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## HEALTH AND SAFETY EXECUTIVE

The HSE Board

### RESULTS OF THE CONSULTATION ON PROPOSALS FOR REVISED POLICIES TO ADDRESS SOCIETAL RISK AROUND ONSHORE NON-NUCLEAR MAJOR HAZARD INSTALLATIONS

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#### Issue

1. To note the publication of the results of the formal public consultation (Annex A) on incorporating Societal Risk in the advice given to Local Planning Authorities (LPA) for developments around major hazard installations, and the next steps in this project. Workshops will be organised with LPAs to develop the format and identify the type of advice LPAs will require from HSE.

#### Timing

2. Routine.

#### Recommendation

3. You are invited to note:
  - a) The publication on 29 January of the consultation report at Annex A; and
  - b) The objectives and timetable of arrangements for the workshops with LPAs.
  - c) The uncertainty over the cost and resource implications.

#### Background

4. Land use planning is covered by planning legislation in Great Britain, in particular, the Town and Country Planning, The Planning (Hazardous Substances) Act 1990 and The Planning (Hazardous Substances) Regulations 1992 as amended by The Planning (Control of Major-Accident Hazards) Regulations 1999. HSE's activity on land use planning is purely advisory and it is for the LPA to take into account other economic or social factors that should be considered.
5. HSE carried out a public consultation from April to July 2007 on the Government proposal that societal risk should be taken into account when assessing safety measures at onshore major hazard installations and for planning applications on the use of land for development in areas around such sites.
6. At present HSE provides advice on planning applications around hazardous installations based mainly on "individual risk", which is the chance that a particular individual at a particular location will be harmed.
7. The consultation looked at incorporating "societal risk" into land use planning advice. This is looking at the consequences of a particular incident in terms of level of harm and numbers of people.

## Argument

8. In all, 94 responses to the consultation were received. In summary, respondents were:
  - a) in favour of societal risk being taken into account for long-term development plans and for individual planning applications;
  - b) in favour of societal risk being taken into account when site operators considered reasonably practicable **on-site** control measures;
  - c) in favour of HSE providing societal risk advice to LPAs in a new format although local authority (LA) and LPA responses were divided on this issue. However, they considered that clear, unambiguous and relevant information was crucial in making balanced decisions.
9. A small number of respondents expressed concerns about the imprecise nature of societal risk calculations and the suitability of existing methodology for application in site-specific cases. HSE considers that the methodology is fit for purpose but acknowledges it needs to be revisited and tested. All relevant stakeholders will be consulted throughout this process.
10. After the consultation a meeting of the Societal Risk Working Group including officials from Department for Business, Enterprise and Regulatory Reform (BERR), Department for Communities and Local Government (DCLG), Scottish Government (SG) and Welsh Assembly Government (WAG) and HSE agreed that the consultation response had given a mandate in principle for taking account of societal risk on-site and in LUP decision-making. However, further work was required on the practical means of giving effect to that through the planning system: the methodology for societal risk calculations, mechanisms for how costs are shared and the format of HSE advice to LPAs.
11. HSE issued a Press release on 29 January 2008 announcing the publication of the results of the consultation and the next steps. The next steps will include further work to develop the practicalities on societal risk calculations, mechanisms for how costs are shared and the format of HSE advice to LPAs.
12. The next stage of consultation would involve workshops with LPAs that have hazardous sites located within their area of responsibility, to establish detailed mechanisms for change particularly on how HSE's land use planning advice should be provided. HSE will provide an approximate timeline for the next steps, workshops and the announcement of outcomes. HSE anticipate running the workshops in February/March 2008 with an announcement of outcomes in spring 2008.
13. The work to test the methodology and explore cost-sharing options would also be undertaken. Economists from the HSE, BERR and DCLG have met to discuss a paper which begins to explore the basis and possible mechanisms for burden sharing.

## Consultation

14. HSE has had a process of continuous consultation with other Government Departments (OGDs) in the interdepartmental Task Group. We sent a submission to the Minister on the results of the consultation and the next steps. The Minister wrote to the Domestic Affairs (DA) Committee, Welsh and Scottish Office letting them know the outcome of the consultation exercise and the next steps. The DA Committee Members responded approved the request. HSE issued a Press

release announcing the publication of the results of the consultation and the next steps on 29 January 2008.

