

**Critical analyses of public participation as part
of the environmental impact assessment
process for the installation of gas pipeline**

A mini-dissertation presented to the Potchefstroomse
Universiteit vir Christelike Hoër Onderwys

MAGISTER IN
ENVIRONMENTAL MANAGEMENT

By

WERNER PETRICK
STUDENT NUMBER: 123146842
MAY 2004

OPSOMMING

Titel: **Kritiese analise van publieke deelname as deel van die omgewingsimpakstudie proses vir gas pyplyne**
Studieleier: **Dr. Kobus van der Walt**
Student: **Werner Petrick**
Graad: **Magister in Omgewingsbestuur**

Omgewingsbewaring is besig om een van die mensdom se grootste bekommernisse te word. Suid-Afrikaanse wetgewing vereis dat sekere projekte deur 'n omgewingsimpakstudie proses moet gaan en goedgekeur moet word voordat dit ge-implimenteer kan word.

Gas pyplyne moet ook goedgekeur word onder die omgewingsimpakstudie wetgewing voordat dit gebou en bedryf kan word.

Een oogmerk van omgewingsimpakstudies is om publieke deelname te verseker. Die Suid-Afrikaanse wetgewing stel sekere riglyne voor hoe om 'n suksesvolle publieke deelname te verseker. Daar is wel baie leemtes in die wetgewing wat veroorsaak dat daar verskeie interpretasies is van hoe om die riglyne effektief toe te pas.

Hierdie studie is 'n ondersoek om te bepaal hoe om die mees gepaste publieke deelname proses wat koste en tyd effektief is uit te voer vir beplande Sasol Gas pyplyne.

Die metode wat gebruik is om bogenoemde antwoord te kry, was om eerstens vier sub-vrae aan te spreek wat betrekking het op die volgende: Omgewingsimpakstudies in Suid-Afrika; die betekenis van publieke deelname; publieke deelname as 'n komponent van omgewingsimpakstudies; insae in spesifieke probleme en lesse geleer uit vorige projekte wat ondersoek is.

Die vier sub-vrae was bespreek en ook beantwoord, onderskeidelik in Hoofstukke 2, 3, 4 en 5 van hierdie verslag.

In Hoofstuk 6 het die student sekere voorstelle gemaak van hoe om 'n effektiewe publieke deelname proses uit te voer op Sasol Gas pyplyn projekte.

Die navorser het gevind dat elke gas pyplyn projek verskil van die volgende een en dit is onmoontlik om een voorskriftelike publieke deelname proses vir hierdie tipe projekte voor te skryf.

Sekere Sasol Gas pyplyn projekte benodig 'n baie intensiewe publieke deelname proses terwyl ander projekte weer 'n baie kleiner proses kan vereis wat ook suksesvol sal wees.

Twee tipe publieke deelname prosesse word bespreek in Hoofstuk 6 onder die beplanning, deelname en afsluit fases. Hierdie twee prosesse is, soos bespreek in die verslag, intern ook buigbaar en aanpasbaar.

ABSTRACT

Title: **Critical analyses of public participation as part of the
environmental impact assessment process for gas pipelines**

Study leader: **Dr. Kobus van der Walt**

Student: **Werner Petrick**

Degree: **Magister in Environmental Management**

The protection of the environment is becoming one of the most pressing concerns of mankind in the 21st century. South African Legislation requires an environmental impact assessment (EIA) to obtain authorisation for executing certain activities.

Constructing and operating a gas pipeline requires an authorisation from the relevant authorities under the EIA legislation.

One of the objectives of an EIA is to ensure public involvement. South African legislation stipulates guidelines for conducting public participation but leaves voids for interpretation on how to most effectively apply these guidelines.

This study investigates how an appropriate and cost and time effective public participation process for proposed new Sasol Gas pipelines should be conducted.

The method of investigation is to first address four sub-questions relating to EIAs in South Africa; the meaning of public participation; public participation as a component of EIAs; and specific problems and lessons learned in some case studies.

These sub-questions were discussed and answered, respectively in Chapters 2, 3, 4 and 5 of this report.

In Chapter 6 the student concluded and gave recommendations to conduct an effective public participation process for Sasol Gas pipeline projects. The research determined that the public participation process recommended for these projects can not be limited to one prescriptive process as each project differs from the next.

Certain Sasol Gas pipeline projects need a very extensive public participation process, whereas, a "limited" public participation process can be applied on certain Sasol Gas pipeline projects and still be effective.

The public participation process to be followed for both types above, is recommended in detail in Chapter 6 under the planning, participation and exit phases. These two proposed processes are internally also flexible, as discussed in this report.

ACKNOWLEDGEMENTS

The following acknowledgements and appreciation are extended to the following people for their input, their hard work, patience and support, without which this thesis would never have realized:

- to Dr. Kobus van der Walt, the study leader;
- Mr. Francois Retief who was initially the study leader for a period of time;
- to Stanley Bracey, Andre Labuschagne, Alfonso Niemand, Peter Butland, Riki Deale, Jameel Banoo and Jan Venter who completed the questionnaires
- Me. Tisha Greyling for her valuable contributions as external examiner.

Also to my wife, Carolyn, for her tolerance, her understanding and support.

Above all, to my Creator who deserves all the credit.

CONTENTS

	Page number
OPSOMMING	i
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
CONTENTS	1
ABBREVIATIONS	4
DEFINITIONS /GLOSSARY	5
CHAPTER 1 INTRODUCTION	
1.1 Introduction	8
1.2 Problem statement/research question	11
1.3 Research objectives / Goals/ Aims	11
1.4 Research methodology	12
1.5 Restriction to the research	14
CHAPTER 2 EIA IN SOUTH AFRICA	
2.1. Introduction	15
2.1.1 What is an Environmental Impact Assessment (EIA)?	15
2.1.2 Objectives of an EIA	15
2.1.3 Review, decision-making and authorisation	18
2.2. A Brief Historical Overview of Environmental Impact Assessment in the international Context	18
2.3. Environmental Impact Assessment Regulations in South Africa	19
2.4. The EIA process in South Africa	21
2.4.1 Phase 1: Application for Authorisation	22
2.4.2 Phase 2: Scoping	25
2.4.3 Phase 3: Environmental Impact Assessment (full EIA)	30
2.5. Review, decision-making and authorisation of the EIA process in South Africa	32
2.5.1 Review	33
2.5.2 Decision-making and authorisation	43
2.6. Conclusion	47

CHAPTER 3	PUBLIC PARTICIPATION DEFINED	
3.1	What is public participation?	50
3.1.1	General	50
3.1.2	Defining Public Participation	53
3.1.3	What Public Participation is not	55
3.2	Aims/Objectives of public participation	56
3.3	How to achieve aims/objectives	58
3.3.1	Principles and values of public participation	58
3.3.2	Techniques and methods	68
3.4	Conclusion	78
CHAPTER 4	PUBLIC PARTICIPATION AS A COMPONENT OF EIAs	
4.1	Legal requirements for public participation in South Africa	81
4.2	Specific objectives of public participation in the different EIA phases	84
4.3	The public participation process as part of the EIA process	85
4.4	Tailoring public participation to project and stakeholder requirements	87
4.5	Conclusion	89
CHAPTER 5	EVALUATING THE PUBLIC PARTICIPATION PROCESS FOR GAS PIPELINES	
5.1	Background to Sasol Gas Pipelines	92
5.1.1	The pipelines and the Gas inside	93
5.1.2	Study area (existing Sasol Gas pipelines in SA)	95
5.1.3	Why is an EIA necessary for Sasol Gas pipelines? (legal requirements)	95
5.2	Case studies	95
5.2.1	Alliance Peroxide Gas pipeline	98
5.2.2	Rosslyn-Babelegi Gas pipeline	104
5.2.3	Sapref Gas pipeline project	111
5.2.4	Sasolburg – Egoli Gas pipeline	117
5.3	Comparing the case studies	124
5.4	Conclusion	129
		124

CHAPTER 6	CONCLUSIONS AND RECOMMENDATIONS	
6.1	Conclusions	131
6.1.1	The Environmental Impact Assessment Process in South Africa	131
6.1.2	Public participation defined	132
6.1.3	Public participation as a component of EIAs	132
6.1.4	Case studies	133
6.2	Recommendations on how an appropriate and cost and time effective public participation process for proposed new Sasol Gas pipelines should be conducted	134
6.2.1	Planning phase	137
6.2.2	Participation phase	138
6.2.3	Exit phase	141
	REFERENCES	142
APPENDIX A	The EIA process	147
APPENDIX B	List of principles and references	149
APPENDIX C	List of methods & techniques and references	151
APPENDIX D	Completed questionnaires	153

List of figures

Figure 2.1	: Dimensions of sustainable development	17
Figure 3.1:	The stakeholder engagement spectrum	51
Figure 3.2(a):	No common goal	52
Figure 3.2(b):	Common goal – sustainability	53
Figure 3.3:	Most often cited Principles	68
Figure 3.4:	Most often cited written methods & techniques	77
Figure 3.5:	Most often cited verbal methods & techniques	78
Figure 4.1:	The degree of environmental assessment and public participation required	89
Figure 5.1:	Comparing general requirements	126
Figure 5.2:	Comparing legal requirements	127
Figure 5.3:	Comparing principles	128

List of tables

Table 3.1:	Some practical techniques and methods, by mode	72
Table 5.1:	Composition of Sasol gas	93
Table 5.2:	Alliance Peroxide – evaluation table	101
Table 5.3:	Rosslyn-Babelegi – evaluation table	108
Table 5.4:	Sapref – evaluation table	113
Table 5.5:	Sasolburg Egoli Pipeline – evaluation table	121

ABBREVIATIONS

BID	Background information document
DEAT	Department of Environmental Affairs and Tourism
ECA	Environment Conservation Act
EIA	Environmental impact assessment
EIR	Environmental impact report
EPA	Environmental Protection Agency
I&AP	Interested and effected party
IEM	Integrated environmental management
NEMA	National Environmental Management Act
NGO	Non-governmental organisation
ROD	Record of decision

DEFINITIONS/GLOSSARY

Assessment:	The process of collecting, organising, analysing, interpreting and communicating data that are relevant to some decision. (DEAT, 1998:6)
Authorities:	The national, provincial or local authorities that have a decision-making role or interest in the proposal or activity. The term includes the lead authority, as well as other authorities. (DEAT, 2002:29)
Decision-making	The sequence of steps, actions or procedures that result in decisions, at any stage of a proposal. (DEAT, 2002:29)
Environment:	Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation. The environment in this context extends from within an organisation to the global system. (SABS, 1996:1)
Environmental aspects:	Elements of an organisation's activities, products, and services, which can interact with the environment. (SABS, 1996:1)
Environmental impact:	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services. (SABS, 1996:2)

Environmental impact assessment:

A process of examining the environmental effects of development.

