

APPENDIX 6

REVIEW OF THE ENVIRONMENTAL STATEMENT FOR ROTHES FAS

In July 2007 the Institute of Environmental Management & Assessment (IEMA) reviewed the Environmental Statement (ES) for the Rothes FAS in accordance with their review criteria and grades. This Review provides a qualitative assessment based on the legislative requirements of EC Directives on environmental assessment and current reasonable best practice standards for ES produced in the UK. IEMA acknowledges that other authorisations and consents may cover aspects of the development. However, it is reasonable best practice to consider many of these issues at the planning stage.

As a public document, the ES should contain all the necessary environmental information for decision-makers. It must include a description of the development, the likely significant environmental effects before, during and after the proposed development, mitigation measures envisaged to avoid, reduce or remedy significant environmental effects, an outline of the main alternatives studied by the applicant and reasons for choice and a non-technical summary

The review does not oppose or support developments but seeks to ensure that all relevant environmental information is made available to decision-makers. It covers general, issue specific and presentation criteria and highlights where each issue would benefit from additional details being provided, to fill gaps in information or to provide clarification. A Review grade is identified for each criterion, where appropriate with grades ranging from **A** (excellent, no tasks left incomplete) to **F** (very poor, most tasks left incomplete) and **N/A** (not applicable).

The ES for the Rothes FAS was awarded the following grades: -

- 3 x A** Excellent, no tasks left incomplete
- 3 x B** Good, only minor omissions and inadequacies
- 5 x C** Satisfactory despite omissions and inadequacies
- 1 x D** Parts well attempted but must as a whole considered unsatisfactory because of omissions and/or inaccuracies

General Criteria

1.1 Description of the Development - C

The proposal is for a range of measures (channel rehabilitation works, construction of burn defences, and adaptive management) to three burns that flow through, or close to Rothes. Collectively, these are designed to improve flood defences for the town of Rothes to at least a 1 in 100 year event standard, including an allowance for climate change.

In the ES, the background to flooding problems in Rothes is provided, including an estimate of the economic impact on the town. Historical flooding data is provided with the most recent flooding events, in 1997 and 2002, being described in more detail. The data appears to indicate that flooding events have increased in frequency in the latter part of the 20th Century, with information collated from newspaper

archives, official reports and public consultation. The review considers this may only reflect the relative availability of more recent information and it would have been helpful to highlight this limitation to the data.

Planning drawings are provided to indicate the location of the various works, which are also described together with the development of the scheme and an indication of the strategic options considered. Whilst not a technical report, IEMA consider the ES should include an explanation of how the combined works will provide the required standard of flood defence for the town.

A brief description of the construction process for the project is provided along with subsequent operational, maintenance and monitoring tasks. The ES indicates a 26 month construction period and states that “it will be necessary to carry out the construction in a number of phases to reduce disruption to the town”. As the source of significant environmental effects, IEMA considers that either the phasing of construction should be provided or information included to identify the potential extreme impacts of construction, e.g. what are the potential worst case environmental impacts associated with likely combinations of construction activity? This is particularly important as the different activities could result in the accumulation of the different types of environmental effect.

1.2 Site Description – A

Descriptions and illustrations are given regarding the catchment areas for the three burns and land uses within the town with particular focus on the importance of distilleries for economic and tourism reasons, the road network and the strategic context of the A941. Other designations, including a Special Area of Conservation and Area of Great Landscape Value within the vicinity of the town are highlighted.

The ES refers to the likely development of the environment in the absence of the project. Environmental conditions in the area of the works are expected to be consistent with the current state. However, the frequency of flooding events, and associated consequences is expected to increase as the effectiveness of existing flood defences declines and climate change increases the frequency of conditions that lead to flooding events.

1.3 Scoping – B

The review considers that reference to the specific requirement (project schedule) within the EIA Regulations would have been helpful plus information to recognise that the Regulations have been amended.

Whilst scoping is part of the EIA process, IEMA note that there is little reference to how it has been carried out. Nevertheless, it is clear that the EIA has included extensive consultation with statutory authorities and the local community. IEMA require clarification on how the level of community support was determined, with data provided to support this assertion, and additional details to demonstrate the effectiveness of the consultation. IEMA considers that the objectives of each activity, together with the techniques used, should have been recorded together with a summary of the issues identified by the stakeholders during the consultation. Clarification is sought over the availability of the reports about consultation, as they

do not form part of the ES. As such, it is not possible to verify whether the document adequately addresses the issues raised by stakeholders.

