However, this significant piece of research did not provide any direct estimates of sites currently outside of scope of COMAH that might move into scope as a consequence of the changes to the Directive. Similarly, this extensive piece of work did not (and would not) provide any robust estimate of the number of HFO sites that would be in scope of the DFE thresholds but not petroleum product thresholds. Instead the number of sites has been estimated based on the information from the Department of Energy and Climate Change (DECC) Annual Digest of UK Energy Statistics. The Federation of Petroleum Suppliers and Tank Storage Association (who have members who supply HFO to a wide range of industries)

have verified our estimate of 50 sites and the range of industries we cover. This method is proportionate to the intervention being proposed here – which is essentially deregulatory in nature. A range has been provided for the likely cost savings, which reflects the uncertainty in the actual savings that will be achieved by all HFO sites. The range around the cost savings is proportionate to the fact that this is a deregulatory proposal that is not in scope of OITO.

# Direct costs and benefits to business calculations (following OITO methodology)

- 39. This proposal is out of scope of One in, Two Out (OITO). The proposed amendment implements a European Directive; it does not "gold-plate" by going beyond its provisions or fail to adopt available derogations. In fact it would essentially be gold plating European requirements for the UK not to implement Article 30 and stick with the DFE thresholds. The proposal is outside the scope of the moratorium on small and micro businesses because it is outside the scope of One In, One Out (OIOO) and OITO, being a change to implement a European Directive with no gold plating. The proposal is also outside the scope of the small and micro business assessment (SMBA) as it will be implemented into UK law before the beginning of April 2014.
- 40. The estimated Equivalent Annual net cost saving to business has been estimated as between £0.13m and £0.2m. with a best estimate of £0.17m. The estimated net present value over 10 years is a net benefit of between £1.16m and £1.73m with a best estimate of £1.43m.

## Wider impacts

Government guidance is to consider whether the proposal will have any impacts on the following: equality, competition, wider environmental issues, health and wellbeing, human rights, justice system, rural proofing, sustainable development. There are no impacts expected in terms of any of these areas. The two main areas in which the proposal has the most relevance (environmental issues and health and wellbeing) are discussed further below.

- 41. <u>Wider environmental issues</u>: For Seveso/COMAH purposes only, the thresholds for HFO will be increased from DFE quantities to those for Petroleum Products. This is in recognition of HFO's lesser level of potential as a major accident hazard. However, it is not expected there will be any loss in environmental protection because there are existing environmental laws under which the standards of environmental protection afforded by the lower 'DFE thresholds' will be regulated and maintained.
- 42. In England the main legislation is The Control of Pollution (Oil Storage)
  (England) Regulations 2001 which apply to any premises storing more than 200 litres of oil, with a few exceptions. The exceptions are either too small to be regulated (domestic premises storing less than 3500 litres) or already regulated

by more specific pollution control legislation (for example, waste oil storage and oil refineries which must have permits issued by the Environment Agency under the Environmental Permitting Regulations 2010 or farms which have to comply with the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (the SSAFO regulations)).