(DEAT, 1998:6)

Interested and Affected Parties (I&APs):

Individuals, communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. These may include local communities, investors, business associations, trade unions, customers, consumers and environmental interest groups. The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered I&APs.

(DEAT, 2002:30)

Non-governmental organizations (NGOs):

Voluntary environmental, social, labour or community organizations, charities or pressure groups.

(DEAT, 2002:30)

Relevant authority:

The relevant authority on national, provincial or local level entrusted in terms of the Constitution and in terms of the designation of powers in Notice No. R. 1184 of 5 September 1997 with the responsibility for granting approval to a proposal or allocating resources.

(DEAT, 1998:7)

Stakeholder engagement: The process of engagement between stakeholders (the proponent, authorities and I&APs) during the planning, assessment, implementation and/or management of proposals or activities. The level of stakeholder engagement varies, depending on the nature of the proposal or activity and the level of commitment by stakeholders to the process. Stakeholder engagement can therefore be described by a spectrum or continuum of increasing levels of engagement in the decision-making process. The term is considered to be more appropriate than the term "public participation".
(DEAT, 2002:31)

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

The protection of the environment is becoming one of the most pressing concerns of humankind in the 21st century. In South Africa, a new constitutional order came into being in 1994 where the right to an environment, which is not harmful to our health or well being, was enshrined as a fundamental right. Along with this, many other important rights, such as the right to information and just governmental action, were also given the status of fundamental rights (Andrews, 1999:1).

Undertaking an identified activity (identified in Section 21 of the Environment Conservation Act (ECA), 73 of 1989) is prohibited by Section 22 of the ECA and it requires an environmental impact assessment (EIA) to obtain authorisation for carrying out such an activity. The application to execute the activity must be supported by relevant reports.

According to DEAT (1998:9) one of the objectives of an EIA is to ensure public involvement in the undertaking of identified activities.

Public participation is one of the big components in the scoping process, which forms part of the environmental impact assessment. Public participation ensures involvement of interested and affected parties in the EIA and also influences the extent and approach of an impact assessment.

According to Greyling (2001:1) "worldwide, public participation has for many decades been widely acknowledged as a potential or partial solution to environmental and policy problems and decision-making". But who to involve, in

which way, when and to what degree, has been the subject of a tremendous amount of debate, by public participation practitioners from across the globe. The latter was again stressed at the annual conference of the International Association for Public Participation (Greyling, 2001:1).

The EIA Regulations - promulgated in terms of the Environment Conservation Act (73 of 1989) - provide guidelines on the environmental impact assessment process. It provides very vague guidelines regarding the approach to the public participation process as part of the EIA process. In this thesis a standard approach to participation is proposed although flexibility is also ensured to cater for different communities and unique environmental issues.

When is public participation effective and how can the effectiveness be measured? Is the participation in itself an essential element in a democratic process? These are difficult questions, which can not necessarily be answered with 100% certainty. However, one has to agree that the more effective the public participation within the environmental impact assessment process is, the more value it will have with regards to the environment. It will also improve decision-making by the authorities.

(Cullingworth, 1984:17)

According to the Consultative Forum on Mining and the Environment (2002:3) public participation helps authorities to understand the environmental consequences of their decisions. The authorities consider all three dimensions of sustainable development – economic growth, social equity and ecological integrity in their decision making.

(Consultative Forum on Mining and the Environment, 2002:3)

Effective public participation will therefore improve decision-making by the authorities towards sustainable development.

South African legislation stipulates guidelines for conducting public participation but leaves voids for interpretation on how to most effectively apply these guidelines.

The minimum legal requirements for public participation are usually not regarded as sufficient. Current South African legislation such as the National Environmental Management Act (107 of 1998) contains principles which allow various interpretations on whether participation was adequate or not. Different role players evaluate public participation by different sets of requirements which make the implementation thereof exceedingly more difficult (Greyling, 2001:3).

The range of projects which requires an EIA is very diverse, each with unique environmental issues to be addressed. Subsequently participation practice is becoming ever more challenging. The most effective participation techniques and processes for each different type of activity should thus be benchmarked to ensure consistency and continuous improvement.

Sasol Gas is expanding its gas pipeline network in most Provinces in South Africa. The public participation process is a very important component of the EIA for the realization of a Sasol Gas pipeline.

The use of gas in South Africa is not a very familiar source of energy as yet and misconceptions still remain. Typical questions posed are, "How will this development affect our safety? Will it affect our health? What environmental effects will it have?" etc. Because of its unknown impacts on humans and the environment, the public participation process plays a very important role in the EIA to involve stakeholders and to identify possible concerns they might have.

The scale of new gas pipelines vary dramatically between distances from a few meters to hundreds of kilometers. The number of interested and more

specifically affected parties (I&APs) involved in the public participation process of a proposed pipeline can therefore vary considerably. The number of I&APs can become quite significant in pipelines covering long distances. To get all the interested & affected parties along a pipeline route involved and also to evoke effective participation can become quite challenging. Another challenge is to conduct effective participation with all I&APs within the proposed project time schedule.

The challenge thus is to conduct an **appropriate** and cost and time effective public participation exercise, as part of the EIA, involving all interested and affected parties.

1.2 PROBLEM STATEMENT/RESEARCH QUESTION

How should an appropriate and cost and time effective public participation process for proposed new Sasol Gas pipelines be conducted?

1.3 RESEARCH OBJECTIVES / GOALS/ AIMS

In order to solve the research question, the following sub-questions need to be addressed:

- i** What process is currently being followed in South Africa to conduct and environmental impact assessment (EIA)?
- ii** What does public participation mean?
- iii** What are the requirements with regard to public participation within the above mentioned process?
- iv** Can specific problems, which prevented effective public participation in previous Sasol Gas pipeline projects, be identified? Can lessons learned, which improved effective public participation in these projects be identified?

1.4 RESEARCH METHODOLOGY

In order to answer the research questions, the following research methodologies will be followed:

i. Research Sub-Question i

A literature study will be done to formulate an answer to this question. Firstly it is important to understand what is meant by an EIA. Defining what an EIA is, the objectives thereof and how it developed historically, will therefore be researched.

To understand the process followed in South Africa, the South African legislation in terms of assessing impacts will be researched. Finally, the details of the process followed in South Africa will be researched.

ii. Research Sub-Question ii

To answer this question, a definition for public participation will first be researched. To understand what public participation is, it is also important to research what it is not.

In addition to the definition the researcher will also, by means of a literature study, state the aims/objectives of public participation and why it is important to conduct such a process.

How to achieve these aims/objectives will be researched.

iii. Research Sub-Question iii

This question will be answered by doing a literature study on the legal requirements of public participation in South Africa.

In addition to this the researcher will also, by means of a literature study, determine specific objectives of public participation in the different EIA

phases and explain how the public participation process is part of the EIA process.

iv. Research Sub-Question iv

To formulate an answer to Question 4, a literature study will firstly be conducted to understand Sasol Gas and how it operates its gas pipelines. Four case studies will be investigated in detail in a comparative study.

The content of this research methodology includes a structured process reflecting the analyzed contents of the relevant literature, tables and diagrams, interviews, questionnaires as well as case studies. The comments raised by I&APs regarding the public participation process for each case study are also included in the evaluation.

Structure of the thesis

The research involved six chapters and the references, which can be summarised as follows:

Chapter 1: Introduction

Chapter 2: Provides a general background of environmental impact assessment in South Africa. This chapter discusses the historic development of EIA, the legislative context and the implementation of the EIA process in terms of procedures, role players etc.

Chapter 3: Defines what public participation is and is not and discusses aims/objectives of public participation. How to achieve aims/objectives are discussed with regard to values and principles as well as methods and techniques.

Chapter 4: Discusses public participation as a component of the EIA process in South Africa by first providing background on the legal requirements of public

CHAPTER 2: EIA IN SOUTH AFRICA

2.1. INTRODUCTION

2.1.1 What is an Environmental Impact Assessment (EIA)?

An EIA is a systematic process that examines the environmental consequences of development actions, in advance (Glasson, et al, 1995:3). Fuggle & Rabie (1992:764) defines EIA as: "The administrative or regulatory process by which the environmental impact of a project is determined".

In other words, if a new project is proposed, the EIA process will assist in determining how this new project will impact on the environment, during construction as well as during operations, etc. According to the integrated environmental management (IEM) framework for South Africa, EIA is classified as a project level assessment tool (DEAT, 1998).

2.1.2 Objectives of an EIA

According to DEAT (1998:9) the objectives of an EIA are the following:

- "To ensure that the environmental effects of activities are taken into consideration before decisions in this regard are taken;
- to promote sustainable development, thereby achieving and maintaining an environment which is not harmful to peoples' health or well-being;
- to ensure that identified activities which are undertaken do not have a substantial detrimental effect on the environment; and
- to prohibit those activities that will;
- to ensure public involvement in the undertaking of identified activities; and
- to regulate the process and reports required to enable the Minister or his designated competent authority to make informed decisions on activities".

