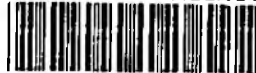


ENVIRONMENTAL ASSESSMENT GUIDELINES :

SUPPLEMENTARY INFORMATION

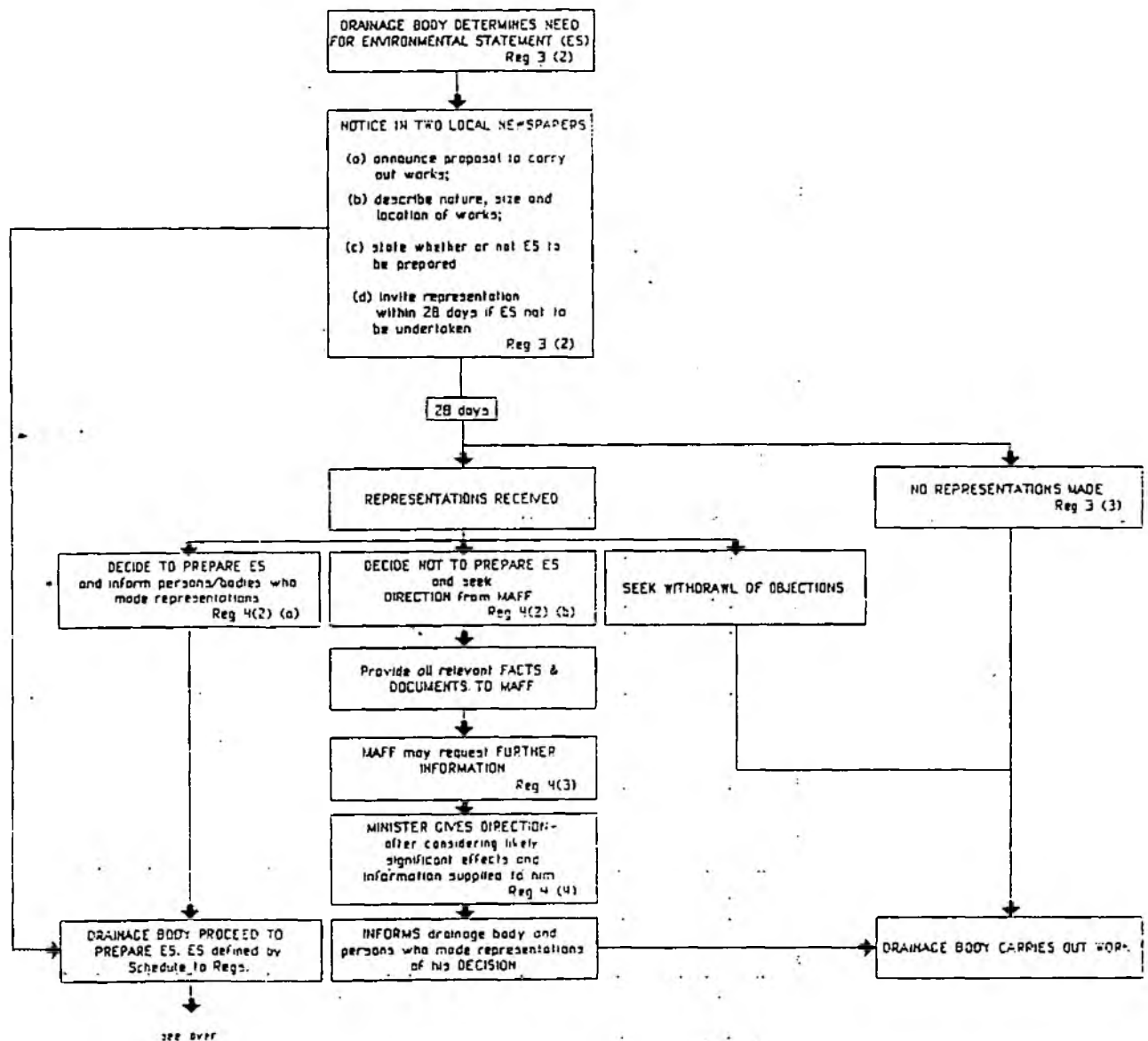
ENVIRONMENT AGENCY



055634

National Rivers Authority
Information Centre
Office

Account No ATXR



KEY PROCEDURAL STEPS
 STATUTORY INSTRUMENT 1217
 FIGURE 1 (1 of 2)

