

4.9 Approaching the Environmental Management Programme (EMP)

It is necessary to include a Draft EMP in the EIA Report. Reference should be made to relevant guidelines in this regard (Refer to Table 7 in this document). The EAP must ensure that the EMP is practical. Specialists should be consulted for input into the EMP. The EAP should draw on methods that have been proven to be effective in minimising, managing and controlling environmental impacts. If necessary, technical experts may need to be consulted (e.g. engineers) when compiling the EMP. The EAP must ensure that all residual impacts are addressed in the EMP. Furthermore, the EAP must cross-check information to ensure that issues raised in the Scoping process have been addressed in the Impact Assessment and that all impacts are addressed appropriately in the mitigation measures provided in the EMP. This is critical to ensure that impacts are avoided or where they cannot be avoided, are minimised.

The EMP must detail mitigation measures for each environmental impact for:

- Design;
- Pre-construction and construction activities;
- Operation;
- Rehabilitation; and
- Closure (where relevant).

The EMP is an action plan that deals with the measures required to mitigate and manage impacts and will therefore detail:

- The mitigation measures (what needs to be done and how).
- Roles and responsibilities for implementation (by whom actions need to be undertaken).
- Timeframe or programme (by when actions need to be completed or if they are ongoing).

Monitoring requirements must also be detailed in the EMP. The following information is required in respect of monitoring:

- Monitoring requirements and methods (what needs to be monitored and how).
- Monitoring roles and responsibilities (who will conduct monitoring or if not known at this stage, how appropriate monitoring services will be obtained).
- Frequency of monitoring / monitoring programme (when to monitor).
- Analysis of monitoring data (what must the monitoring results show or reveal).
- Application of monitoring results (what to change or correct).
- Reporting requirements (to whom and how frequently).

It has become common practice, when determining the significance of impacts, to show a reduction in rating in the after mitigation scenario, based on an EMP being the primary mitigation measure. Clearly, this approach has limitations, since it is based on the assumption that the EMP will be effectively implemented and that its content will address all impacts comprehensively. The purpose of the draft EMP is to address this issue, that is, to set out the mitigation measures so that the decision-maker can assess whether these are likely to be effective or not. In the event of the proposed development being authorised, it will be necessary for the Applicant to ensure that the draft EMP from the EIAR is updated to take account of the conditions in the authorisation.

The effectiveness of the EMP as a mitigation tool will largely be determined by its implementation. This is particularly true of impacts that require the application of control measures on an ongoing basis. For example, the potential impacts associated with storing hazardous chemicals on the site

can only be achieved if the correct procedures for unloading, storage and handling of these substances are adhered to **all the time**. Thus, the downgrading of the significance of impacts in the EIAR on the basis of the implementation of an operational EMP (or an Environmental Management System such as ISO 14001) must be approached with caution. This is due to the fact that the mitigation of impacts associated with the operation of the project is dependent on how effectively the operational EMP or EMS is implemented. In general, a greater level of confidence can be attached to mitigation measures that involve "hard" solutions (e.g. engineering or technological measures) as opposed to "soft" solutions such as a management system.

5 Assessment of job well done

In this section criteria that can be used by both practitioners and consultants will be provided to assist in determining whether the EIA process and documents that have been produced meet acceptable professional standards as well as the requirements of the EIA regulations. These criteria will be drawn from typical measures of quality and adapted for the purposes of the guideline. Aspects such as clarity, objectivity and quality of information will be covered.

When determining whether an EIA process has been adequate, it is important to bear the purpose of this process in mind, which is to:

1. Determine whether and how adverse environmental effects can be avoided or minimized before they occur.
2. Provide information to enable environmental factors to be incorporated into decision making.

The role of the EAP is to undertake the process in a thorough and objective manner. It is not the role of the EAP to actively support the development proposal. The EAP's role is first and foremost to ensure that means are found to prevent adverse impacts associated with the project, or to at least minimise these if they cannot be avoided. In fulfilling this role, the EAP must ensure that the requirements of the EIA Regulations are met in all respects.

5.1 Quality assurance criteria

In accordance with principles of best practice, the objectives of EIA are as follows (IAIA, 1999)¹²⁰:

- to ensure environmental considerations are explicitly and comprehensively addressed and incorporated into decision-making about development;
- to anticipate the effects of development proposals with a view to avoiding, minimising or offsetting significant adverse impacts and enhancing benefits;
- to ensure that the productivity and capacity of natural systems and ecological processes is protected and maintained; and
- to promote development that is sustainable.