Glasson, et al (1995:7) identified three important objectives (purpose) of an EIA: .

1. An aid to decision-making

The EIA process provides for the decision-maker, a systematic examination of the environmental implications of a proposed action, and sometimes alternatives, before a decision is taken.

2. An aid to the formulation of development actions

The EIA can provide a framework for considering location and design issues and environmental issues in parallel. It can be an aid in the identification of environmental impacts which the proposed projects can have on the environment, developing actions (mitigatory measures) and indicating areas where the project can be modified to minimise or eliminate altogether those identified impacts.

3. An instrument for sustainable development.

Over the years man's unsustainable management of natural resources was improved to encompass issues of equity between different sections of society, and between successive generations.

According to the Consultative Forum on Mining and the Environment (2002:5) "a policy, programme or plan to be sustainable, it has to take all three dimensions of sustainability into consideration:

- Ecological integrity
- Economic growth
- Social equity".

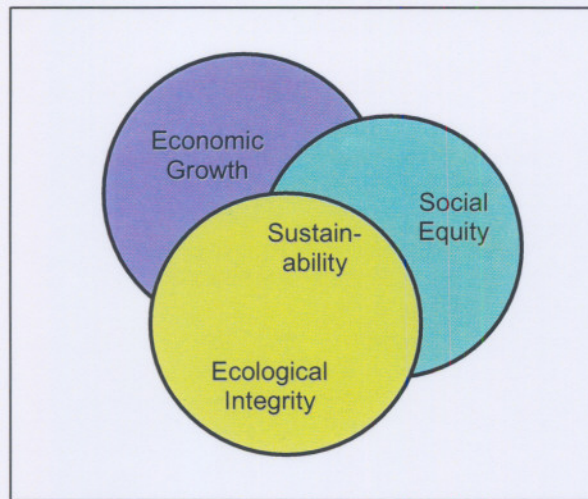


Figure 2.1: Dimensions of sustainable development

Governments of local to international levels have recognised the interaction of these three dimensions and use the concept of sustainable development in their decision making (Glasson, et al, 1995:9).

According to Shell (2000) the Bruntland Commission definition for sustainable development is: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

The objectives as spelled out in the guideline document are similar to that of Glasson, et al (1995:9). It does however add another important objective, which was not included by Glasson, namely bringing the public's views to bear on the decision-making process through public participation. Public participation plays an important role in the EIA process to achieve this objective.

It should be emphasised however, according to Wood (1995:2), that EIA is not a procedure for preventing actions with significant environmental impacts from being implemented. Rather the intention is that actions are authorised in the full knowledge of their environmental consequence.

2.1.3 Review, decision-making and authorisation

No project may proceed (with construction or operations) before the relevant authorities grant authorisation. In order to make a decision, the relevant reports must first be reviewed by various stakeholders.

The purpose of review is to provide an evaluation of the strengths and weaknesses of a proposal or of the assessment reports submitted. On the basis of this review, a decision is taken as to whether the proposal should be approved or not and under what conditions (DEAT, 1992a:5).

2.2. A BRIEF HISTORICAL OVERVIEW OF ENVIRONMENTAL IMPACT ASSESSMENT IN THE INTERNATIONAL CONTEXT

According to Fuggle & Rabie (1992:762) environmental evaluations, which have become an established part of good development planning throughout the world, were first formalized in the United States of America through the National Environmental Policy Act of 1969. Fuggle & Rabie (1992:762) states that "this act required the preparation of a formal statement documenting the consequences of any major Federal action on the environment. It also required that this environmental impact statement had to accompany all other documents through any decision-making process so as to ensure that the environmental consequences of projects, plans or programmes were considered together with economic and technical considerations. Such administrative reform legislation was subsequently emulated by most of the world's leading nations.

These federal measures had a wide influence, which can be gauged from the rapidity with which they have been echoed in the state and local statutes. A number of other industrialised countries have since implemented EIA procedures. Canada, Australia, the Netherlands and Japan, amongst others, adopted legislation in 1973, 1974, 1981 and 1984 respectively. The European Community (EC) adopted a directive making

environmental assessments mandatory for certain categories of projects in July 1985 (Wathern, 1995:1).

In South Africa the initiative by the Council for the Environment led to the formulation of the Integrated Environmental Management Policy, several years after the United States (Fuggle & Rabie, 1992:762).

Glasson, et al (1995:1) states that the European Community Directive has accelerated its application in EC Member States and, since its introduction in the UK in 1988, it has been a major growth area for planning practice.

According to Barnard (1999:27) the Bruntland Commission (the World Commission of Environment and Development), "considered a strategy for an implementation programme. Their report, titled *Our Common Future*, published in 1987, introduced the concept of sustainable development. This broad guideline was supplemented by a detailed implementation programme, *Agenda 21*, which was a product of the UN Conference on Environment and Development (UNCED), popularly known as the 1992 Rio Conference".

2.3. ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS IN SOUTH AFRICA

South Africa promulgated EIA procedures in the 1990's. On the 4th of March 1994 draft legislation for compulsory EIAs was published for comment. One of the major recommendations was that a Guideline Document be published, which would provide a uniform basis for implementing the regulations by all role players.

The draft EIA Guideline was published by the Department of Environmental Affairs and Tourism in September 1997 to coincide with the publication of the list of Activities and

Regulations for EIAs in the Government Gazette of 5 September 1997, in terms of sections 21, 22 and 26 of the Environment Conservation Act (ECA), 73 of 1989 (DEAT, 1998:5). The Draft Guideline Document was revised and finalised in April 1998.

Section 21 of the ECA authorises the Minister of Environmental Affairs & Tourism to identify, by notice in the Gazette, activities, which in his opinion may have a detrimental effect on the environment. The identified activities cut across the three environmental media and are contained in GN R1182 in GG18261 of 5/9/1997. The description of these identified activities are mostly very indistinct and should be clearly defined to assist an applicant and even authorities in the decision whether an EIA is required or not.

Undertaking an identified activity (identified in Section 21) is prohibited by Section 22 of the ECA and requires an environmental impact assessment (EIA) to obtain authorisation for carrying out such an activity. The application to undertake the activity must be supported by an environmental impact report, which is regulated by Section 26 of the act. The EIA regulations are contained in GN R1183 in GG18261 of 5/9/1997. (GN R1184 of the same date delegates powers of providing records of decisions on EIAs to provinces).

The application has to be supported by the necessary permits obtained from other departments.

Other departments (than DEAT) are given the opportunity to evaluate an application, considering that these activities impact on their systems as well. The final decision-maker, however stays the Minister of Environmental Affairs & Tourism.

EIA is supposed to be a part of an integrated environmental management (IEM) system. This elicits a problem with the Environment Conservation Act regulations, as these only

enforce EIA and not IEM. The EIA is only the assessment part of IEM and does not enforce monitoring, auditing etc. but can recommend that it be included in the record of decision conditions.

In other words, the follow-up of identified aspects/impacts and “closing the loop” are of utmost importance, by ensuring that mitigatory measures are in place and implemented – but it is not enforced by the Environment Conservation Act.

In addition to the Environment Conservation Act 73 of 1989 (ECA), EIAs also need to conform to the National Environmental Management Act 107 of 1998 (NEMA). NEMA constitutes South Africa’s framework environmental legislation.

Although NEMA did not repeal section (s) 1 (Definitions) of the ECA, it does redefine the environment in line with section 24 of the Constitution of the Republic of South Africa Act 108 of 1996 that states, “Everyone has the right ... to an environment that is not harmful to their health or well-being ...”

2.4 THE EIA PROCESS IN SOUTH AFRICA

The Application procedure / EIA process to be followed to obtain authorisation to commence with a listed activity, is described in the figure which appears in Appendix A (DEAT, 1998:18). For the purpose of explaining the process, this figure can be divided into three phases:

- Phase 1: Screening/Application for Authorisation/Plan of study for scoping
- Phase 2: Scoping
- Phase 3: Environmental Impact Assessment

2.4.1 Phase 1: Screening/Application for Authorisation/Plan of study for scoping

The first phase of the EIA includes screening. According to Wood (2000:71), screening incorporates the decision on whether the nature of the action and its possible impacts are such that it should be submitted to environmental assessment.

Glasson, et al (1995:3) states that screening narrows the application of EIA to those projects that may have significant environmental impacts. Screening may be partly determined by the EIA regulations operating in a country at the time of assessment.

The Consultative Forum on Mining and the Environment (2002:14) explains that "the level of effort in environmental assessment and public participation required for a project is a function of a combination of the following:

- The scale of anticipated impacts
- The scale of public sensitivity".

Wood (2000:72) distinguishes between two broad approaches to the identification of actions which may have a significant impact on the environment:

- The compilation of lists of actions and of accompanying thresholds and criteria (which may include locational characteristics) to help in determining which actions should be assessed.
- The establishment of a procedure (which may include the preparation of a preliminary or intermediate environmental assessment report) for the case by case (discretionary) determination of which actions should be assessed.

The hybrid approach is a very common approach to screening in most EIA systems. This approach involves the utilisation of lists, thresholds and the use of some discretion in the selection of projects.

In South Africa the activities that require an EIA in terms of the Environment Conservation Act (ECA), 73 of 1989, are listed in the Schedule 1 of the Regulations. These activities are referred to as the listed activities. The problem with the list of activities is that it does not capture all activities which can have a potential impact on the environment. Using the listed activities as the only basis for screening, leads to concerns.

Section 28(1) of NEMA states in general terms the duty of care requirement as follows: "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."