- 43. The situation is similar in Scotland with The Water Environment (Oil Storage) (Scotland) Regulations 2006 covering most premises (including farms) and permits issued by the Scottish Environment Protection Agency (SEPA) for specific users (for example, the Pollution Prevention and Control (Scotland) 2012 Regulations for oil refineries).
- 44. Wales does not currently have any Oil Storage Regulations that cover all premises, but it does have the SSAFO Wales regulations covering farms and permits issued by Natural Resources Wales (NRW) for specific users such as waste oil and oil refineries (under similar legislation to England).
- 45. <u>Health and well being:</u> Although the thresholds for HFO to be in scope of COMAH are being raised to those of petroleum products, it is not thought that the risk to human health will change as the lower threshold is not warranted by the risk posed by HFO. No actual change in risk is expected.
- 46. Small and micro businesses: As explained in paragraph 39 the proposal is outside the scope of the moratorium on small and micro businesses and the SMBA For information purposes, the survey of COMAH sites described in this IA shows that of the sites surveyed, 47% were small (1-49 employees) 335 (33%) were medium sized (50 - 249 employees) and 21% were large (250+ employees). However, most sites stated that they are operated by an organisation with other sites (72%) rather than this being the sole site. However, some genuinely small businesses are likely to be COMAH sites. Applying the rationale that 72% of the 47% of small sites had operations at multiples sites, then it can be concluded that just 13% of sites were genuinely small. Applying the same rationale 9% of sites would be genuinely medium sized. The survey did not provide information on micro businesses, (<10 employees) and because it has been difficult to estimate the number of sites affected by the proposal it would be disproportionately difficult to estimate whether there were any micro companies within the population affected. However, as this proposal is deregulatory, there is an overall net saving to business. So, if there are any micro, small and medium sized companies storing HFO at DFE thresholds they will also experience savings. The total costs of familiarisation with the amendment to business have been estimated at less than £1000 and at very small amounts per site.

## Summary and preferred option with description of implementation plan

47. Option 1 is the preferred option, to amend the HFO thresholds so they become much less onerous by aligning with the thresholds for other petroleum products. The overall impact on business is expected to have present value cost savings of between £1.16m and £1.73m over 10 years with a best estimate of £1.43m.

The equivalent annual net cost saving to business is estimated to be between £0.13m and £0.2m with a best estimate of £0.17m

48. We will implement the amendment to current regulation (COMAH 1999, enacting Seveso II) as required by Seveso III by 14 February 2014. It is planned that the COMAH Regulations will be amended more fully when the remainder of Seveso III changes are incorporated into UK law by June 2015.

## Annex 1 - Case studies of HFO sites known to be affected by the DFE thresholds

## Business with operations at multiple sites

**Whisky manufacturer** currently operating 29 sites; 2 Top Tier and 3 Lower Tier sites already notified due to qualifying quantities of flammable liquids under COMAH. At DFE thresholds, 4 Top Tier sites and 6 Lower Tier sites. At petroleum products thresholds, same as current operation: 2 Top Tier and 3 Lower Tier.

#### The do nothing option:

Costs of compliance with DFE thresholds – 2 extra Top Tier sites and 3 extra Lower Tier sites. Actual costs over 10 years would depend on the site's awareness of the legal requirements under DFE and how quickly compliance would be adopted.

<u>Option 1</u>: Compared to the baseline could make cost savings, because qualifying inventory thresholds are significantly relaxed.

# Changing from Lower Tier at DFE thresholds to out of scope at petroleum products thresholds

Small whisky distillery holding 132t of HFO

## The do nothing option:

Costs of compliance with DFE thresholds at Lower Tier.. Actual costs over 10 years would depend on the site's awareness of the legal requirements under DFE and how quickly compliance would be adopted.

<u>Option 1</u>: This site would fall out of scope of COMAH and so could make savings compared to the baseline

# Changing from Top Tier at DFE thresholds to Lower Tier at petroleum products thresholds

a. Food manufacturer already a Lower Tier site due to presence of other dangerous substances and holding 1,000t of HFO as a back up heating fuel.

### The do nothing option:

Cost of compliance associated with being treated as in scope at TT under DFE thresholds. Actual costs over 10 years would depend on the site's awareness of the legal requirements under DFE and how quickly compliance would be adopted.

<u>Option 1:</u> Due to other substances held, the site would remain Lower Tier. The site would make savings compared to the baseline.

- b. **Power station** already a Lower Tier site due to presence of other dangerous substances and holding 12,000t of HFO as a back up fuel. The impacts against the baseline are the same as for the food manufacturer in a) above.
- c. **Fuel storage site** already a Lower Tier site due to presence of other petroleum products and holding 19,500t of HFO predominantly for marine purposes.

The impacts against the baseline are the same as for the food manufacturer in a) above.