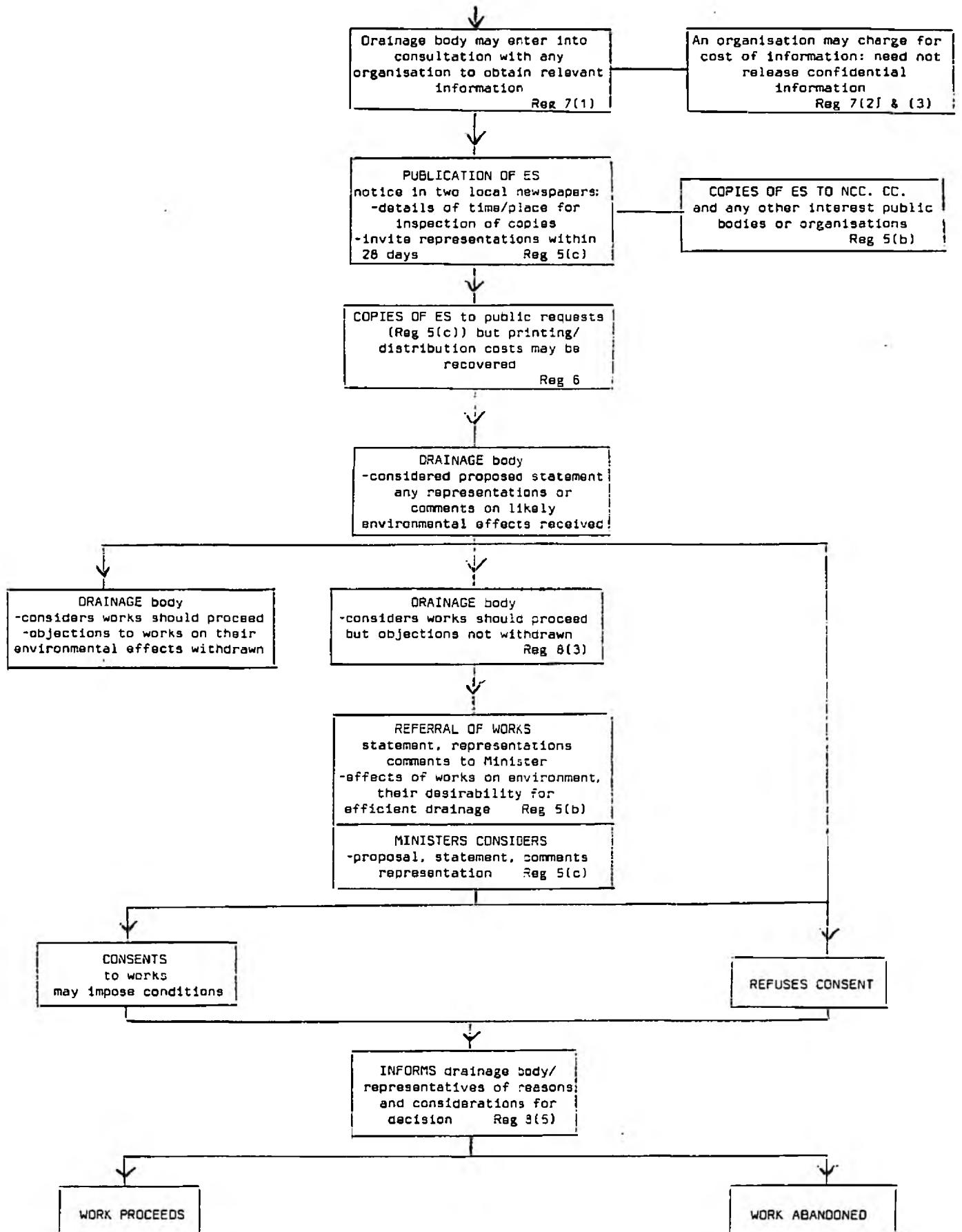


Table 1: CHECKLIST OF QUESTIONS RELATED TO THE LIKELY ENVIRONMENTAL EFFECTS DURING BOTH THE CONSTRUCTION AND OPERATIONAL PHASES OF A PROPOSED DRAINAGE IMPROVEMENT WORK

PHYSICAL CHARACTERISTICS OF THE SITE AND ITS SURROUNDINGS

1. Land

- a. Does the geology of the area present problems with regard to the type of work under consideration?
- b. Does the work involve excavation or earthmoving which may have detrimental consequences, eg. soil erosion, etc.?
- c. Does the general character of the local topography impose constraints on the design and siting of the proposed work?
- d. What is the grade of land to be affected by the work (Ministry of Agriculture classification)?

2. Water

- a. Is the proposed work likely to affect the drainage pattern of the area?
- b. Is the proposed work likely to result in changes to other hydrological characteristics of the area?
- c. Is the proposed work likely to affect the flow of ground water?
- d. Are the proposed work likely to affect the bed characteristics of the watercourse.
- e. Are any of the hydrological characteristics of the area likely to impose constraints on the design and siting of the proposed work?
- f. Where dredging operations are considered necessary, are there any constraining factors which could influence or even prevent work taking place?
- g. Would hydrological characteristics in the area prevent satisfactory completion and/or operation of any part of the works?

3. Land Use and Landscape Character

- a. Is the proposed work compatible with surrounding land uses, such as agriculture, forestry, recreation etc?
- b. Will the proposed works substantially alter the landscape character and quality of the area?

- c. Will the proposed works have a substantial zone of visual influence (ie. the area within which the works can be seen, and vice versa)?
- d. How far are existing land uses within the zone of visual influence compatible with the character of the proposed work?
- e. Is the scale of the proposed work compatible with that of the local landscape?