The applicant of a proposed project should therefore not only take the activities listed under the ECA into consideration when doing screening, but also NEMA. Therefore, as stated by Wood (2000:72), the determination of whether or not an environmental assessment is to be prepared for a particular action should hinge upon the likely significance of its environmental impacts.

In practice this implies that, even if the proposed project is not a listed activity under the ECA, it may still have a significant impact on the environment and the applicant should complete an EIA.

One of the purposes of the pre-application consultation between the relevant authority and the applicant is to determine whether the proposed activity needs to comply with

the regulations, in particular if the applicant is not certain whether the proposed activity falls within the description of the activity identified (DEAT, 1998: 19).

In other words, when the applicant is uncertain of whether a project needs to undergo an EIA or not, they should consult with the relevant authority. The pre-application consultation can thus be seen as part of screening.

If the screening exercise proves that the activity needs to be subjected to an EIA, the applicant should submit an Application for Authorisation to the relevant authorities (Department of environmental Affairs and Tourism). According to Sasol (2002a:4) "the Application for Authorisation is the submission of a designated form to the relevant provincial authority by the applicant for authorisation to undertake a listed activity as identified by the Minister of DEAT in terms of Section 21 of the Environment Conservation Act, no 73 of 1989".

It is further essential that the applicant and/or the consultant consult with the relevant authority to:

- "determine the specific contact person on provincial authority level;
- obtain an application form;
- obtain general guidance on the procedures, information and reports required;
- determine whether the application for authorising the undertaking of an identified activity should comply with the legislative requirements in terms of the Environment Conservation Act, 1989;
- determine whether the application should be submitted to the Minister of Environmental Affairs and Tourism for consideration; and
- determine whether other authorities are involved".

(DEAT, 1998:19)

Plan of study for scoping

A plan of study for scoping document must be prepared and submitted to the relevant authority for review. This plan must be approved by the relevant authority.

What is the purpose of a plan of study for scoping?

To provide a description of the tasks to be performed throughout the scoping process to indicate when and how the above mentioned tasks will be performed.

The contents of a Plan of Study for scoping include the following (DEAT, 1998:21):

- Description of the activity
- Description of tasks to be performed
 - Including:- identification of the issues and alternatives;
 - evaluation of concerns in order to prioritise issues;
 - developing a strategy for addressing and resolving key issues.
- Time-table of tasks
- Authority consultation
- Method of identifying issues and alternatives
- Description of the proposed public participation process

During phase 1 the applicant/consultant must also, according to DEAT (2002:11), identify I&APs.

2.4.2 Phase 2: Scoping

Most of the EIAs in South Africa end after this phase, meaning that all the identified environmental aspects/impacts are not only identified, but also resolved/answered (mitigatory measures are in place).

What does scoping mean?

According to Glasson, et al (1995:74) "scoping seeks to identify at an early stage, from all of a project's possible impacts and from all the alternatives that could be addressed, those that are the key, significant issues".

Petts (1999:202) states that "scoping usually takes place once an affirmative decision is reached on the question of screening, although scoping can contribute to the selection of alternatives or may be combined with the screening stage. The scoping stage aims to highlight, for further more intensive study, those impacts which will form an important part of the decision as to whether the project should be authorised. Scoping will indicate detailed information needs for the subsequent stages and can also be used to review alternative options for siting and design.

DEAT (1998:7) defines scoping as follows:

"The process of identifying the significant issues, alternatives and decision points which should be addressed by a particular EIR, and may include a preliminary assessment of potential impacts".

2.4.2 (a) Aims of scoping

The main aims of scoping are (DEAT, 1992c):

- To provide an opportunity for the proponent, his/her consultant(s), the relevant authorities and interested and affected parties (I&APs) to exchange information and express their views and concerns regarding a proposal before an impact assessment is undertaken;
- to focus the study on reasonable alternatives and relevant issues to ensure that the resulting impact assessment is of value to the decision-maker and addresses the concerns of I&APs and
- to facilitate an efficient assessment process which could save time and resources and could reduce costly delays which could arise if consultation could not realise.

Scoping, therefore aims to provide everybody (proponent, his/her consultant(s), the relevant authorities and I&APs) the opportunity to raise issues of concern and to identify environmental aspects (possible environmental impacts) associated with the proposed project.

This should help to ensure that the applicant (proponent) does not overlook any significant environmental impacts.

According to Petts (1999:202) “the scoping stage aims to identify and ‘narrow-down’ all the potential environmental impacts, so that the assessment focuses on the key issues. These key issues may be biophysical impacts or may relate to values, concerns and fears of the public and other groups. Scoping can also play a role in identifying impacts that may need to be monitored once the project is operational”.

2.4.2 (b) Who is responsible?

The proponent (applicant) as well as his/her independent environmental consultant is responsible to comply with the regulations in conducting the scoping process.

2.4.2 (c) The scoping process

After the first phase of the EIA has been completed (screening, application, etc.) the scoping process needs to be followed, which means:

- The proposed project is a listed activity according to the Environment Conservation Act.
- The relevant authority (DEAT) requires from the proponent that a scoping exercise has to be performed.
- An Application for Authorisation has been submitted to the relevant authority.
- The relevant authority approved the plan of study for scoping.

The following is a description of the EIA scoping process as required by the ECA (refer to phase 2 in the figure presented in Appendix A). Some best practices, according to the

Sasol Quality Management Systems 918 & 919 (Sasol, 2002a & 2002b) are also implied. These are not always necessarily required in the regulations:

- 1) Appoint an independent environmental consultant (if he/she was not appointed before or during the screening and application phase). It often happens that the applicant appoints an independent consultant to assist with the preparation and submission of the Application for Authorisation and the plan of study for scoping. The applicant may, however submit these documents to the relevant authority.
- 2) Conduct an internal scoping exercise (not requested in terms of the regulations – good practice).
 - Identify internally, environmental aspects with regards to the proposed project
 - Compile an aspect register, which lists all the identified aspects applicable to the proposed project.
- 4.) Prepare a background information document (not requested in terms of the regulations – good practice). (Refer to paragraph 6.5).
- 5.) Conduct the public participation process.
- 6.) Capture all identified environmental aspects and add to the aspect register.
- 7.) Determine the significance of potential environmental impacts.
- 8.) Prepare a draft scoping report and distribute to I&APs for comment (Refer to paragraph 6.6).
- 9.) Prepare a final scoping report and submit to the relevant authority and other consulting authorities, for review. Also make a copy of the final scoping report available to I&APs for their cognisance.
- 10.) Obtain a Record of Decision (ROD) from DEAT.

After a scoping report has been submitted, the relevant authority may decide either:

- that the information contained in the scoping report is sufficient for the consideration of the application without further investigation; or

- that the information contained in the scoping report should be supplemented by an environmental impact assessment which focuses on the identified alternatives and environmental issues identified in the scoping report.

2.4.2 (d) Background information document (BID)

What is the purpose of a BID?

To provide sufficient information to I&APs to constructively comment on the proposed project during the scoping process.

The contents of a BID should include the following:

- Description of the activity (including the purpose and need for the project, proposed actions, location, timing, method of operation, possible impacts, etc.);
- a brief description of the affected environment (the aspects already identified internally can also be highlighted in this document).

2.4.2 (e) Scoping report

The content of a scoping report should include the following (DEAT, 1998:22):

1.) A brief project description, which should include:

- A brief description of the activity to be executed, as required for the Plan of Study for scoping;
- A site plan of the project illustrating location of existing buildings and facilities, proposed components of the project and any infrastructure required to help realize the project (roads, rails, etc.)
- Where appropriate, schematic drawing and discussion of the project's production processes and technology;
- Estimates of the type of solid waste, liquid effluent, and gaseous emissions expected from the project and a brief discussion of plans for their treatment and disposal;
- Identification of the expected volume of water required for the project and an indication of its source and availability;

- Biophysical descriptions of the site, including the physical (relevant physical features and characteristics, such as landscape features, dynamics and patterns), biological (such as ecological processes and functions, species present and seasonal species, interrelationships of species and habitat) and social characteristics (such as patterns of land use);
- Only the environmental elements within the study area which are relevant to the project need to be identified and evaluated; and
- An estimate of the start and completion dates of construction and the number of construction and operational employees.

2.) A brief description of how the environment may be affected.

3.) A description of environmental issues identified; (the mitigatory measures may also be described here if it is finalised – not requested in terms of regulations but good practice).

4.) A description of all alternatives identified (also discuss advantages and disadvantages for each alternative).

5.) An appendix containing a description of the public participation process which has been followed, including a list of I&APs and their comments.

2.4.3 Phase 3: Environmental Impact Assessment

The authorities can require that a proposed project needs to go through the third phase, which is known as the environmental impact assessment phase, in other words that a full EIA be done. This will require the applicant/consultant appointed by the applicant to (Sasol, 2002a:14):

- submit a plan of study for EIA to the relevant authority;
- conduct specialist studies on specific identified environmental aspects;
- conduct public participation;
- submit an environmental impact report (EIR) including the relevant specialist studies to the relevant authorities;

- obtain a ROD from the authorities and ensure that the ROD conditions are met; and
- Advertise the ROD (I&APs can direct appeals regarding the said development).

2.4.3 (a) Plan of study for EIA

According to Sasol (2002a:7) a plan of study for EIA is the "indication of procedures to be followed for an EIA, if the relevant authority decides that the information contained in the scoping report should be supplemented by an environmental impact report (EIR)".

The plan of study for EIA should include the following (DEAT, 1998:25):

- Description of the environmental issues identified during scoping, including explanation of elimination of insignificant impacts where necessary;
- a description of the feasible alternatives to be further investigated;
- additional information required to determine potential impacts;
- method to be used for identifying impacts;
- method to be used for assessing significance of impacts; and
- project phases (the project has to be divided into four phases from which impacting activities can be identified – pre-construction phase, construction phase, operational phase as well as decommissioning phase).