The review the issue specific chapters provide evidence that environmental concerns, where expressed by the consultees, have affected the scope of the EIA. However, where consultees have highlighted that some issues are not considered important this does not appear to have been not been taken into account in the ES. For example, Moray Council did not consider air quality to be a substantive issue and Aberdeenshire Council (Archaeological Services) stated that there was no need for a desk top study relating to cultural heritage. Nevertheless, these issues are still covered in the EIA. According to IEMA, the omission of these issues would have enabled the ES to be more focused on the important issues. Minor concerns raised by consultees e.g. about Cultural Heritage could have been addressed by including a short paragraph (in Chapter 6), outlining why the concerns are not significant and identifying the precautionary mitigation measures to be implemented to safeguard against unknown archaeological interests. The inclusion of information describing how the scope of this EIA has been determined would have potentially addressed this issue.

For each effect identified the ES considers the range of possible interactions between the project and the environmental resource. IEMA consider that additional scoping to identify the types of effects likely to be significant should have been undertaken, to avoid the extensive consideration of environmental effects that are clearly not significant and do not require detailed consideration.

1.4 Consideration of Alternatives – A

In the ES a clear description of the alternatives considered is provided, with an indication given on how they compared according to selected criteria and reasons for the selection of the preferred option are given. According to IEMA, it would have been helpful if additional information had been provided to justify the relative rankings given to the alternatives against the selection criteria because the separate appraisal document that includes this detail is not included in the ES. A summary of the main reasons for the ranking would have provided further transparency in the selection of alternatives. Similarly, additional information justifying the ranking of the strategy development options (Table 3.2) would have been helpful.

The review also notes that the ES includes a description of the design process to demonstrate that environmental and sustainability considerations have been taken into account throughout the design of the scheme. Environmental design guidance was used as a basis for the design of the scheme and regular reviews from an environmental and sustainability perspective were undertaken.

2 *Issue Specific Criteria*

2.1 General Comments

2.1.1 Baseline Conditions – C

According to the review, the description of the baseline conditions for the study area appears to be comprehensive, with sources of data clearly stated and where surveys were undertaken, the methods used are described. Quantitative information is provided where appropriate with due consideration given to the likely change in environmental conditions in the absence of the project. Where designations apply, a

clear indicator is given of the sensitivity of the receiving environment. However, for other types of receptors, the ES should have provided an evaluation of their sensitivity, to provide for greater transparency of the assessment of the significance of the effects.

2.1.2 Prediction of Impact Magnitude – C

According to IEMA, the prediction of the magnitude of environmental effects is variable. Predictive methods are primarily qualitative (except for noise) on the basis that significant effects will be temporary, being associated with the construction phase of the project and works in any one location would appear to only last a few months. IEMA consider this to be a reasonable approach in principle.

However, where a qualitative approach is used IEMA note that there are few predictions of the likely effects: the ES describes the types of effects that could occur and then concludes upon the likely significance of the effects. IEMA consider that the lack of judgement as to the magnitude of the effect means that it is difficult to understand the basis for the assessment of significance: the ES should have included judgements on the magnitude of the impact.

2.1.3 Impact Significance – C

Despite the framework identified in the ES to assess the significance of the various environmental effects, IEMA require greater transparency in demonstrating why the impacts described have had the various significance categories attributed to them. Similarly, additional information should be provided to demonstrate that the mitigation described will have the effect to result in the re-categorisation of the effect.

Whilst the magnitude of the effect is presented as a generic framework, the descriptions of the category of the sensitivity of the receiving environment only refers to the ecological environment. The basis for determining the sensitivity of other receptors therefore requires clarification. IEMA note that the descriptions of the categories for the magnitude of the impact use the word "significant" to define the high magnitude category, despite Table 6.2 providing significance criteria.

2.1.4 Mitigation – C

Mitigation measures are described for each of the environmental effects considered. These have been incorporated into the Environmental Action Plan, to demonstrate that there is a clear commitment to their implementation. However, IEMA consider that many of the mitigation measures are expressed in vague terms. As a result it would not be possible for any stakeholders to verify whether they have been implemented. For example, in relation to commitments to minimise activities, the specific steps to be taken should be stated. Similarly, for commitments to adhere to published guidance, the main requirements of the guidance should be summarised in the ES, to enable stakeholders to understand the specific measures to be implemented.

IEMA require additional information to demonstrate the effectiveness of the mitigation measures given that for most of the adverse environmental effects, the significance of the residual impacts is given at a level below the original 'unmitigated' prediction. In addition, further information is required to demonstrate that the proposed mitigation measures will be sufficiently effective to reduce the significance

of the effect. In the ES only in the assessment of noise impacts is the effectiveness of mitigation in reducing noise levels quantified.