With respect to the EIAR, it is important that the information is consistent with the terms of reference and the process followed. Specific questions to consider are¹²¹:

- complete — informed decision can be made?
- suitable — right type of information included?
- understandable — easily apprehended by I&APs decision maker?
- reliable — meets established professional and disciplinary standards?
- defensible — risks and impact are qualified as are uncertainties?
- actionable — provides clear basis for choice and condition setting?

¹²⁰ IAIA in cooperation with Institute of Environmental Assessment (1999): Principles of EIA Best Practice. www.iaia.org.

¹²¹ Sadler B (1996) *Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance (Final Report of the International Study of the Effectiveness of Environmental Assessment)*. Canadian Environmental Assessment Agency and International Association for Impact Assessment, Ottawa, Canada

A checklist of the contents of the EIAR is given in Table 10. This can be used to determine whether all of the relevant information has been provided.

TABLE10: Checklist for EIAR contents

ITEM	CONTENTS
Introduction	<ul style="list-style-type: none"> Qualification details of the EAP and Specialists (could be referred to in report and provided in an Appendix). Terms of Reference for the study (this must link to the Scoping Report). Structure of the EIAR (i.e. a "roadmap").
Project Description	<ul style="list-style-type: none"> Nature / type of development. Project purpose, need and desirability of the proposed activity. Objectives or principles applied in the project planning and design, if any (e.g. "green" building design; waste recycling). Development footprint / scale of development. Infrastructure and buildings. Facilities for storage of waste, hazardous substances etc. Emissions (air, wastewater / effluents) and waste types. Treatment facilities for wastes, emissions and effluent, if any Project phases and activities (construction, operation etc.) Maps, site layout plans and photographs. Revisions made to the project through comments received from I&APs and specialists.
Alternatives	<ul style="list-style-type: none"> Overview of alternatives that have been assessed (this must link to the Scoping Report), with an explanation of how they were identified (e.g. I&AP comments, specialist inputs).
Description of baseline environment	<ul style="list-style-type: none"> Key points relating to the baseline environment from the Scoping Report, highlighting aspects that are relevant to the impact assessment: <ul style="list-style-type: none"> Sensitive environmental features (biophysical and socio-economic). Constraints (e.g. available natural resources). Social and economic needs / requirements (trends / pressures). Maps showing environmental characteristics, together with sensitivity rating or showing opportunities and constraints. Brief description of specialist work undertaken for the purposes of the EIAR (e.g. field surveys with period undertaken, dates etc.). New information / findings from additional specialist work (i.e. post Scoping Report). Annex - full Terms of Reference for specialist studies in an Appendix.
Public participation	<ul style="list-style-type: none"> Public participation activities. Measures taken to resolve conflicts (if relevant). Methods used for dealing with illiteracy (if applicable). Issues and response trail (summarise in report and provide original comments in Annex). Appendix / Annex: <ul style="list-style-type: none"> List of I&APs. Proof of advertisements, site notices. Minutes of meetings and records of discussions/correspondence. Original comments made by I&APs.
Assessment and evaluation of impacts, alternatives and mitigation measures	<ul style="list-style-type: none"> Assessment methodology/ies applied, particularly criteria for evaluating the significance of impacts, including the NEMA principles. Assumptions, uncertainties and gaps in knowledge and the implications of these.

ITEM	CONTENTS
Assessment and evaluation of impacts, alternatives and mitigation measures	<ul style="list-style-type: none"> For each issue and alternative identified in Scoping as requiring investigation: <ul style="list-style-type: none"> Identify the impacts, risks and benefits for each phase of the project (i.e. design, construction, operation and where relevant decommissioning and closure). Assess the significance of each impact, risk and benefit. Describe measures that can be used to avoid or minimise impacts and risks and to enhance benefits. Evaluate the significance of the each impact and risk, assuming these mitigation measures are undertaken (i.e. after mitigation). Describe the effectiveness of the proposed mitigation measures (e.g. testing of effectiveness). Assess increase in benefits, assuming measures to enhance these are implemented. Describe any implications associated with non-alignment between the proposed development and relevant strategic and spatial plans, policies or guidelines. Describe cumulative impacts, as relevant to the proposed development. Describe links and relationships between impacts and adjust significance accordingly. Describe residual impacts and the likelihood that these could be "red flags" or "fatal flaws" (e.g. a high negative rating after mitigation may be a "red flag" whereas a low negative would probably not be considered as a "red flag"). Describe the impacts of the alternatives relative to one another and which is the most appropriate alternative from an environmental impact point of view. Describe any tradeoffs that would be involved for each alternative, where applicable.
Draft EMP	<ul style="list-style-type: none"> Mitigation measures for each environmental impact for: <ul style="list-style-type: none"> Design; Pre-construction and construction activities; Operation; Rehabilitation; and Monitoring programme
Summary and conclusions	<ul style="list-style-type: none"> Summary or synthesis of the impacts and their significance before and after mitigation. This table should enable comparison of positive and negative implications of the proposed activity and identified alternatives. Summary of significance of risks, if any. Summary of findings in relation to cumulative impacts. Summary of irreversible and/or residual impacts. Conclusion, that is the opinion of the EAP in respect of: <ul style="list-style-type: none"> The appropriate alternative/s. Residual and/or irreversible impacts considered to be "red flags" or "fatal flaws." The extent to which the development proposal meets or deviates from relevant policies, plans and guidelines. The extent to which the development proposal meets relevant principles and criteria in each area of sustainability (environmental, economic and social). The net gains (benefits) and losses (impacts) associated with the development (i.e. who and what stands to gain and who or what stands to lose). The effectiveness of proposed mitigation measures to avoid or minimise impacts and enhance benefits. Uncertainties, gaps and limitations and the implications thereof for decision-making.