2.4.3 (b) Environmental Impact Report (EIR)

According to Sasol (2002a:6) an EIR is "a report describing the process of examining the environmental effects of a development proposal, the expected impacts and the proposed mitigation measures".

The contents of an EIR must contain the following (DEAT, 1998:28):

- A description of each feasible alternative – including the extend and significance of each identified environmental impact. Furthermore the possibility for mitigation of each identified environmental impact should be reflected.

- The assessment of impacts according to assessment criteria – including the nature of the impact, extent (local, regional or national), duration (short-, medium-, long term or permanent) as well as intensity (low, medium or high) and probability.
- Determination of significance. This can be described as low medium or high, where low would not have an influence on the decision and high would influence the decision regardless of any possible mitigation.
- Mitigation – which may include options such as alternative ways in meeting the need, changes in planning and design, improving monitoring and management, monetary compensation and replacement and relocation of affected environments.
- Addressing of key issues.
- A comparative assessments of the feasible alternatives
- Appendices – including descriptions of environment concerned, the activity to be executed, the public participation process followed, media releases and other appropriate information included in the plan of study.

2.5 REVIEW, DECISION-MAKING AND AUTHORISATION OF THE EIA PROCESS IN SOUTH AFRICA

The purpose of review is to provide an evaluation of the strengths and weaknesses of a proposal or of the assessment reports submitted. On the basis of this review, a decision is taken as to whether the proposal should be approved or not (DEAT, 1992a:5).

According to Glasson, et al (1995:6) review involves a systematic appraisal of the quality of reports, which forms part of the EIA, as a contribution to the decision-making process.

“The purpose of EIA is not just to assess impacts, it’s to improve the quality of decisions” (Petts, 1999:127). The power to mobilise and influence decision-making will

be unevenly distributed within this political process. Various stakeholders in the EIA process may view it differently, e.g. pressure groups. Retaining a healthy scepticism of its effectiveness and impact on decisions requires that stakeholders should be kept well informed about proposed developments. Others might view it as a hindrance and seek to circumvent it by limiting its integration into the decision-making process, and limiting its scope, thereby minimizing guidance and good practice procedures (Petts, 1999:127).

2.5.1 Review

a) What is review and the purpose thereof?

According to Glasson, et al (1995:141) the purpose of the review of the EIA proposal is to evaluate the strengths and weaknesses of the proposal and to provide the basis for deciding whether the proposal should be approved or not.

DEAT (1998:29) states that "reviewing is the step in the EIA process that:

- Determines whether the EIR on an identified activity is an adequate assessment, and of sufficient relevance and quality for decision-making;
- collects and collate the range of stakeholder opinion about the acceptability of the proposal and the quality of the EIA process undertaken;
- ensures that the EIR and process complies with the plan of study; and
- determines whether the application complies with the required regulations".

When an EIA is conducted for a proposed activity, various reports (e.g. scoping report, an environmental impact report, etc.) need to be prepared and distributed to various parties for perusal. These parties include interested and affected parties, specialists (when required), relevant authorities, etc. The cognisance of the various reports in the different phases of an EIA therefore provides a basis for decision making by the authorities, whether a proposed activity should go ahead and finally authorizing it.

b) Review during the EIA process

Review during the EIA process will be discussed by referring to the figure in Appendix A and the explanation of the EIA process, as discussed in paragraph 2.4 of this report.

During phase 1 which includes screening, application for authorisation and consultation with the authorities, requires review for the following documents/reports:

- **Plan of Study for Scoping**

The relevant authority must review the plan of study for scoping before scoping can commence. The review of this report will determine whether the procedures and legal requirements were met thus far and whether the plan for conducting the scoping and public participation is acceptable (DEAT, 1998:22).

The plan of study for scoping, which can be seen as a contract between the authorities and the independent environmental consultant, can be reviewed until the authorities are satisfied. (Smit, 2002:7).

Phase 2 which includes the scoping exercise as well as public participation, requires review for the following documents/reports:

- **Scoping Report**

According to DEAT (1998:24) the "scoping report must be reviewed by the interested parties (public), by specialists and all the relevant authorities".

The public must review the scoping report to ensure that all their issues/concerns have been incorporated in the report to be studied further in the environmental impact report (Smit, 2002:7). In most instances the scoping report will not only include the environmental issues as identified throughout the scoping process but it will also address these issues. The Public will then have the opportunity to see whether their issues/concerns have been adequately addressed.

According to Smit (2002:7) specialists will review the scoping report “to ensure that highly technical issues are being dealt with on the correct level”. DEAT (1998:24) states that scoping reports need not be reviewed by specialists, only when it is highly technical or when the relevant authority lacks the expertise to assess the report.

The authority review in this regard should determine whether the procedures and legal requirements were met thus far in the EIA process and whether the plan of study was followed. It will also determine if adequate attention has been paid to the reasonable range of alternatives and the main issues identified to guide the scoping to the EIR, if required (DEAT, 1998:24).

Phase 3 (the Environmental Impact Assessment Phase), which includes specialist studies, an environmental impact report (EIR), additional public participation and the appeal process requires for the following documents/reports to be reviewed:

- **Plan of Study for an EIA**

The relevant authority must review the plan of study for an EIA before the applicant commences work on the specialist studies and before submitting an EIR. The review of the plan of study for EIA may include compliance with the regulations, organisation of the information, presentation of information, public participation and the quality of the plan of study for EIA (DEAT, 1998:22).

The plan of study for EIA, which can be seen as a contract between the authorities and the independent environmental consultant, can be reviewed until the authorities are satisfied (Smit, 2002:7).

- **Environmental Impact Report (EIR)**

According to DEAT (1998:29) "the EIR should be reviewed by the relevant authority with the assistance of the other authorities involved, specialists, all interested parties and the public".

The public must review the EIR to ensure that all their issues/concerns have been incorporated in the specialist studies in this report (Smit, 2002:7).

Similar to the scoping report, the authority review for the EIR should determine whether the procedures and legal requirements were met throughout the EIA process and whether the plan of study for EIA was followed.

According to Smit (2002:7) it will also determine whether "all issues in the plan of study has been incorporated in the EIR to ensure that an informed decision can be taken".

- **Appeal**

According to DEAT (1998:30) the Environment Conservation Act, 1989 makes provision for any person who feels aggrieved by a decision made by the relevant Authority, in terms of the EIA regulations, to appeal. 'Any person', according to DEAT (1998:30) includes "the applicant, interested party or member of the public".

During an appeal the minister or MEC must apply his/her own mind without the authorities getting involved. Advisors may be appointed by the MEC or minister to advise on the reaction to the appeal (Smit, 2002:8).

According to Smit (2002:7) specialists will review the scoping report "to ensure that highly technical issues are being dealt with on the correct level".

c) Participants in the review process and their responsibilities

As was mentioned in paragraph 2.5.1b there are a number of reports/documents that require review by various participants or reviewers.

According to the University of Potchefstroom (1999:166) the reviewers' tasks are to assess the content and comprehensiveness of reports/documents. Adequacy of information as well as the quality of work presented also needs to be assessed.

The task of reviewers also includes the identification of issues/aspects not covered in the applicable reports, any inaccuracies presented as well as apparent potential conflicts. They also need to identify logic problems with regards to information presented in reports as well as any constraints with regards to the proposed activity (University of Potchefstroom, 1999:166).

Reviewers of an EIA therefore need to assess and identify certain important aspects as discussed above.

The participants in the review process include the following:

- **Authorities**

According to DEAT (1992a:5) the decision-making authority or the lead authority to which a particular proposal is submitted, carries overall responsibility for assessing the adequacy of the document(s). DEAT (1992a:6) states that "authority reviewers need to ask three questions:

- What form should the review take?
- Is further information required to make a decision?
- Is the proposal or assessment an acceptable document on which a decision may be based?"

The lead authority decides which of the other government departments/authorities should be involved in the review process of a proposal. These "other authorities" are referred to as commenting authorities in the EIA process and may include amongst others DWAF (Department of Environmental Affairs and Tourism), DME (Department of Minerals and Energy Affairs) and CAPCO (Chief Air Pollution Control Officer).

The type of activity, which is dealt with under a specific EIA, will lead the decision-making authority to involve relevant other authorities in the review process.

According to Smit (2002:5) the authorities can appoint specialists to assist in the review of highly technical EIAs.

- **Interested and affected parties (public)**

According to (Glasson, et al, 1995:142) the public (interested and affected parties) reviews the proposal during the scoping phase in order to identify issues and proposed alternatives omitted or not considered before.

The scoping phase may also include mitigation measures for identified aspects/issues, which need to be reviewed by I&APs.

The extent of public review of a proposed activity as part of an EIA is generally determined during the scoping process. Public review should be seen as a way in which the I&APs can be sure that their concerns have been adequately addressed and that factual information in the report is adequate. It should not be seen as a delaying tactic (DEAT, 1992a:6).

The Consultative Forum on Mining and the Environment (2002:33) states that "stakeholders should have the opportunity to verify that all issues they have raised have indeed been captured and considered".

It is important to note that I&APs play a great role in the review process to assist the authorities in their decision-making, but also that the I&APs are not making the decision at the end of the day.

- **Specialists**

As mentioned above, the specialist review is a step which may be required by the decision-making authority. Specialists may also be required for review if identified as necessary during the scoping process.

A qualified specialist may review the procedure followed in the assessment and check on the adequacy and thoroughness of the information in the relevant reports/documents (DEAT, 1992a:6).

According to DEAT (1992a:6) "the following assessments or proposals should be considered for specific issues:

- Highly technical proposals;
- proposals where the decision-making authority is also the proponent;
- proposals where the planning consultant is also the assessor; and
- proposals for which the authority lacks the expertise to assess".