- f. Are there any trees or buildings on the site worthy of retention?
- g. Are the materials to be used in permanent structures (especially buildings) in character with those of the local area?
- h. Has consideration been given to a satisfactory scheme for site restoration?
- i. Are the submitted landscaping proposals satisfactory?

ECOLOGICAL CHARACTERISTICS OF THE SITE AND ITS SURROUNDINGS

4. Habitats

- a. Are the works compatible with the existing ecological habitats?
- b. If "yes", what conservation methods are required to protect the habitats?
- c. Are conservation methods that it is intended should be used to protect sensitive habitats likely to be successful?
- d. If the works and habitats are not compatible, what communities will be at risk from:
 - Physical destruction?
 - Changes in groundwater level?
 - Changes in quality of standing or flowing water, oxygen content, salinity, turbidity, flow rate and temperature?
 - Chemical pollution, eutrophication and specific toxins?
 - Changes in silting pattern?
 - Changes in nutrient status of habitats?
 - Opening up of areas to increased recreation pressure by the construction of access routes, roads and pathways?
- e. In each of the above cases what is the local, regional and national status of any habitats at risk?
- f. What is the quality of the habitats regardless of status?
- g. What dependent habitats or communities will be at risk, including non-resident and migrant species? What is their status?
- h. Can any of these habitats be recreated within a short period (5 to 10 years)?

9. Water Supply

- a. Will the proposed works affect the provision of public water supplies?
- b. Will the works lead to the provision of additional abstraction schemes in the area or the construction of new supply facilities eg. a new reservoir?

10. Telecommunications

- a. Will the proposed development interfere with existing telecommunication networks?

EXISTING LEVELS OF ENVIRONMENTAL POLLUTION

11. Air pollution

- a. Will the works produce offensive odours?