Communication with the local community is cited as a mitigation measure on several occasions. Whilst of value, IEMA consider the ES should be explicit in stating that the value of this is to manage expectations as to the level of impact, but it will not mitigate whatsoever the actual environmental effect.

2.1.5 Follow-Up – A

Many of the mitigation measures associated with the project are management measures that require implementation during construction. The draft Environmental Action Plan (EAP) appended to the ES identifies mitigation, management and monitoring measures. Provision is made for allocating responsibility for implementation and for signing off that the measures are in place. However, in the draft document, the responsibility for the various activities has not yet been assigned.

2.2 Issue-Specific Comments

2.2.1 Land use

Land use impacts are addressed under a number of headings designed to categorise the different types of land use within and around Rothes. However, clarification is required, for example, about how minimising disruption to the local community will be achieved during the phased removal of Station Street Bridge and the upgrading of Caperdonich Bridge. Furthermore, in addressing the disturbance to residential property and the reduced number of properties to be removed. IEMA consider it should have been clearly stated, to avoid confusion, that 2-4 Burnside Street is in fact one property.

IEMA require a more precise language and detailed explanations for the mitigation measures. For example, instead of informing residents "well in advance" of the works, the period of notice should be stated. Similarly, rather than refer to the use of best management practices and organisations that provide guidance, the ES should describe the specific management practices to be adhered to or, as a minimum, identify the specific guidance with which they are seeking to comply. Without this information it is not possible for stakeholders to verify whether the mitigation measures are being adequately implemented.

With the lack of any quantitative information on the effects of the scheme IEMA consider it will be difficult to verify whether the predictions in the ES are accurate, for example in relation to the potential impact on local business. Further justification is required over the basis for the reduction in the significance of the effect, as a result of the implementation of mitigation measures. Similar comments are levelled at other aspects of the assessment of the land use effects and where the effects are considered to be 'minor', reasons for this categorisation of the impact are self evident.

With reference to the disturbance to agricultural land and practices, consultation or the provision of information is cited as a mitigation measure. IEMA consider that these measures will not mitigate the environmental effect, but will only better inform the receptors of the timing and duration of the effect.

2.2.2 Hydrology and water quality

Mitigation measures to reduce the effects on the natural surface flow are described. The review considers that many qualitative terms are used to describe the nature of the works, whereas quantitative terms would have provided a more precise indication of the nature of the mitigation measures, and made their implementation more verifiable. For example, in quantifying the anticipated duration of the works on the Black Burn or when stating that 'No long sections of work are to be undertaken', the maximum length of works to be undertaken should be stated.

2.2.3 Geology and soils

In describing the geo-technical investigations that have been undertaken, the ES refers to a third and final phase of the site investigation to be undertaken in Spring 2007, in order to provide supplementary information. IEMA require a more detailed description to demonstrate the purpose of these investigations. Furthermore, plans should have been provided to indicate the location of different methods of investigations carried out into soil and groundwater contamination.

2.2.4 Habitats and species

The ES includes a description of the findings of the 2003 river corridor survey. The river corridor survey mentions the presence of Japanese Knotweed for all three of the burns but, as noted by IEMA, discussion on invasive species is only mentioned in the context of the Burn of Rothes. Clarification should be provided on whether Japanese Knotweed is an issue for the other burns and, if so, the location of the areas of growth should have been mapped or a justification provided for not mapping this information.

The removal and disposal of invasive species is to be carried out in accordance with SEPA guidelines. The review considers that to provide a clearer understanding of the types of steps to be taken, the main requirements of this guidance should be outlined to enable stakeholders to verify whether the works are being implemented appropriately.

2.2.5 Traffic and access

To address the traffic and transport impact of the construction of the project the ES separates out the different types of impact i.e. change in traffic levels, disturbance to through traffic, disturbance to local access, etc. The significance of these different types of effect is assessed separately. However, in reality IEMA considers that the impacts are likely to occur simultaneously and therefore there should also be an assessment of the significance of the accumulation of the different types of effect, particularly where they will be experienced by the same receptor.

Operational impacts of the scheme on the various aspects of transportation and traffic are predicted to be 'major beneficial' in all cases, with the exception being the disruption to public transport, the justification for this being the relief from disruption that is caused by the flooding events. To justify this conclusion, IEMA require data on the frequency and duration with which the transport infrastructure is significantly affected by flooding events. In addition, Table 2.1 indicates at least 8 flooding events in the last 30 years although it isn't clear whether the road system was affected on all of these occasions. Clarification is required by IEMA on why this level of disruption is considered to be of such severity that relief from it is considered to be a major beneficial effect.