- **Project Team of the applicant**

Another reviewer, which was not mentioned before, is the project team of the applicant. The project team will most probably consist of a group of people (engineers) with the most expertise of all the reviewers with regards to the proposed activity. It is therefore very important that all reports/documents prepared in the EIA process should be reviewed for correctness of accuracy by the project team (Sasol, 2002a:11).

d) Review Criteria, Framework and Aids

According to DEAT (1998:29) the basis of general procedural review criteria are the following:

- legal requirements;
- quality of scoping;
- quality of impact prediction;
- quality of determining impact significance;
- assessments of alternatives;
- quality of mitigation proposed; and
- public participation process.

Glasson, et al (1995:154) states that effective review criteria should allow a competent authority to:

- ensure that all relevant information has been analysed and presented;
- assess the validity and accuracy of information contained in the various reports;
- quickly become familiar with the proposed project and consider whether additional information is needed;
- assess the significance of the project's environmental effects;
- evaluate the need for mitigation and monitoring of environmental impacts; and
- advise on whether a project should be allowed to proceed.

The review criteria as described by the two references above are more or less the same. DEAT however did not add monitoring of environmental impacts to their list of criteria, which should be highlighted as a very important part of any EIA. Glasson on the other hand missed the public participation process as part of their review criteria, which can not be left out.

All of the reports/documents, which form part of the EIA process, as discussed in paragraph 2.5.1b above need to be reviewed. A review framework can be drawn up in the form of yes/no questions for the proposed review criteria used. Tomlinson in

Glasson, et al (1995:154) proposed nine main issues to be used as review criteria in such a framework: administration/procedural requirements, effective communication, impact identification, alternatives, information assembly, baseline description, impact prediction, mitigation measures and monitoring/audits.

Lee and Colley (1990) in Glasson, et al (1995:154) proposed a hierarchical review framework. At the top of the hierarchy is a comprehensive mark A (well performed and complete) through to F (very unsatisfactory) for the entire report. This mark is based on marks given to four broad sub-headings:

- description of the development, local environmental and baseline conditions;
- identification and evaluation of key impacts;
- alternatives and mitigation of impacts; and
- communication of results.

These criteria should act as a checklist when reviewing the various reports (scoping, EIR, etc).

The University of Potchefstroom (1999:182) suggests the following aids to assist with review:

- Regulations
- DEAT Guidelines
 - Checklist of environmental characteristics
 - Guidelines for Scoping
 - Guidelines for Report Requirements
 - Guidelines for Review
 - Guideline Document for EIAs
- Site visits
- Expertise in other departments
- Consultants
- Books on EIA process

- Internet

DEAT (1992a:7) refers to mostly the same aids to assist the review process. In addition to the list above, they refer to DEAT Guideline Document 1 (A List of Environments), which would alert the reviewer if particularly sensitive areas are involved.

e) Review problems

The following problem areas for reviewers are highlighted by DEAT (1992a:11):

- **Defining significance**

Significance is not easy to define and it is bound to a subjective judgment, as there are no objective measures which can be used to judge significance. Context (spatial dimension and time dimension) and intensity should both be considered when judging significant impacts. Intensity is the severity of the impact, which results from an action as judged either by some knowledgeable authority or by the people affected by the impacts.

- **Cumulative impacts**

Dealing with cumulative impacts usually requires coordinated institutional arrangements, which are sometimes difficult to achieve, due to the fact that such effects can be local, regional or global in scale. It also typically crosses jurisdictional boundaries.

- **Bias**

According to DEAT (1992a:12) "clients may attempt to bias an assessment by placing restrictions on the scope of the study when formulating the terms of reference for the assessment. A common problem is the tendency for clients to omit an assessment of the social implications of a development. A further concern is the reluctance to involve I&APs, often due to doubt on behalf of professionals of the general public's ability to meaningfully contribute to project planning".

- **Confidentiality**

Reasons for secrecy in the private sector include competitive advantage and concerns that ideas might be stolen. Therefore as few people as possible are drawn into initial project planning and often authorities and environmental consultants are excluded, which leads to delays in approval and construction.

The University of Potchefstroom (1999:167) mentions the following review problems:

- Lack of technical expertise – the authorities as well as I&APs reviewing reports can lack the expertise and add little value to the decision making process.
- Rely on Professional Judgments of Proponents' Specialists – which makes the review process dependent on non independent people.
- Financial constraints
- Time constraints
- Limited staff

The latter three problems mentioned above, go hand in hand as financial constraints. This may lead to limited staff which will eventually cause reports/documents not being reviewed on time and unauthorised proposals at hand.

2.5.2 Decision making and Authorisation

a) What does decision-making entail?

According to DEAT (1992b:8) decision-making consists of review, record of decision and appeal:

- **Review**

Should the authority be satisfied that sufficient information is provided in order to make a decision (sufficient consultation with I&APs has taken place and the proposal complies with requirements) then a decision as to the acceptability of the proposal should be taken (DEAT, 1992b:8).

Authorisation can be defined as the approval of a proposal in writing after considering the strengths and weaknesses of the application. The relevant authorities will grant authorisation to execute a listed activity in terms of Section 22(1) of the Environment Conservation Act and will refer to the relevant activity in terms of Government Notice R1182, which is applicable to the proposal.

- **Appeal**

According to DEAT (1992b:8) "the decision-making authority must provide an opportunity for appeal. Besides appealing to the decision-making authority, appellants should also be allowed to appeal to a court of law if malpractice is suspected".

DEAT (1994:30) states that an appeal may be lodged by any person to the Minister or provincial authority under section 35 (3) of the Environment Conservation Act. It must be done in writing within 30 days from the date on which the record of decision was issued to the application.

An appeal must set out all the facts as well as the grounds of the appeal and must be accompanied by all relevant documents or copies of them which should be certified as true by a commissioner of state.

According to Glasson, et al (1995:158) the range of decision options for any application is as follows: "the competent authority can grant permission for the project (with or without conditions) or refuse permission. It can also suggest further mitigation measures following consultations and will seek to negotiate these with the developer".

Glasson, et al (1995:159) also states that the developer can appeal against the decision if the development is refused. On the other hand, if the development is permitted, people or organisations can challenge the permission in the form of an appeal.

b) Decision makers and the decision making environment

Developments tend to have four main groups of actors or stakeholders: The developers/proponents; the affected parties/often opponents; the facilitators (especially consultants: they may work for whoever hires them); and the regulators. The latter group includes the competent authorities to whom the environmental information is submitted. They could be local authorities or state environment commissions (Petts, 1999:126).

All of the parties mentioned above will play an important role in the decision-making process, especially the review process, which is part of the decision-making stage of the EIA (refer to paragraph 2.5.1c for responsibilities of role players in the review process).

The ultimate decision lies with the relevant authority.

c) Methods & Criteria for environmental impact assessment in Decision-making

Methods

Methods are used for rationalising some of the trade-offs involved and the perspectives of various participants. Petts (1999:127) states that "one family of techniques clusters around cost-benefit analysis and the attempt to express impacts in monetary units". They include the popular contingent valuation method, in addition to hedonic pricing, travel cost pricing and averted expenditure".

"Lichfield's planning balance sheet (PBS), and his recent development of community impact evaluation (CIE), provides a bridge between the monetary and non-monetary approaches, which seeks to build distributional issues much more into decision-making" (Lichfield, 1996 in Petts, 1999:127). Some kind of simple scoring and weighting system is utilised by the methods. This however implies a too rational technocratic approach for many decision-makers. A research study for the UK Department of the Environment found skepticism among both planning officers and elected decision makers.

Criteria

Synthesizing the various relevant criteria from several countries over a 10-year period, the following are identified as particularly important in assessing the impacts of EIA on decisions (Petts, 1999:128):

- centralised decision-making (i.e. to what extent does EIA make a difference?);
- integration in the project cycle and approval process (i.e. to what extent is EIA easily bypassed?);
- consistency in application of development proposals;
- fairness in application, providing opportunities for participation and contributions to the process by all relevant stakeholders;
- flexibility in terms of application to various stages in the EIA process (e.g. from consideration of alternatives to implementation of project modifications);
- scope in terms of considering a range of environmental factors, both bio-physical and socio-economic.

2.6 CONCLUSION

The EIA process will assist in determining how a new project will impact on the environment, during construction as well as during commissioning and operations. EIAs assist and support decision-making. The EIA is an aid to the formulation of development actions; an instrument for sustainable development and last but not least, it ensures public involvement in the execution of identified activities.

A latter stage of the EIA process includes review, decision-making and authorisation. No project may proceed (with construction or operations) before the relevant authorities grant authorisation. In order to make a decision, the relevant reports must first be reviewed.

The Application procedure / EIA process to be followed to obtain authorisation to commence with a listed activity can be divided into three phases:

- Phase 1: Screening/Application for Authorisation/Plan of study for scoping
- Phase 2: Scoping
- Phase 3: Environmental Impact Assessment

The first phase of the EIA is deciding on whether the nature of the action and its potential impacts are such that it should be submitted to environmental assessment. The first phase also requires a plan of study for scoping to be submitted (if an EIA is required) and reviewed by the relevant authority. No public participation is required during this stage. However, by just asking two or three local people what the real issues are, it can enrich this early stage tremendously.

The second phase is the identification of significant issues, alternatives and decisions which should be addressed by a particular EIR and may include a preliminary assessment of potential impacts. The second phase requires public participation to ensure that interested and affected parties are systematically and proactively afforded an opportunity to share their knowledge and concerns on developments.

What does scoping mean?

According to Glasson, et al (1995:74) "scoping seeks to identify at an early stage, from all of a project's possible impacts and from all the alternatives that could be addressed, those that are the key, significant issues".

The third phase is where the authorities require that a proposed project go through a full EIA and an environmental impact report (EIR) needs to be submitted. Public participation is also a requirement during this stage.