12. Water pollution

- a. Will the proposed work pollute or change the flow regime, and if so thereby causing significant effect on the flora and fauna of the river, canal, lake, etc.?
- b. Will variations in water flow created by the works cause a significant increase in the concentration of pollutants from other sources.
- c. Will the proposed works effect salinity gradients and/or current movements in estuaries and lead to a locally high build-up of pollutants and cause problems of dispersion of pollutants?
- d. What dependent communities or species of animals and birds are likely to be affected by a change in the aquatic flora and fauna?
- e. Are there any sensitive plant communities dependent on the receiving waters for their supply which are likely to be adversely affected by the work and pollutants arising from it?
- f. Do any horticultural or agricultural enterprises use receiving waters for irrigation?

13. Noise and vibration

- a. Will construction noise significantly alter ambient noise levels?
- b. If these levels increase, will the introduced noise levels be of a magnitude to cause complaints from residents either during day or night-time?
- c. Will the levels have any adverse effect on the functioning of schools, hospitals, and old people's homes or on informal recreation areas either during day or night-time?

- d. Are the levels likely to have a significant effect on the wildlife of a Site of Special Scientific Interest, Local Nature Reserve or high quality habitat of local significance?
- e. Will vibration from blasting, pile-driving, etc, cause human discomfort and annoyance?
- f. Will vibration cause structural damage to ancient monuments and other important structures?
- g. Will vibration cause structural damage to other buildings, especially houses, schools, etc?

14. Waste Disposal

- a. If proposals will lead to a surplus of spoil, how will they relate to existing spoil disposal areas?
- b. Would an alternative means of spoil disposal be more appropriate?
- c. Would an alternative spoil disposal site be more appropriate?
- d. What would be the visual impact of the spoil disposal site and what means could be taken to reduce visual impact?
- e. What would be the potential surface water pollution from the proposed spoil disposal area?
- f. What is the proposed after-use of the site and how would it relate to plans for the area?
- g. Would any special site management have to be introduced to realise the proposed after-use?

15. Risk and Hazard

- a. Will the works introduce a significant hazard to the public?
- b. What other less significant hazards are associated with the works?
- c. What are the worst possible effects of all levels of hazard in terms of death, injury and damage to property?
- d. What are the risks associated with the different levels of hazard?
- e. Are these risks acceptable?

ANNEX A: DETERMINING SIGNIFICANCE OF ENVIRONMENTAL EFFECTS

Introduction

- Al.1 It is recognised that almost all projects will alter the environment in some way or other. The type and magnitude of environmental effects resulting from a particular project will depend on:
- (i) specific characteristics of the project itself (including not only what is done, but also how, when, and where it is done);
 - (ii) specific characteristics of the environment within which, or in the vicinity of which, the project is carried out.
- Al.2 The significance of any type of environmental effect (either adverse or detrimental) will depend not only on its magnitude, but also on the importance of the environmental attributes which are likely to be affected. The importance of these attributes will vary according to their abundance, availability or accessibility, necessity, or desirability. Each of these may, in turn, vary with time, location, and the particular interests affected.
- Al.3 The types of short and long-term environmental effects likely to be caused by a specific project, and the magnitude and significance of each effect, can only be identified and assessed after it has been revealed where, when and by what means specific environments (eg. watercourses, habitats, etc.) are likely to be affected.
- Al.4 In general, the range of expected environmental effects resulting from the construction/implementation of small scale drainage works is likely to be relatively limited. It is possible, for example, that a project might result in a number of temporary effects, including changes in air quality (dust), noise, aquatic habitat, water quality, etc. Many of these expected effects will be short-term, lasting only for the duration of the construction/implementation period; others will be capable of mitigation. In such cases it may be concluded that the effects will not be significant and an ES need not be prepared.