It is important to ensure that the EIAR is written in a clear and succinct manner and every effort should be made to avoid "padding" the document with unnecessary detail (e.g. pages and pages of information on legislation).

5.2 Legal compliance

Compliance with legal requirements is mandatory and the decision-maker must reject applications that do not comply. Furthermore, the EAP should ensure that its independence is not compromised. Should the competent authority have reason to believe that the EAP managing the application may not be independent in respect of the application, it may after affording the EAP an opportunity to make representations regarding his or her independence, refuse to accept any further reports or input from the EAP.¹²² The applicant may also be required to Commission an external review by an independent person or to appoint another EAP. These will be at the applicant's own cost.

Applications for authorisation must:

- Be made on the official application forms published by or obtainable from the relevant competent authority;
- Be properly completed and contain the information required in terms of the application form;
- Contain the written consent of the landowner for non-linear activities on land owned by a person other than the applicant;
- Contain any prescribed application fees;
- Take into account any guideline applicable to the submission of applications;
- Fulfil the requirements for public participation as set out in the Regulations or ensure that exemption is obtained if some of these activities are not undertaken;
- Include copies of any representations, objections and comments received in connection with the application;
- Include copies of the minutes of any meetings held by the EAP with I&APs and other role players which record the views of the participants;
- Include any responses by the EAP to those representations, objections, comments and views;
- Include any reports and other documents required in terms of the EIA Regulations;
- Provide the content in reports (BAR, Scoping Report, EIAR) as specified in the Regulations (Table 10 may assist in respect of the EIAR); and
- Contain a declaration of interest by the EAP on a form provided by the competent authority.

¹²² Regulation 19

References

A. Environmental Impact Assessment Guidelines

Integrated Environmental Management – (Department of Environmental Affairs – formerly the Department of Environmental Affairs & Tourism):

1. DEAT (2002): Screening, Integrated Environmental Management, Information Series 1, Department of Environmental Affairs, Pretoria
2. DEAT (2002): Scoping, Integrated Environmental Management, Information Series 2, Department of Environmental Affairs, Pretoria
3. DEAT (2002): Stakeholder Engagement, Integrated Environmental Management, Information Series 3, Department of Environmental Affairs, Pretoria
4. DEAT (2002): Specialist Studies, Integrated Environmental Management, Information Series 4, Department of Environmental Affairs, Pretoria
5. DEAT (2002): Impact Significance, Integrated Environmental Management, Information Series 5, Department of Environmental Affairs, Pretoria
6. DEAT (2002): Ecological Risk Assessment, Integrated Environmental Management, Information Series 6, Department of Environmental Affairs, Pretoria
7. DEAT (2004): Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs, Pretoria
8. DEAT (2004): Cost Benefit Analysis, Integrated Environmental Management, Information Series 8, Department of Environmental Affairs, Pretoria
9. DEAT (2004): Life Cycle Assessment, Integrated Environmental Management, Information Series 9, Department of Environmental Affairs & Tourism, Pretoria
10. DEAT (2004): Criteria for Determining Alternatives in EIA, Integrated Environmental Management, Information Series 11, Department of Environmental Affairs & Tourism, Pretoria
11. DEAT (2004): Environmental Management Plans, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs & Tourism, Pretoria
12. DEAT (2004): Review in EIA, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs & Tourism, Pretoria.
13. DEAT (2004): Environmental Impact Reporting, Integrated Environmental Management, Information Series 15, Department of Environmental Affairs & Tourism, Pretoria
14. DEAT (2007): Strategic Environmental Assessment Guideline, Integrated Environmental Guideline Series 4, Department of Environmental Affairs & Tourism, Pretoria