The purpose of review is to provide an evaluation of the strengths and weaknesses of a proposal or of the assessment reports submitted.

When an EIA is conducted for a proposed activity, various reports (e.g. scoping report, an environmental impact report, etc.) needs to be prepared and distributed to various parties for review. These parties include interested and affected parties, specialists (when required), relevant authorities, etc. The reviewing of the various reports in the different phases of an EIA therefore provides a basis for decision making by the authorities, whether a proposed activity should go ahead and finally authorizing it.

Public participation therefore plays a great part in the review of EIA documents.

The public (interested and affected parties) reviews the proposal during the scoping phase in order to identify issues and propose alternatives not considered before. The scoping phase may also include mitigation measures for identified aspects/ issues, which need to be reviewed by I&APs.

The extent of public review of a proposed activity as part of an EIA is generally determined during the scoping process. Public review should be seen as a way in which I&APs can ensure that their concerns have been adequately addressed and that factual information in the report is adequate. It should not be seen as a delaying tactic.

It is important to note that I&APs play a major role in the review process to assist the authorities in their decision-making. However, I&APs are not making the decision at the end of the day.

CHAPTER 3: PUBLIC PARTICIPATION DEFINED

3.1 WHAT IS PUBLIC PARTICIPATION?

3.1.1 General

According to Wood (1999:147) participation is a process of engagement, where people are enlisted into the decision process to contribute to it. Participation methods provide for exchange of information, predictions, opinions, interests and values.

Thornhill (2001:1) states that "public participation is no longer a voluntary exercise but an integral part of our democratic society. It is aimed at improved decision-making."

Kinhill Engineers (1994:i) explains that "this involvement can take many forms and can derive from either a legal right to participate at particular stages of a process or from invited or imposed opportunities to participate".

DEAT (2002:7) states that the range of definitions for 'participation', presented by various public participation practitioners throughout the world, differ widely in the degree to which I&APs influence decision-making.

DEAT (2002:7) refers to the stakeholder engagement spectrum, adapted from IAP2, 2000, which describes the increasing levels of public engagement in the decision-making process.

According to DEAT (2002:7) the different levels of the spectrum range from protest to empower. DEAT (2002:7) refers to protest as "the efforts of I&APs to influence decision-making through challenging specific, visible targets".

DEAT (2002:7) also mentions that "protest is adversarial" and therefore it will not be discussed further in this document.

Figure 3.1 shows the spectrum of increasing levels of engagement between stakeholders in the decision-making process, with a definition and an objective for each level.

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
D E F I N I T I O N	"Provision of information to inform stakeholders of a proposal, activity or decision". (DEAT, 2002:7)	"Exchange of information between stakeholders, which provides an opportunity for stakeholders to raise concerns and comment the impacts and merits of a proposal or activity before a decision is made". (DEAT, 2002:7)	"Builds on the consultation process and refers to the process in which stakeholders work together to ensure that concerns and issues are directly reflected in the planning, assessment, implementation and management of a particular proposal or activity". (DEAT, 2002:8)	"Refers to the process of shared decision-making in which all stakeholders constructively explore their differences and develop a joint strategy for action". (DEAT, 2002:8)	"Stakeholder engagement has reached the level of full empowerment, the responsibility for decision-making and accountability for the outcome have been delegated from the authority to the proponent and/or I&APs". (DEAT, 2002:8)
O B J E C T I V E	"To provide balanced and objective information to improve understanding of the issues, alternatives, and/or solution". (DEAT, 2002:8)	"To obtain feedback from stakeholders on analysis, alternatives and/or decisions". (DEAT, 2002:8)	"To work directly with stakeholders throughout the process to ensure that issues and concerns are consistently understood and considered". (DEAT, 2002:8)	"To partner with the stakeholders in each of the decisions, including the development of alternatives and the identification of the preferred solution". (DEAT, 2002:8)	"To place final decision-making in the hands of the stakeholders". (DEAT, 2002:8)

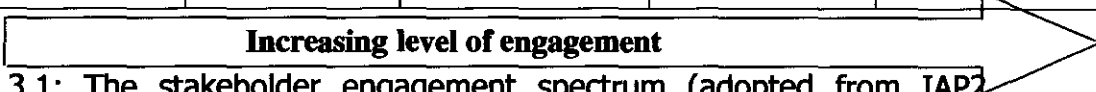
Increasing level of engagement 

Figure 3.1: The stakeholder engagement spectrum (adopted from IAP2, 2000)

DEAT (2002:9) states that "the right level of engagement will depend on the particular situation and circumstances".

According to Greyling (2001:5) public participation addresses the "process objectives of a project in order to distil or add to the content of the project. Content objectives refer to "hard" information: facts based on scientific and technical study, statistics of technical data. The public participation is a vehicle or tool to help in gathering or expanding the content".

It is important that all the role players pursue a common goal through the public participation process.

In Figure 3.2(a) there is "no common goal, no joint vision for improved decision making and no proposed framework within which to achieve this. In such a situation, public participation how extensive and well meaning it may be, polarizes stakeholders' viewpoints".

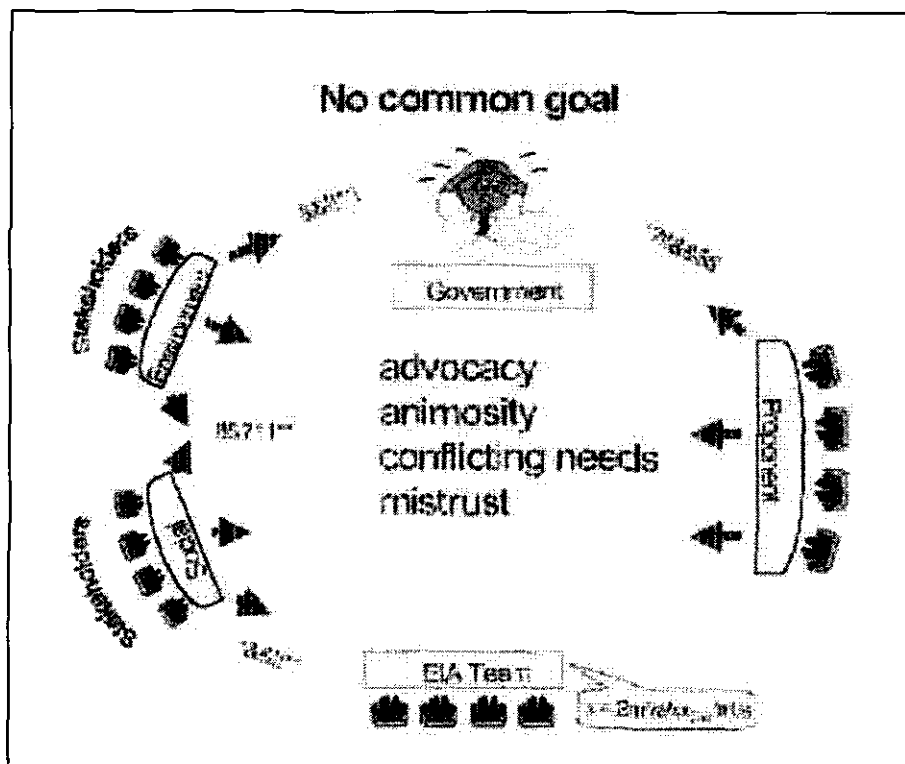


Figure 3.2(a): No Common goal, no joint vision for improved decision making and no proposed framework.

Greyling (2001:6)

Figure 3.2(b) illustrates a situation where the “collective wisdom of the project proponent, its technical consultants, the authorities and stakeholders representing a wide range of perspectives, share a common goal – sustainability – and together work towards achieving this goal in the best interests of everyone involved.

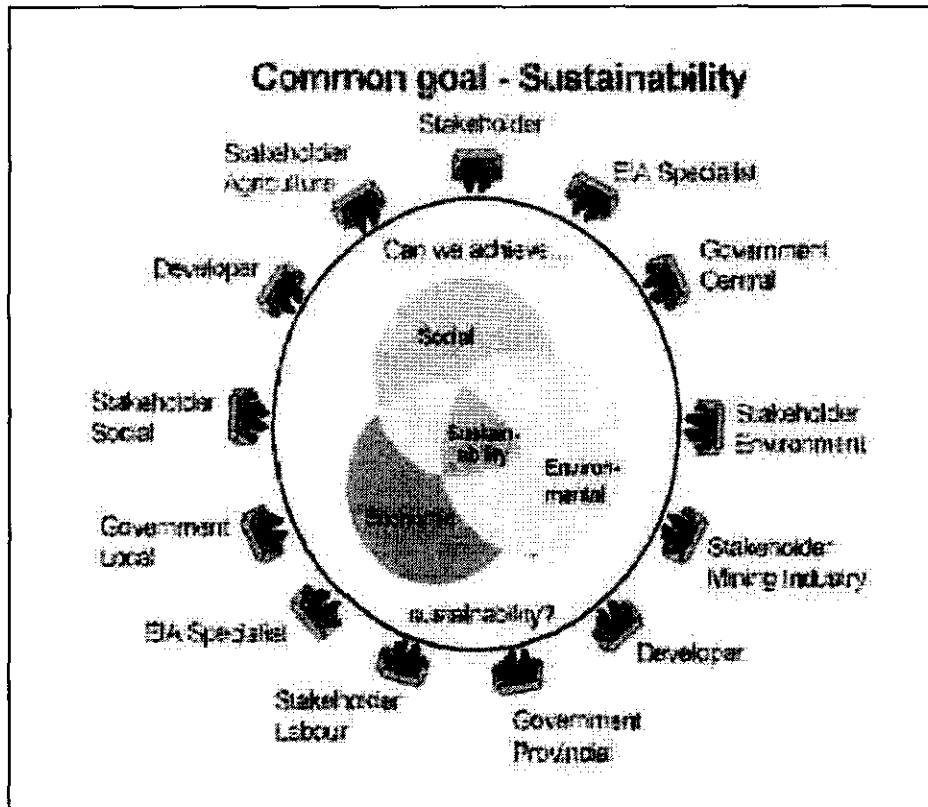


Figure 3.2(b): A common goal of sustainability is shared.
Greyling (2001:6)

3.1.2 Defining Public Participation

Sasol (2001:4) defines participation as “a process of consultation with interested and affected parties through which their input is obtained and they influence environmental decision-making” and public involvement/participation as “the process of involving the public in decision-making”.