### **Presentation**

15. HSE, BERR and DCLG developed a communication strategy which covered the initial announcement of the publication of the consultation report and the next steps. HSE will provide stakeholders with a timetable showing the next steps and major milestones.
16. There are two likely stages to the communication strategy. First, the initial report on the consultation states that societal risk will be taken into account in for determining on-site measures and in land use planning advice. HSE and other government departments are continuing to work to develop the mechanism for delivering HSE's advice to LPAs.
17. Second, when this mechanism is developed, Ministers and subsequently stakeholders will be informed as to how the system is to work in practice.

### **Costs and Benefits**

18. HSE will be working with DCLG and BERR to develop a detailed impact assessment once the mechanism on how HSE will advise LPAs on land use planning is established.

### **Financial/Resource Implications for HSE**

19. There will be financial implications at the next stage of consultation, which will have an impact on the communications, science planning and travel and subsistence budgets.
20. HSE will, in conjunction with BERR, DCLG, Scottish Office and Welsh Office, run focus groups and workshops with LPAs that have hazardous sites located within their area of responsibility to establish mechanisms on how HSE should provide land use planning advice.
21. The initial focus group meeting will be held at the Government Office, Leeds. This will contain a select group of LPAs so venue costs will be minimal. We estimate costs relating to travel and subsistence at £1500-2500 (including staff costs) for this meeting.
22. The workshops may be held at conference venues as they are likely to be larger events. We have not as yet established the costs for this. We estimate the cost of each workshop at £35-75 per delegate per day plus T&S costs of £3000.
23. Work and consultation with stakeholders on SR methodology will be set out and estimated in the Science Plan. HID estimates costs of £2 million over the next three to four years.
24. There are likely long term costs associated with the inclusion of societal risk considerations in HSE's land use planning advice to LPAs. We have not yet identified the staff costs for providing the additional advice and the draft Planning Bill does not provide for cost recovery in this area. We are continuing to work with DCLG to formalise the arrangements.

### **Action**

25. Board members are invited to note the information contained in this paper.

# **Proposals for revised policies to address societal risk around onshore non-nuclear major hazard installations**

## **Summary of Responses to the Consultation Paper**

### **1 Introduction**

1.1 On 2 April 2007 the Health and Safety Executive (HSE) published, on behalf of the cross-departmental Task Group on Societal Risk, a consultation document seeking views on a proposal to include, information on 'societal risk' when assessing safety measures at onshore major hazard installations and for informing decisions on the use of land for development in areas around such sites.

1.2 A cross-departmental Task Group was set up to consider how to address societal risk and its impact on economic, social and public health and safety policy.

### **Consultation**

1.3 Printed copies of the consultation document were sent to key stakeholders. The document and the initial regulatory impact assessment were also made available for download from the HSE website. In addition, around 6000 e-mail notifications were sent to those who expressed an interest in the issues.

1.4 By the end of the consultation on 2 July 2007 almost 5000 people had downloaded the consultation document from the HSE website during this period. 94 responses were received in total, including local/planning authorities, developers, members of the public, employers, Government Departments, etc. The comments from stakeholders have been analysed to provide a summary of the views. A list of respondents (table 1) and a breakdown by category of respondent (table 2) are attached.

### **2 Summary of findings**

2.1 A large majority of respondents were in favour of taking account of societal risk to both the assessment and provision of on-site control measures and the decision making process for land development around sites. Furthermore, for land use planning purposes, most respondents agreed that societal risk should be considered when drawing up local development plans as well as when considering individual planning applications.

2.2 A small number of respondents had expressed concerns about the imprecise nature of the societal risk calculations and whether the existing methodology was suitable for application in site specific cases. Some respondents considered that any advice provided needed to be clear, unambiguous and to provide relevant information to enable balanced decision -making.

2.3 The question on cost sharing appeared to cause some confusion for respondents and most answered in terms of who they thought should pay for increased control measures; rather than whether cost-sharing, etc. was desirable. However, most respondents are in favour of the person or organisation causing the

increase in risk to pay for any additional measures (e.g. operator for on-site changes, developer for off-site land development).

2.4 The majority of respondents were in favour of HSE providing societal risk advice to LPAs in a new format. However, a sizeable number of respondents were in favour of retaining the existing AA/DAA format (40/26). The next stage of the consultation exercise will focus on more detailed consultation by HSE with LA/LPAs to establish detailed mechanisms.

### **Technical comments**

2.5 In their comments on various questions respondents raised a number of “technical” issues relating to how societal risk should be measured, how it might be taken account of in the future, etc. It is anticipated that these comments will need to be looked at in greater detail once the Departments involved in the cross-departmental Task Group start to consider the mechanisms for taking account of societal risk. The following issues in particular were mentioned by stakeholders.