2.2.6 Noise

The ES describes the methods adopted for undertaking the baseline noise assessment with the assessment of the significance of noise impact based on predicted noise levels exceeding identified thresholds. Whilst this approach has been justified, with thresholds identified and reasons for selection given, IEMA considers that the ES should clarify that receptors experiencing a 'minor' impact could still experience noise levels that are more than double the existing levels.

The framework for assessment of significance is based on quantitative thresholds and therefore, for an impact to move from one category of impact to another, as a result of mitigation, the noise levels received would have to be affected. The ES emphasises the importance of communication with those to be affected by noise impacts as mitigation. The review notes that this is likely to have the effect of altering the perception of the noise impact. However, this will not have an effect on actual noise levels. The altered perception of receptors should not be taken into account when assessing the significance of effects, taking into account mitigation. For example, for non-construction traffic noise impacts, consultation is the only mitigation offered and the predicted significance of the effect should not have been reclassified from 'minor to moderate' to 'minor'.

The review considers that the consideration of noise presents a welcome exception to the approach in the ES by linking the effectiveness of mitigation measures to the residual impact (Table 18.5). As a result, it is clear why the significance of the impact has been reassessed. However, two of the three mitigation measures for operational noise are non-specific (p 320) and it will not be possible to verify whether they are being delivered unless provided in more measurable terms. These relate to questions about how stakeholders will know whether the regularity and duration of maintenance work has been minimised and whether due consideration has been given to noise impacts in the selection, placement and operation of maintenance equipment.

3 *Presentation of Results*

3.1 Presentation - B

The review considers that the ES is presented in a clear and logical manner. Technical language is generally avoided with a glossary provided to explain terms that might be unfamiliar. The information is presented in a logical structure. The problem of flooding within Rothes is first explained from an historical perspective, an analysis of the proposed options to address the problem is presented and a description of the preferred option. Issue-specific chapters follow, presenting the assessment of the effects of this option.

However, IEMA consider that the description of the impact assessment process is convoluted and wordy (see pages 41-44). Relatively simple concepts appear to be complicated. For example, Table 6.1 describes three levels of quantification. In reality, sensitivity and impact magnitude have not been quantified, but classified or categorised into three levels of impact. These rely on qualitative descriptions and professional judgement to determine which category an impact should be allocated to. The description of the categories of sensitivity is inadequate to be applied to the assessment of effects other than those on habitats and species.

IEMA consider the length of the document could have been reduced by the avoidance of repetition and adherence to scoping advice provided by consultees. For example, the land use chapter makes continual reference to impacts addressed in other chapters. A preferable method of presentation would have been to state at the beginning of the chapter that these issues are dealt with elsewhere in the ES and will not be addressed as part of this chapter. This would have provided for more efficient reporting of the issues. Based on consultee advice, the cultural heritage and air quality chapters could have been omitted from the ES.

According to IEAM the figures and illustrations in the ES are generally of good quality and complement the text. Some photographs are included in the ES, particularly to illustrate the landscape character of the three burns. IEMA suggest that it would have been helpful to reproduce these at a larger size, to provide a clearer impression of the landscape character and visual impact of the scheme.

3.2 Objectivity - B

IEMA considers the ES presents an objective assessment of the environmental effects with no attempt to downplay the adverse effects of the proposal. Where significant impacts are likely to occur these have been clearly stated. The benefits of the scheme are not over emphasised with the arguable exception of the assessment of the operational development on traffic and access. However, a more transparent approach to the assessment of the significance of effects would have been helpful with information provided on the magnitude of effects and the sensitivity of the receptors to justify the conclusions on the significance of the effect. Similarly, the effectiveness of proposed mitigation should be demonstrated to justify the reclassification of the residual effects.

3.3 Non-Technical Summary (NTS) - D

IEMA consider the NTS reflects the writing style of the main document with technical language largely avoided. However, on occasions technical language appears without explanation. The NTS does not provide an indication of the impacts that are considered to be important and therefore on which the EIA has focused, or a summary of the methods by which these impacts were identified. The description of the environmental effects of the proposal in the NTS is considered inadequate with only vague reference to the likely effects and emphasis placed on the steps being taken to mitigate them. Information is required on the specific nature of the environmental effects and the aspects of the environment that are likely to be affected together with a clearer indication of the likely severity of the environmental effects.