15. DEAT (May 2006): General Guide to the EIA Regulations (Guideline 3), Department of Environmental Affairs & Tourism, Pretoria
16. DEAT (May 2006): Public participation (Guideline 4) in support of the EIA Regulations, Department of Environmental Affairs & Tourism, Pretoria
17. DEAT (June 2006): Assessment of alternatives and impacts (Guideline 5) in support of the EIA Regulations, Department of Environmental Affairs & Tourism, Pretoria

Draft Guidelines: NEMA Environmental Impact Assessment Regulations - Guidelines and Information Document Series (Western Cape Department of Environmental Affairs & Development Planning):

18. Guideline on the Interpretation of the Listed Activities (November 2006).
19. Guideline on Alternatives (September 2006).
20. Guideline on Exemption Applications (September 2007).
21. Guideline on Appeals (September 2007).
22. Guideline on Public Participation (September 2007).
23. Guideline on Transitional Arrangements (September 2007).
24. Guideline on Need and Desirability (May 2009).

Guidelines for Specialist Involvement in EIA Processes (Provincial Government of the Western Cape; Department of Environmental Affairs and Development Planning):

25. Brownlie, S. 2005. *Guideline for involving biodiversity specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 C. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
26. Saayman, I. 2005. *Guideline for involving hydrogeologists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 D. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
27. Münster, F. 2005. *Guideline for determining the scope of specialist involvement in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 A. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
28. Keatimilwe, K. and Ashton, P.J. 2005. *Guideline for the review of specialist input in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 B. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
29. Winter, S. & Baumann, N. 2005. *Guideline for involving heritage specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 E. Republic of South Africa, Provincial

Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

30. Oberholzer, B. 2005. *Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
31. Van Zyl, H.W., de Wit, M.P. & Leiman, A. 2005. *Guideline for involving economists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 G. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

B. DWAF Water Use Authorisation: External Guidelines:

32. External Guideline: Generic Water Use Authorisation Application Process.
33. External Guideline: Section 21(c) and (i) Water Use Authorisation Application Process (Impeding or Diverting the Flow of Water in a Water Course, and/or Altering the Bed, Banks, Course or Characteristics of a Water Course).
34. External Guideline: Section 21(d) Water Use Authorisation Application Process (Stream Flow Reduction Activities).

C. DWAF Water Use Authorisation: Internal Guidelines:

35. Internal Guideline: Generic Water Use Authorisation Application Process.
36. Internal Guideline: Section 21(a) and (b) Water Use Authorisation Application Process (Taking and/or Storing Water).
37. Internal Guideline: Section 21(c) and (i) Water Use Authorisation Application Process (Impeding or Diverting the Flow of Water in a Water Course, and/or Altering the Bed, Banks, Course or Characteristics of a Water Course).
38. Internal Guideline: Section 21(e), (f), (g), (h), (j) Water Use Authorisation Application Process (Waste Discharge Related).

D. Other Guidelines:

39. Gauteng Mast Construction Guidelines (Gauteng Provincial Government: Department of Agriculture, Conservation and Environment).
40. Guideline on the Application of the EIA Regulations to Structures associated with Communication Networks (Western Cape Department of Environment and Cultural Affairs and Support: Environmental Management Directorate, EIA Guidelines Series, September 2001).
41. Guidelines for Development on Mountains, Hills and Ridges of the Western Cape (Western Cape Department of Environmental Affairs and Development Planning, April 2002)).

42. Guidelines for Golf Courses, Golf Estates, Polo Fields and Polo Estates in the Western Cape (Western Cape Department of Environmental Affairs and Development Planning, December 2005).
43. Guidelines for Resort Developments in the Western Cape (Western Cape Department of Environmental Affairs and Development Planning, December 2005).
44. Guideline on Biodiversity Offsets (Western Cape Department of Environmental Affairs & Development Planning Provincial (Draft Edition 2), April 2007).
45. Practical Field Procedure for Identification and Delineation of Wetlands and Riparian Areas First Edition (Department of Water Affairs and Forestry, First Edition, September 2005).
46. Provincial Urban Edge Guideline (Western Cape Department of Environmental Affairs and Development Planning, December 2005).
47. Ralston S and Williams Q, CapeNature's Requirements and Recommendations with Respect to Applications for Environmental, Mining, Agriculture, Water and Planning-Related Authorisations.
48. Red List Plant Species Guidelines (Gauteng Provincial Government Department of Agriculture, Conservation and Environment) (June 2006).
49. Ridges Guidelines (Gauteng Provincial Government Department of Agriculture, Conservation and Environment, September 2001 as reviewed and updated in January 2004 and April 2006).