#### **2.5.1 Measuring societal risk**

- The scale aversion factor – should it be included or not?
- On-site populations - should they be included in calculations?
- Substances on site – should the calculations be based on consented quantities or what is actually present on site?
- Should consideration given to harm to people be extended to include to building damage, loss of facilities, etc?
- Should mitigation (e.g. through building design) be taken into account?
- The compatibility of societal risk with the protection concept around some sites for individual risk calculations.

#### **2.5.2 Scope of the new policy**

- Should the scope include existing populations within the consultation distance and “reverse COMAH” considerations?
- Should pipelines be included?

#### **2.5.3 Issues of Mechanism**

- Keep it simple, clear and unambiguous.
- Resource implications – how much would this cost and who should bear the costs.
- Carefully consider that the issue of incremental development.
- 2.6 Gas holders

2.6.1 Some operators of gas holders were concerned that the consultation distances around facilities had been significantly increased, with relatively little explanation, given that they have (in their view) a very good accident record. This related to the increase in consultation distances for individual risk. Nevertheless there are some gas holders on the SR site list and there could be societal risk implications in the future.

### 3 Views expressed on specific questions and related issues

#### 3.1 Question 1

**What factors and issues do you believe should be taken into consideration when determining what might be unacceptable in terms of societal risk from major hazard installations?**

- A large number of comments were received on this question. The following factors required consideration:
  - 33% of respondents considered it important to have a robust and transparent standard methodology to calculate societal risk. The mechanism should not be overly complex or expensive to carry out and should be used where necessary.
  - 24% of respondents said that it was important to stress the socio-economic benefits from the existing major hazard sites and from new developments around them.
  - 23% of respondents said it was important to consider the number of people who could potentially be harmed.
  - 16% said that the previous safety record of the sites in question should be a factor although 2% disagreed.
  - 16% also believed that sound evacuation procedures were important.
  - 16% regarded proximity of proposed developments to major hazard sites as being important.
  - 15% of respondents considered that clear information on risk should be available to the public.
  - 14% said that other effects should be considered for example, long term ill health, property damage, etc.
  - 14% also commented that environmental impact should be considered (14%).
- A small number of respondents (mainly from the industry side) were concerned that the calculation of societal risk was imprecise, depending as it did, on many variables and assumptions (such as likelihood of events and equipment failures). It was important not to be over-cautious and a clear understanding and agreement by all involved was critical on what “acceptable” and “unacceptable” levels of risk might be. HSE should be involved in the decision making process (providing advice) but it would be beneficial to include the views of other stakeholders (e.g. site operator, developer, emergency services, etc.).

#### 3.2 Question 2

**Do you think that assessment of societal risk should be used in the control of major hazard sites?**

- 76 respondents specifically answered this question. Of these, most (97%) agreed that societal risk should be considered. It was important for people living and working around major hazard sites to be confident that they were safe. However, some were concerned that it could result in additional costs for industry and a loss of land for development/restriction on what could be built. A balanced approach was required for effective and informed decision making. Others commented that the issue of societal risk was complicated and that any future regime that takes it into account must be robust, consistent, easily understood and have the confidence of all involved.
- Only (3%) of respondents answered no (two employers, one LA). Reasons cited included;
  - The current land use planning system took sufficient account of societal risk.
  - Early intervention by HSE at the Local Development Plan stage would improve the system.
  - HSE assumptions on societal risk were not robust enough to use.
- A few respondents commented that methodology currently used by HSE for calculating societal risk may not be precise enough for producing detailed site-specific information, suitable for input into planning decisions.

### 3.3 Question 3

**Should societal risk be taken into account by site operators when considering reasonably practicable on-site control measures?**

- Of the 77 respondents that answered this question, 91% answered yes and 9% answered no.
- Respondents commented that it was right for site operators to take account of societal risk. Some industry respondents said that, in practice, reasonable practicable measures were already in place under COMAH. They acknowledged that site operators should reassess measures if the situation on site changed but it was considered to be unfair that industry should be penalised for increases in off-site risk brought about by population build up around sites as result of the decisions of planners and developers. It was important that UK major hazard sites were not put at a disadvantage compared to the rest of Europe. A small number of respondents stated that industry should be required to put in place control measures regardless of whether they were reasonably practicable or not.
- Respondents considered that greater clarity on the acceptable level of societal risk and how it was calculated would be helpful - an agreed open and transparent framework, recognised by all stakeholders should result in improved public assurance and confidence that the risks are ALARP.