DOE Guidance

- Al.5 Guidance provided by the Department of the Environment on environmental assessment (Circular 15/88 relating to SI 1199) acknowledges that a project may require an ES if only one or two significant effects are identified. Appropriate considerations for assessing significance given by the Department may be summarised as follows:
- 1. Where projects are of more than local importance, ie. major projects of a large scale. For example, as a broad indication of the likely environmental effects related to the land requirements for an infrastructure project the DOE consider projects requiring sites in excess of 100ha may require EA.
 - 2. Where projects are in sensitive locations. For instance, consideration should be given to:

- (a) Effects on the special character of a protected area or site such as National Parks, Areas of Outstanding Natural Beauty (AONB's), Sites of Special Scientific Interest (SSSI's), National Nature Reserves and areas or monuments of archaeological importance. Special consideration should be given to any SSSI which has been classified as a Special Protection Area (SPA) under the EEC's Birds Directive, or to wetlands under the Ramsar Convention. In the DOE's view, however, the identification of sensitive areas does not in itself provide grounds for requiring an ES.
- (b) Views expressed by the Nature Conservancy Council, Countryside Commission and Historic Buildings and Monuments Commission.
- (c) Urban locations where the characteristics of the proposed development would be likely to have significant effects on heavy concentrations of population.

3. Where projects are particularly complex or have potentially adverse effects. This includes projects which could give rise to significant effects far removed from the site.

Al.6 Importantly, the DOE recognise that "for some types of project the issue of significance is bound to be a matter of judgement and quantified criteria have little relevance".

FIG. 2 EXAMPLE MATRICES

Construction Phase: Alder Road Weir

(NB: o - Neutral Impact assuming comments noted are incorporated in final design)

PROPOSAL	A/B	S/L	Lt/Sc	Int/ Cont	D/ld	I/R	Comments
Agriculture	-	-	-	-	-	-	
Amenity	A	L	St	Int	D	R	Construction activity will be disruptive.
Angling	-	-	-	-	-	-	
Aquatic Biology	o	-	-	-	-	-	Maintain water levels during construction.
Archaeology	A/B	L	Lt	Cont	D	R	Existing structure of possible industrial archaeological interest. Archaeological watching brief.
Fisheries	o	-	-	-	-	-	Maintain waterlevels during construction.
Landscape	o	-	-	-	-	-	Avoid adjacent trees.
Planning	o	-	-	-	-	-	Local Planning Authority will need to be satisfied that residents have been consulted.
Recreation	o	-	-	-	-	-	Avoid blocking adjacent public footpath.
Water Quality	-	-	-	-	-	-	
Wildlife	-	-	-	-	-	-	
End State Phase: Alder Road Weir							
Agriculture	-	-	-	-	-	-	
Amenity	o	-	-	-	-	-	Assuming existing bridge is replaced to provide access to far bank for local residents.
Angling	-	-	-	-	-	-	
Aquatic Biology	-	-	-	-	-	-	
Archaeology	-	-	-	-	-	-	
Fisheries	-	-	-	-	-	-	
Landscape	o	-	-	-	-	-	Sympathetic detailing on new structure in brick.
Planning	o	-	-	-	-	-	(see Amenity)
Recreation	B	L	Lt	Cont	ld	I/R	Assuming adjacent bridge of public footpath is refurbished.
Water Quality	-	-	-	-	-	-	
Wildlife	-	-	-	-	-	-	

Key to headings:

- A/B - Adverse/Beneficial
- S/L - Strategic/Local
- Lt/Sc - Long term/Short term
- Int/Cont - Intermittent/Continuous
- D/ld - Direct/indirect
- I/R - Irreversible/Reversible

ANNEX B

Environmental Statement : layout and contents

SUMMARY

This should summarise, in non-technical language, the information contained in the sections described below.

I Introduction

This section should include an explanation of the purpose and nature of the ES, including reference to the Statutory Instrument under which it is being prepared.

II Purpose of Project

This section should describe the purpose of the project, including a description of the problems, issues and opportunities that are being addressed; how these have been identified; and what the subsequent objectives of the project are.