E. Other References

50. Gibson R.B., Hassan, S., Holtz S., Tansey J, and Whitelaw G (2005): Sustainability Assessment - criteria, processes and applications, Earthscan.
51. IAIA in cooperation with Institute of Environmental Assessment (1999): Principles of EIA Best Practice. www.iaia.org.
52. Canadian Environmental Assessment Agency, 1994): Determining whether a project is likely to have significant adverse effects.
53. Sadler B (1996) Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance (Final Report of the International Study of the Effectiveness of Environmental Assessment). Canadian Environmental Assessment Agency and International Association for Impact Assessment, Ottawa, Canada.

Annexes

Annex A: Legal Matrix

Annex B: Checklist of questions to assist scoping of issues.

Annex C: Activities and Impacts Matrix (Linear Development)

Annex D: Activities and Impacts Matrix (Agri-Industry)

Annex E: Activities and Impacts Matrix (Energy)

Annex F: Activities and Impacts Matrix (Large scale property development)

Annex G: Activities and Impacts Matrix (Social infrastructure)

ANNEX A: LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
	(For example, the extraction of gas from landfills, the construction of a nuclear reactor or a coal power station).	(For example, the development of a shopping mall, a sports complex or a golf course estate).	(For example, the construction of a low cost housing estate, the construction of a hospital, a wastewater treatment plant or a landfill site).	(For example, the construction of a dam and the construction of facilities for the commercial production of animals).	(For example, the construction of roads, pipelines or power lines).
1. NEMA (ACT)					
Section 2: Principles	The responsible use of non-renewable natural resources; the wise use of renewable resources and the precautionary principle are three principles that are relevant to this activity (Section 2(4)(v)(vi) and (vii)).	In property developments the most important principle to bear in mind is that the physical, psychological, developmental, cultural and social interests of people must be weighed equitably (Section 2(2)). Site locations must aim to avoid the loss of ecosystems and biodiversity (Section 2(4)(a)(i)). EMPs must show a commitment to limit pollution and degradation (Section 2(4)(a)(ii)) and the generation of waste must be avoided, or where this is not possible, there should be re-use or recycling (Section 2(4)(a)(iv)). The best practicable environmental option must be chosen e.g. in choosing materials or between competing technologies (Section 2(4)(b)) and the developer must bear in mind that the responsibility for the consequences of the activity, exists throughout its lifecycle (Section 2(4)(e)).	Social developments must ensure in particular that the physical, psychological, developmental, cultural and social interests of people are weighed equitably (Section 2(2)). In addition developments must ensure that environmental justice is served - for instance, low income housing must not be placed closer to harmful situations (Section 2(4)(c)). As far as possible, developments must avoid the loss of ecosystems and biodiversity (Section 2(4)(a)(i)). EMPs should aim to limit pollution and degradation (Section 2(4)(a)(ii)). The generation of waste must be avoided (Section 2(4)(a)(iv)). The best practicable environmental option must be chosen e.g. in choosing materials or between competing technologies (Section 2(4)(b)).	This industry needs to be particularly aware of the triple bottom line principle which involves a weighing of the social, economic and environmental impacts of activities (Section 2(4)(i)) and that environmental management must place people and their needs at the forefront of its concern and serve their interests equitably (Section 2(2)).	These activities would need to be alert to the requirement of environmental justice when positioning infrastructure such as power lines, railway lines or pipelines (Section 2(4)(c)). People's needs must be equitably weighed (section 2(2)) and where possible, harm to ecosystems and the loss of biodiversity must be avoided (Section 2(4)(a)(i)).
Section 24: Environmental authorisations	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).
Section 28: Duty of care	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri/industry	Linear Activities
Public participation					
What special considerations regarding public participation should be taken into account for this sector?	It is possible that these activities will have an impact that extends beyond the boundaries of the local municipality. If this is the case, then an advertisement has to be placed in at least one provincial newspaper or national newspaper. This applies unless a notice has been placed in an official Gazette (Regulation 56(2)(d)).	It is possible that these activities will have an impact that extends beyond the boundaries of the local municipality. If this is the case, then an advertisement has to be placed in at least one provincial newspaper or national newspaper. This applies unless a notice has been placed in an official Gazette (Regulation 56(2)(d)).	No special considerations. However, given that the basic needs of people are being addressed by social infrastructure development, it is likely that a greater degree of community involvement and consultation will be encouraged.	No special considerations.	Until the route and alternatives has been settled, it is not possible to inform landowners and the community. This notification happens after the application has been made.
Which organs of state have jurisdiction and should be included on the I&AP register?	Organs of state that will probably need to be notified are the municipal planning authorities, the Department of Mineral Resources, the Department of Health, the Department of Transport, the Department of Environmental Affairs, the Department of Water Affairs, the Department of Science and Technology, the National Nuclear Regulator and heritage authorities.	Organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Environmental Affairs, the Department of Human Settlements, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Water Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Human Settlements, the Department of Environmental Affairs, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Water Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Environmental Affairs, the Department of Transport, the Department of Water Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Environmental Affairs, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Mineral Resources, the Department of Water Affairs and heritage authorities.
Alternatives					