### 3.4 Question 4

**In any cases where new development would raise societal risk levels significantly, should consideration be given to sharing the costs of any measures that might counter such an increase in order to enable development to go ahead?**

- There were 68 responses, 60% answered yes and 40% no.
- The comments provided focused on who should pay rather than “cost sharing”. Most respondents agreed that the individual or organisation causing the increased risk (or who benefited from the change to the existing situation) should pay for any additional control measures that might be required. That is to say, the site operator if risks increase as a result of changes on site, or the developer (or others) if the increase in risk is as result of increased population from land development. There was no clear view about central or local government funding or involvement. Only a small number of respondents indicated that they were in support or opposed to funding from this source.

### 3.5 Question 5

**If so what arrangements do you think could be introduced to achieve this?**

- There was no clear consensus on what the cost-sharing arrangements should be where additional control measures that might be required. Suggestions included, levies on builders, tax, benefits, financial incentives from central and local government, contributions from developers through legal or planning conditions, etc. Some respondents said that, once it was agreed what control measures would be required, they should be built into the conditions of any planning application that was granted to ensure that measures were actually put in place and paid for. All those affected by the decision should be confident that the agreed control measures were appropriate. Some respondents indicated the importance of discussion between HSE, planning authorities, developers and site operators when these decisions are being made.
- Further analysis of responses and discussion with stakeholders may be required if these proposals are to be taken forward.

### 3.6 Question 6

**As well as site operators taking account of societal risk when considering on-site control measures, should societal risk be taken into account by planning authorities when making land use planning decisions?**

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- 77 respondents provided comments - 96% answered yes and 4% said no. Key themes were:
    - That planners should be aware of the societal risk consequences of planning (and hazardous substances consent) decisions;
    - That any system to address societal risk should be applied consistently; and open and informed dialogue with all parties was needed.
    - There should be a balance between improving communities and controlling potential harm.
    - Clear, robust and transparent guidance should be made available to all as otherwise it could slow up the already over-complicated planning process.

3.7 Question 7

**Should HSE be consulted by planning authorities during the preparation of development plans so that information about societal risk could be considered at this stage?**

- 74 respondents provided comments - 96% answered yes and 4% said no. Respondents agreed early consideration of societal risk, provided it was done in a clear and consistent manner, would enable developers and others to have a clearer picture of how development applications are likely to be treated. Respondents thought that HSE was best placed to give advice but were concerned that it was inadequately resourced.

3.8 Question 8

**Do you think that it would be appropriate for HSE to provide societal risk advice (in addition to the advice it provides currently) for individual development proposals around major hazard sites?**

- 74 respondents answered this question. 89% said yes. The following comments were provided.
  - It was important for HSE to be able to give societal risk advice on individual planning applications, particularly where the proposals are at variance with development plans or where development plans did not provide the necessary level of detail at an earlier stage in the process.
  - It would provide further assurance against gradual, incremental build up of population density.
  - All relevant information on risk should be made available and used.
- Some respondents thought that it might be possible for this advice to be built into the PADHI LUP system. A couple thought that other stakeholders (e.g.

site operator, emergency services) should be included in the process for giving advice.

- 11% disagreed that HSE should provide societal risk advice for individual development proposals. They considered it would add an unnecessary level of bureaucracy and be a burden to HSE and business.

### 3.9 Question 9

**Do you think that societal risk should be taken into account when considering certain large developments outside existing consultation zones?**

- 73 respondents specifically answered this question. 85% said yes and 15% (including a small number of As, employers and the Planning Officers Society) said no. While respondents said that risks needed to be considered where necessary, there needed to be consistent advice on the types and size of development that would be included. Some respondents considered that where existing consultation distances were not appropriate to address societal risk concerns they should be extended. Education of the public would be needed in this case so as not to cause undue alarm.
- Those that disagreed were concerned that it would lead to a lack of clarity and consistency for developers and planners. If such large developments needed to be considered then consultation distances should be extended accordingly. However, issues affecting large scale developments should have been addressed at the development plan stage.