III Alternatives Considered

This section should document what alternatives have been considered, including a description of the consequences of not proceeding with the works (ie. the do-nothing alternative). The environmental effects of the various alternatives and the reasons for rejecting certain alternatives should also be documented.

IV Project Description of Preferred Alternative

A description of the major elements of the preferred alternative should be provided including:

- (i) where the works will be carried out;
- (ii) what is to be done, the design, size and scale of the works;
- (iii) how the works will be carried out;
and
- (iv) when the works will be carried out.

The location of the project and the boundaries of the study area also need to be described. Maps and photographs of the site and its setting (ie. the local and regional context) should be included, as appropriate.

V Description of Existing Environment

This section should describe the existing or projected environmental conditions against which the effects of the improvement works will be assessed. Sources of data should also be indicated.

VI Predicted Environmental Effects, Mitigation Measures and Residual Effects

This section should focus on the likely significant direct and indirect environmental effects associated with the project and highlight the means being proposed to minimise/mitigate significant adverse effects. Mitigation measures are likely to include design and operational modifications, and constraints on construction/implementation.

More specifically this section should include:

- (i) a description of the potential significant direct, indirect and cumulative environmental effects associated with the preferred alternative, including information on when they might occur, the magnitude of change and the probability of permanent change. Reference should be made to possible impacts on human beings, flora, fauna, soil, water, air climate, the landscape, interaction between the foregoing, material assets, the cultural heritage. The description should include both beneficial and adverse environmental effects and should indicate the source of all conclusions;
- (ii) a description of the measures that will be incorporated into the planning, design, and construction of the project to prevent, lessen or remedy potential adverse environmental effects and whether the methods are fully proven and predictable;
- (iii) an explanation of why any suitable mitigation measures have been excluded, for reasons such as cost-effectiveness, design problems, etc.;
- (iv) reference to alternative mitigation measures and why they were rejected;
- (v) a description of any adverse effects that may result from mitigation measures;
- (vi) a description of the resultant net, or residual, significantly adverse effects of the project.

VI External Interest in the Project

This section should outline the degree of interest in the project expressed by statutory bodies and other relevant interests.

VII Monitoring Arrangements

For large projects the final section of the Environmental Statement may identify the arrangements for monitoring the environmental effects of the construction and operation of the works, the effectiveness and adequacy of mitigation measures, or any other significant environmental factors.

It should also be indicated who is to be responsible for seeing that monitoring is properly carried out.

If contact with external bodies is required during the monitoring process, or if reports need to be produced, these should be specified in the ES.

Appendices

In an effort to keep Environmental Statements as simple and concise as possible, it is not anticipated that large amounts of material will need to be appended. There will be occasions, however, when technical support on a specific aspect may be of assistance. In such cases, appendices might include:

- (i) contact with statutory authorities and other public bodies;
- (ii) significant submissions from interest groups or other organisations;
- (iii) supporting studies regarding environmental factors;
- (iv) related studies, memoranda, or press releases and public notices.

The appendices should also list contacts, submissions, studies, notices and press releases relating to the project.



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 Rivers House, 30/34 Albert Embankment, London SE1 7LT
 Tel: 01-238-3000 Direct line: 01-238-6660 GTN: 238
 Telex: 927793 Fax: 01-238-6616

RECEIVED
 TECHNICAL SERVICES

20 MAR 1989 7.

To all Chairmen of RLDCs

NRA THAMES	
20 MAR 1989	
LDJ	✓
IMA	
AB	✓
JD	✓
SL	✓
GWF	
GHK	

KPA		FM 14 (2)
CC		
JLG		6 March 1989 27/3
GFCJ		
DNI		
TIN		
NIS		

PAYMENT OF GRANT ON ENVIRONMENTAL STATEMENTS PREPARED IN CONNECTION WITH LAND DRAINAGE IMPROVEMENT WORKS

General guidance on the payment of grant on preliminary investigations involving the use of consultants/specialists was given in Richard McIvor's letter of 8 July 1985 (copy attached for reference). As authorities will be aware, the implementation last July of The Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument 1199), and the Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (Statutory Instrument 1217) introduced a requirement to consider whether proposed land drainage works should be subject to the preparation of an environmental statement.