What alternatives should be considered for this kind of development? (regs 23(1)(g) and 28(e)(iii))	Alternatives that could be considered are the different methods of electricity generation (including using renewable sources) and their respective resource usage, different technologies as well as different locations and different scales of operation.	Alternative land uses, locations, nature and scale of development should be assessed.	Alternative locations, nature and scale of development should be assessed. In addition alternative technologies may need to be considered.	Alternative land uses, locations, nature and scale of development should be assessed.	Alternatives relate to different route determinations. It is necessary to see which are the most economically viable, topographically feasible and least environmentally damaging. Technology alternatives may need to be considered.
Exemptions					
In what circumstances could an applicant in this sector obtain exemptions and from what regulations?	Given the significance of the method of energy generation and the demand for supply, it is unlikely that any exemptions from any part of the public participation process would be allowed. It is possible that other exemptions would be granted, such as the need to investigate alternatives, if for instance, the government had already made a policy decision that a certain type of energy was to be favoured.	Large scale property developments may not need to investigate need and desirability if for instance planning work such as SDFs have already identified the preferred site and a recognised need.	Social infrastructure developments will probably be able to be exempt from showing need and desirability as this may already have been ascertained.	Even if these activities are contemplated in areas outside those zoned for industry, given the more limited nature of their impact on the environment and the fact that they would probably be established on land outside the urban edge, it is possible that an exemption from public participation requirements may be given.	Permission may be granted to submit a single application. However while the process may be consolidated, impacts in different places must be separately considered.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Authorities					
Who is the competent authority?	The competent authority is generally the provincial department of the environment. If, for example, the construction of a hydro-electric power station is envisaged on the border of a neighbouring country, the national Minister of Environmental Affairs must authorise the activity (Section 24C(2)(c)).	Generally the provincial department of the environment.	The competent authority is generally the provincial department of the environment. However, in this sector the applicant is likely to be a national or provincial department or a statutory body performing a function that is exclusively within the sphere of national government (For example where the Department of Human Settlements is the applicant and the activity is the bulk transportation of water to supply a new RDP housing development). In those cases, the national minister must authorise the activity (Section 24C(2)(d)).	The competent authority is generally the provincial department of the environment. The national minister would probably only be involved if the facility was to be established in an area that traversed a provincial boundary.	The competent authority is generally the provincial department of the environment. However, pipelines, railways, roads and power lines will often traverse provincial boundaries. In those cases, the competent authority will be the national minister (Section 24C(2)(c)). If the applicant is a national or provincial department or a statutory body performing a function that is exclusively within the sphere of national government ((for example, SANRAL building a national road), the national minister is the competent authority (Section 24C(2)(d)).
Is consultation necessary with other competent authorities in terms of regulation 6?	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. This obligation is not relevant to any energy related legislation unless the mining of the energy resource (such as coal) is also part of the activity at the site. If so, the Department of Mineral Resources and the competent authority must enter into a written agreement to ensure co-operation.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure, for instance to develop land for residential use, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure to fast-track a RDP project, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure for their agri-industry activity, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Information disclosure					
What kind of information must be disclosed to the competent authority in terms of regulation 7 and what is protected by law?	All information that has the potential to influence the competent authority's decision must be disclosed on request unless the information is "protected by law". PAIA describes the types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).
Assistance to applicants					
What kind of assistance can be obtained from competent authority?	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(x)). The competent authority could refer the applicant to government policies regarding the preferred sources of energy generation.	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(x)). The competent authority could advise on what SDFs and other spatial plans exist for the area.	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(x)). The competent authority could refer the applicant to information such as the water reserve and the basic supply requirements.	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(x)). The competent authority could provide information on the requirements for the safe disposal of animal waste or the road transportation of livestock.	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(x)). Many linear activities will involve the state as applicant. In those circumstances there is a duty for organs of state to co-operate with one another so that the duty of the competent authority to assist the applicant would be matched by the duty of the applicant to cooperate with the competent authority.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
EAPs (regulation 18(b))					
What particular skills and expertise should an EAP in this sector have?	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should also have a working knowledge of the energy sector.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning and SDFs.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning, SDFs and housing policy.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning and of the agricultural sector.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP must be able to deal with a number of parallel assessments for the same activity in different areas at the same time.
EAP must be independent	Yes	Yes	Yes	Yes	Yes
Determining the correct process					
Is it appropriate to make application for permission for scoping instead of basic assessment? (regulation 21(2)(b))	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.
Applicant not owner of land					
Consent needed if Applicant not the owner of the land	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	No. Consent is not needed however notice of the proposed activity must be given as soon as the route determination and/or alternatives routes are determined (regulation 16).