### 3.10 Question 10

**If HSE is to be consulted about societal risk for individual planning applications (see question 8), should consideration be given to framing it in a different way from that currently provided and based on individual risk?**

- 66 respondents specifically answered this question - 60% said yes and 40% said no. Of the 13 LA/LPAs who specifically answered this question 7 said yes, 6 said no. Planning Officers Society said no.
- Respondents comments ranged from:
  - those who felt the existing system should be used as it would give clear and unambiguous advice; to
  - those who felt that the nature of societal risk was such that information should be comprehensive to ensure a balanced opinion setting out recommendations and providing justification for the decisions.
- Respondents agreed that advice should encourage clear decision-making.
- 13 Local Authorities and Planning Authorities responded to Question 10. 7 answered yes and 6 answered no. A more detailed breakdown of information

provided by Local Authorities and Planning Authorities (and also the Planning Officers Society) is provided in Table 3. This shows how each answered question 10 and the comments they provided for questions 10A and 11.

### 3.11 Question 11

**If the answer to Question 10 is yes, what form might this advice take?**

- A variety of suggestions were put forward on how societal risk might be given, including:
  - HSE/LAs/stakeholders should meet and discuss the application (and the production and approval of the local authority development plan).
  - There should be an explanation of levels of risk so that risks can be balanced properly against other factors.
  - There should be a range of options and associated risks.
  - Information provided in terms of likelihood of various events and possible consequences.
  - Clear response with an explanation of risk so that it can be balanced properly against community benefits, etc.
  - Some restated their position that there should be no change from the current way in which advice is provided (on individual risk).

### 3.12 Question 12

**Please provide any additional comments that you may have on these proposals.**

A wide range of comments were provided:

- General comments on societal risk and its potential effects.
- Quite detailed technical comments on SR calculation methodology (e.g. on how fN curves and scale aversion should/should not be used).
- Concerns about resource implications (primarily whether HSE had the resources to provide additional advice).
- Disappointment that more details on possible solutions were not provided in the consultation.
- Views that much more discussion/research was required.
- Concerns that increased criteria for public safety may result in the dilemma of having to reconcile safety against long term development needs.
- Support for consideration taking account of societal risk.

**List of Respondents**

4 Sight Consulting Ltd  
Aberdeen City Council - Planning Dept.  
Aberdeenshire Council  
A. D. Brown  
Association of Chief Police Officers  
**Confidential response**  
**Confidential response**  
**Confidential response**  
Brough Planning Consultancy  
Buncefield MIIB  
Byrne O'Cleirigh  
**Confidential response**  
**Confidential response**  
**Confidential response**  
Chemical Industries Association  
CIBA Speciality Chemicals UK  
D. Ball  
D. Nicholls  
Dacorum Borough Council  
**Confidential response**  
Det Norske Veritas  
**Confidential response**  
**Confidential response**  
Emergency Planning Society COMAH/Pipelines Professional Working Group  
Entec UK Ltd  
Environment Agency  
Fire Brigades Union  
Flexsys Ltd  
G. Hibbs  
**Confidential response**  
Glasgow City Council  
Greater London Authority Mayor's Office  
**Confidential response**  
Hydro Polymers Ltd  
Hyndburn Borough Council  
**Confidential response**  
**Confidential response**  
Institute of Civil Defence and Disaster Studies  
Institute of Civil Engineers  
Institute of Occupational Safety and Health  
Institution of Chemical Engineers  
J. Braithwaite  
J. Clark  
**Confidential response**  
K.P. Mawer  
**Confidential response**  
Kodak Ltd

M. Goose  
M.G. Dodson  
**Confidential response**  
Member of public - no other info.  
Millennium Chemicals Ltd  
**Confidential response**  
N. Jensen  
National Grid  
North Ayrshire Council  
**Confidential response**  
P. Lowe  
P. Stewart  
P. Woodward  
Paul141 - no other information  
Peak Associates Environmental Consultants Ltd  
**Confidential response**  
Petroplus Refining Teeside Ltd  
Planning Officers Society  
R.P. Brereton  
Renfrewshire Council  
Safety and Reliability Society  
Scotch Whisky Association  
Scottish Water  
SEPA  
Shell Upstream  
Shetland Island Council  
South Lanarkshire Council  
**Confidential response**  
T. Berry  
T. Dunwoody  
Tank Storage Association  
Tazman  
Telford and Wrekin Primary Care Trust  
**Confidential response**  
Thames Water Utilities  
The City of Edinburgh Council, Planning and Strategy  
The Highland Council  
Thurrock Thames Gateway Development Corporation  
Tyne and Wear Emergency Planning Unit  
UK Cleaning Products Industry Association  
UKPIA  
Unison  
**Confidential response**  
Warwickshire City Council  
**Confidential response**  
Yorkshire Chemical Focus

**Table 2**

**Breakdown of respondents**

Member of the Public	8
Employer	17
LA	18
Industry Association	12
Trade Union	5
Charity	1
Others	32