This letter is to give authorities guidance on the eligibility of such statements for grant aid in accordance with the general memorandum relating to grants to Water Authorities (paragraphs 5, 31 and 32). In this connection it is appropriate to consider separately the water authority's administration costs of complying with the new requirements (ie advertising, dealing with subsequent representations etc); and the costs of preparing the environmental statements, including the costs of obtaining relevant information from other bodies.

In respect of the former, administration costs will not generally be eligible for grant in accordance with paragraph 32(i) of the memorandum, as such costs would be regarded as day-to-day running expenses which an authority must necessarily incur to discharge its functions.



With regard to the costs of preparing an environmental statement, grant aid will not normally be available for studies undertaken by an authority's own staff (paragraph 31 of the memorandum). However, where the study can be regarded as a preliminary investigation in accordance with paragraph 5(i) and there is a need by reason of the scope or complexity of the statement for the authority to specially engage staff solely for the preparation of such a statement, grant aid will be available. Grant will also be considered on the cost of the industrial labour employed on investigations connected with the preparation of an environmental statement.

Where authorities commission outside consultants/specialists (ie staff not belonging or specially engaged by an authority) for the preparation of environmental statements, these will normally be eligible for consideration for grant under paragraph 5(ii).

The above arrangements are subject to the overriding consideration that the cost of the preparation of the environmental statement should not exceed a reasonable proportion of the overall scheme costs.

We plan that this provision will be available for the next three financial years to end 1991/92, after which a review will be held of the experience gained over this period and further advice given. It is hoped that these provisions will assist authorities in meeting the new requirements under the EA rules. The Ministry's Regional Engineer will, of course, be available to give authorities any further guidance which might prove necessary on these new arrangements.

Finally, where it is decided that it is appropriate to prepare an environmental statement, this should be completed before application is made for formal approval to a scheme or in the case of a comprehensive scheme, before formal approval is sought for the first phase or stage. In the latter case, such environmental statements should, as appropriate, cover all subsequent stages of the comprehensive scheme.

I am sending a copy of this letter to the NRA Regional General Manager and Flood Defence Manager.

Yours Sincerely
Jim Park

J R PARK



MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
GREAT WESTMINSTER HOUSE
HORSEFERRY ROAD LONDON SW1P 2AE

Direct line 01-216
or Switchboard 01-216 6311

Chief Executives of Water Authorities
Chairmen of RLDCS

8 July 1985

Dear

PAYMENT OF GRANT ON PRELIMINARY INVESTIGATIONS INVOLVING
THE USE OF CONSULTANTS/SPECIALISTS

Paragraph 31 of the memorandum relating to grants to Water Authorities precludes the payment of grant on consultants' fees unless such fees have been specifically approved for a special preliminary investigation. In order to be eligible for grant we would expect, in accordance with paragraph 5 of the memorandum, for the consultants engaged on such investigations to be specialists in their own field, i.e. having an expertise which is not available within the normal Water Authority staff.

As the engagement of consultants/specialists on such preliminary investigations appears to be becoming more common generally, I thought that some further clarification of those fees which will be eligible for grant was necessary. This is particularly in view of the limitations on the funds now available for grant aiding arterial drainage and sea defence projects, and the wish to ensure that the available resources are used as productively as possible.

It is intended, therefore, that the approval for grant of consultant/specialist fees under paragraph 31 of the grant memorandum, will in future be limited to investigations that are clearly directly linked to the execution of the works themselves. As before, the Ministry's prior approval must be obtained in all cases.

I am copying this letter to other RLDC Chairmen and to Chief Executives of Water Authorities.

Yours sincerely

R C McIvor