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
To which other competent authorities must notice be given?	Energy related activities will require notice to be given to Department of Mineral Resources, Department of Human Settlements, Department of Transport, Department of Environmental Affairs, Department of Water Affairs, Department of Science and Technology, the National Nuclear regulator and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Transport, Department of Environmental Affairs, Department of Water Affairs, Department of Human Settlements and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Human Settlements, Department of Transport, Department of Environmental Affairs, Department of Water Affairs and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Transport, Department of Environmental Affairs, Department of Water Affairs and SAHRA.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture, Forestry and Fisheries, the Department of Transport, the Department of Mineral Resources, the Department of Water Affairs, Department of Environmental Affairs and heritage authorities.
What constitutes "all the information that is necessary for the competent authority to consider the application and to reach a decision" (reg 23(2)).	Applicant must provide information which may affect the decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). Whilst to some extent dependent on the project this would include information regarding the proposed locality and separation distances from neighbouring communities; information regarding whether the facility will constitute a Major Hazard Installation and regarding compliance with the Major Hazard Installation regulations under the Occupational Health and Safety Act. Energy efficiency should be considered. Air pollution and waste issues will be particularly relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent dependent on project. The views of the public and whether the location of the development is suitable for economic and social reasons as well as if measures can be taken to mitigate harm to the environment, will be especially relevant for consideration. Availability of services for the development and the impact of those services (ie water consumption) will be relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent dependent on the type of project but the type and nature of services to be provided and their availability, as well as the planning demands of the area will be important.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). Depends on the scale and level of impact of the activity. Competing land uses and any possible health impacts and waste provisions may be relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent depends on project but since linear activities do not necessarily significantly affect each part of the route, it may not be necessary to provide a lot of information other than that which is topographically or location specific. Where the project is a major road, the impact of creating a barrier for biodiversity should be considered.
Legislation that should be considered (reg 23(2)(e))	NEMA, NWA, National Environmental Management: Air Quality Act, National Nuclear Regulator Act, Nuclear Energy Act, Mineral and Petroleum Resources Development Act, Hazardous Substances Act, National Building Regulations and Building Standards Act, NHRA.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act and National Building Regulations & Building Standards Act.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act, National Building Regulations & Building Standards Act and Less Formal Townships Establishment Act.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act, National Building Regulations & Building Standards Act, Subdivision of Agricultural Land Act & National Environmental Management: Air Quality Act.	NEMA, NWA, National Environmental Management: Air Quality Act, National Nuclear Regulator Act, Nuclear Energy Act, Mineral and Petroleum Resources Development Act, Hazardous Substances Act, National Building Regulations and Building Standards Act, NHRA and Electricity Act.

LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Need and desirability/advantages and disadvantages of the development (reg 23(2)(g))	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. The lack of sufficient energy in South Africa is accepted. Need would not be relevant but the desirability of a particular source of energy and the nature of the technology used to produce the energy would need to be assessed.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. It may be necessary to show that the need for large scale property development will enhance the facilities of the area and provide economic and social upliftment.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. The backlog of social infrastructure development is generally accepted, therefore the desirability of the development in a particular location rather than the need for the development at all, will most likely require more consideration.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. Need and desirability will relate to the level of food production/supply in the sector concerned.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. Need for certain infrastructure can be straightforward but with toll roads and similar infrastructure, need should still be considered.
Description of significance and assessment of environmental impact (reg 23(2)(h))	The significance of impacts will be determined in the assessment process; most significant impacts are likely to include safety aspects of nuclear energy, the impact of air emissions from coal fired power stations, carbon emissions and other greenhouse gases. Cumulative impacts of dealing with nuclear waste or the impact on climate change from carbon emissions should be described.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include land use management issues, impact on provision of services and biodiversity.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include socio-economic impacts, land use management issues, impact on provision of services and biodiversity.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include loss of agricultural land, pollution (including noise) and waste issues.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include socio-economic impacts, visual impacts and biodiversity impacts.
What mitigation measures might be proposed (reg 23(2)(i))	To some extent this project dependent but in nuclear generation it will be important to mitigate the effects of production of nuclear waste, therefore methods of waste disposal must be considered. In coal-fired power stations air pollution and CO2 emissions are major issues - pollution abatement measures or alternative technologies should be considered. With regard to wind power plants there are high visual impacts as well as impacts on biodiversity (birds and bats) and danger to aircraft so that locational and technological aspects must be considered. Hydro-electric schemes will have visual impacts as well as major impacts on water resources, biodiversity and local communities.	Avoiding the creation of too many hardened areas around the properties would help stormwater control. Where there will be a loss of biodiversity and where ecosystems are destroyed for construction purposes, there may be an opportunity to offset this with rehabilitation elsewhere on the property. There should be visual impact mitigation, e.g. landscaping, urban design guidelines, public and non-motorised transport facilities to mitigate traffic impacts, measures to promote energy efficiency and efficient use of energy and water resources to minimise the impact on provision of basic services.	Roads and pipes may need to be routed around important geographical or heritage features. New developments have the opportunity to utilise solar power and so avoid excess demand on the power grid. There should be visual impact mitigation, e.g. landscaping, urban design guidelines, public transport facilities, green technology. Water and energy efficient measures should be put in place, utilising technology and best practice.	Mitigation measures should consider pollution abatement (including noise) and waste management. Water and energy efficient measures should be put in place, utilising technology and best practice.	Railways roads, power lines and pipes may need to be routed around important geographical or heritage features or threatened habitats or ecosystems.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Specialist input: what is needed?	Specialist reports would be needed to help clarify the scientific claims of the different energy generating sources. Geotechnical, biodiversity, air pollution and climate change, waste management, traffic and socio-economic specialist studies should also be considered.	Geotechnical, biodiversity, air pollution and socio-economic specialist studies should be considered.	Geotechnical, biodiversity, air pollution and socio-economic specialist studies should be considered.	Biodiversity, air pollution, noise impact, waste management and socio-economic specialist studies should be considered.	Land surveys and heritage/conservation studies may be needed. Route determinations are linked to the development of economic or residential hubs. Biodiversity socio-economic and visual impact specialist studies are likely to be necessary.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
SCOPING AND EIA					
Scoping & EIR					
What constitutes "all the information that is necessary for a proper understanding of the nature of issues identified during scoping (reg 29(1))	Nuclear energy and coal fired plants should be located far from communities. Information regarding the proposed locality and health and safety and waste issues would be especially relevant.	The views of the public and whether the location of the development is suitable for economic and social reasons as well as if measures can be taken to mitigate harm to the environment, will be especially relevant for consideration.	The type and nature of services to be provided, as well as the planning demands of the area will be important.	Competing land uses and any possible health impacts and waste provisions may be relevant.	The nature of the services to be provided, as well as the topography and planning demands of the area will be important.
Description of property	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.
What are potential issues and impacts (reg 29(1)(f))?	The environmental issues and impacts would be related to resource use. In terms of cumulative impacts it would not be helpful to put a coal fired power station in an already polluted industrial area. Impacts of climate change mitigation objectives should be assessed.	The potential impacts relate to land use and long term economic viability as well as growing pressure on transport systems and municipal services.	The potential impacts relate to land use and growing pressure on transport systems and municipal services. Planning, economic, transport, urban design, visual impact and heritage specialist reports may be required.	Possibly there would be a greater demand on electrical supply in the area and agricultural land would be lost.	The routes of oil pipelines can be problematic as they may be placed underground and may leak in time causing harm to people and the environment.
What specialist input is needed?	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment
Description of activity and any feasible and reasonable alternatives that have been identified (reg 29(1)(b))?	See discussion on alternatives (in terms of the General Process)	See discussion on alternatives (in terms of the General Process)	See discussion on alternatives (in terms of the General Process)	See discussion on alternatives (in terms of the General Process).	See discussion on alternatives (in terms of the General Process).
What should plan of study contain (reg 29(1)(i))?	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.
What guidelines are relevant to the activity? (reg 29(2))?	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3. of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.
What is the need/desirability and advantages and disadvantages of the activity?	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment
What are the environmental issues common to the sector?	The major issues include energy efficiency, renewable sources, public safety, air pollution and carbon emissions.	The major issues include pressure on municipal services and access and transport routes.	The major issues include pressure on municipal services and access and transport routes and environmental justice issues.	The major issues include spatial planning, pollution and waste management.	The major issues include visual impacts, impacts on heritage and biodiversity.