According to DWAF (2001:5) the term "public participation" describes a variety of relationships between the implementing agency and its stakeholders. The nature of a planned public participation process will depend on what is planned and the goal of the initiative. In some instances, the public only needs to be informed about certain initiatives or aspects of it. Other initiatives require public opinions and views in order to improve decisions and the sustainability of the initiative.

According to EPA (1994:1) "public participation is the involvement of members of the community in decision-making processes. This involvement can take many forms and can derive from either a legal right to participate at particular stages of a process or from incited or imposed opportunities to participate".

Sasol (2002a:4) defines public participation as a process in terms of which the public is systematically and proactively afforded an opportunity to share their knowledge and concerns on developments, programs and policies with a view to the promotion of informed and generally acceptable authority decisions.

Greyling (1999:1) developed the following definition for public participation: "Public participation is a process leading to a joint effort by stakeholders, technical specialists, the authorities and the proponent who work together to produce better decisions than if they had acted independently".

The definitions above have important similarities:

- Public participation is a process which allows I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project and to put alternatives forward.
- Public participation is a process which assists to provide authorities with information to be able to make better decisions.

3.1.3 What Public Participation is not

To understand what public participation is, one should also recognise common misunderstandings regarding public participation.

It is important to note that public participation is not decision-making.

According to DWAF (2001:1) public participation must not be confused with decision-making. The Minister or his delegated nominees, or assignees are responsible and accountable for all decisions made by the Department.

According to DWAF (2001:1) public participation does not mean that the public makes decisions together with the decision-makers. Rather, it means that the public's views are available to decision-makers and are considered in the decision-making process.

Andrews (1999:5) explains public participation in the environmental sphere as "not as far reaching as negotiation, in which the parties try to reach an agreement. But it is at least an opportunity for the public to contribute meaningfully before a decision is made".

There are many misunderstandings about the purpose of public participation. These misunderstandings can cause further misconceptions and unnecessary delays and fears. Greyling (1999:4) mentions the following about public participation:

- Public participation is not public relations – it should not promote the proposed project, but merely present the information in an objective way.
- It does not imply that every individual or organisation in the study area needs to be personally consulted. According to Greyling (1999:4) public participation "aims to generate issues representative of the various sectors of society, not of every individual". In the case of large, linear projects (e.g. pipelines) there could be literally millions of people living in a 100-km corridor either side of a route. Greyling (1999:4) states that "it is not practical, possible or necessary to consult with millions of people.

What is, however necessary, is to provide the broadest possible range of sectors of society the opportunity to contribute, and to be able to prove this". It is therefore necessary to obtain the group's or the sector's view, and not that of every individual or organisation in the group or sector.

- It does not constitute the proponent's neighbour or community relations.
- Public participation is not a negotiation process between the proponent and affected land owners.
- It does not necessarily aim at consensus.
- It does not constitute conflict resolution.
- It can not be done by way of petitions. A petition (simple yes/no answer) cannot capture the issues of concern so that they can be evaluated and addressed.

3.2 AIMS/OBJECTIVES OF PUBLIC PARTICIPATION

Public participation improves decision-making, sustainable development and normalised attitudes of stakeholders in the long term. Effective public participation also results in short-term benefits (e.g. allaying undue fears and countering undue expectations and it can generate commitment in stakeholders) that may add to the success of an initiative (DWAF, 2001:9).

To "normalise the attitudes of stakeholders", according to DWAF (2001:6) means that "certain behavioural patterns have grown out of the dynamics of exclusion and marginalisation in South Africa's history. Public participation can contribute to normalising human behaviour to achieve positive human growth by changing the attitude and beliefs adopted by people living in a hostile environment. The current political and socio-economic situation in South Africa benefits from public participation as a means of facilitating co-operation between previously segregated sectors".

According to Thornhill (2001:1) the aim of public participation is to address specific developmental problems. Public participation is critical for decision-

making and seeks to integrate economic, social and environmental concerns. The public participation allows all people to work together to produce better decisions and allows authorities the ability to facilitate a better decision (Thornhill, 2001:1).

Institutions charged with the responsibility for governance all over the world, according to Sasol (2001:5) are "becoming more willing to develop some degree of autonomy in decision-making to local communities. This, it is believed, broadens the ownership of such decisions and therefore promotes sustainable development".

According to the environmental protection agency (EPA) (1994:5) benefits of public participation in environmental decision making identified by Robinson (1992) are:

- "Participation increases the accountability of administration
- Participation is consistent with expert and efficient administration
- Participation can improve the quality of decision making
- Participation can increase credibility and public confidence in final decisions".

Greyling (1999:2) states that developers, authorities and stakeholders should read for public participation, respectively, the following:

- Developers: "They will help us to think."
- Authorities: "They will help us to understand the environment and social consequences of our decisions."
- Stakeholders: "They will understand our concerns and suggestions and consider them fairly along with all others."

3.3 HOW TO ACHIEVE AIMS/OBJECTIVES OF PUBLIC PARTICIPATION

3.3.1 Principles and values of public participation

a) Values

The International Association for Public Participation (2003) developed seven core values for the practice of public participation:

1. The public should have a say in decisions about actions that affect their lives.
2. Public participation includes the promise that the public's contribution will influence the decision.
3. The public participation process communicates the interests and meets the process needs of all participants.
4. The public participation process seeks out and facilitates the involvement of those potentially affected.
5. The public participation process involves participants in defining how they participate.
6. The public participation process communicates to participants how their input affects the decision.
7. The public participation process provides participants with the information they need to participate in a meaningful way.

b) Public participation principles in general

Worldwide, public participation has for many decades been widely acknowledged as a potential or partial solution to environmental and policy problems and decision-making. Precisely which stakeholders should be involved in which way, when, and to what degree, however, has been the subject of a tremendous amount of argument, disagreement, experimentation and theorising. Annually, these issues are still debated by public participation practitioners from across the globe at the annual conference of the International Association for Public Participation (Greyling, 1999:1).

Along with the rest of the world, according to Greyling (1999:6), we are still striving to “find the ultimate process, the one in which everyone will be equally happy with the process as well as the outcome, the one which will not result in delays to development, frustration for stakeholders or confused messages to authorities”.

Many practitioners, organisations and companies have developed principles for appropriate public participation, discussed below.

Kinhill Engineers (1994:5) developed guiding principles for EIA. Due to the fact that the key elements of these principles relate to public participation, it can be discussed under principles for public participation as well. These principles include:

- Transparency, which can be achieved if all participants clearly understand all elements of the EIA.
- According to Kinhill Engineers (1994:5) “committed opportunities for participation in the EIA process would assist the certainty of the process for all parties even if the number and type of opportunities are not consistent with the views of all parties”.
- Accountability

An important fact about public participation is that every process differs from the next one. For each project the public participation process consists of different stakeholders, is conducted in different areas, needs different consultation methods and is conducted in a different language (Greyling, 1999:7).

However, a number of principles can be applied to every public participation process - regardless if no two processes are similar.

Greyling (2001:11) explains the following overarching principles:

- Flexibility - The process; must be sufficiently flexible to accommodate local needs, and appropriate to local circumstances. The challenge is to understand the local circumstances and to design a process that will enrich decision-making.
- Inclusivity - The process must include all sectors, perspectives and interests of society.
- Transparency and honesty - Transparency and honesty must characterize the process. There must be no hidden agendas.

DWAF (2001:15) mentions the following 16 principles, which underpin public participation:

- Inclusive involvement of stakeholders – all relevant stakeholders have the opportunity to be involved in the initiative.
- Integration – the inclusion of both, public issues and technical assessments, in public participation processes that contribute to decision-making.
- Mutual respect among role-players – role-players should acknowledge and respect each other's knowledge, abilities and inputs.
- Continuity in participation – role-players should participate throughout the initiative.
- Consideration of multiple options – Stakeholders should be allowed the opportunity to consider various alternatives within an initiative.
- Flexibility – refers to the need for public participation to adopt to different circumstances.
- Transparency – public participation should be honest, open and equitable.
- Rights and roles – the principle of rights and roles strengthens role-players' understanding of their own and other role-players' contribution to the success of public participation.
- Accountability and Commitment – role-players should be encouraged to take responsibility for the process of public participation.
- Accessibility to information – enables effective participation by supporting stakeholders to be well-informed and knowledgeable.

- Awareness creation – stakeholders should be made aware of issues affecting them and how they might influence the outcomes of the process.
- Capacity building and Empowerment – all stakeholders should be granted both the opportunity and support to participate meaningfully.
- Efficiency – the public participation plan should maintain the momentum of a clear and definite process.
- Suitability of scale of involvement – stresses the fact that the intensity of public participation is relative to the impacts of the decision and suitable to the scale and type of initiative.
- Feedback to and from stakeholders – refers to a flow of information that establishes trust and assurance among stakeholders and the consistent involvement of all.
- Monitoring and evaluation – aims at minimising mistakes in the process - both in the present and future - by applying lessons learned from the past.

Experience shows (Greyling, 1999:7) that stakeholders in a public participation process participate more constructively if the following good practice principles are followed:

- All sectors and perspectives of society should be included in the process.
- One single interest group should not dominate the process.
- It should be well communicated that stakeholders have the opportunity to comment.
- Key stakeholders should be identified in advance and special efforts should be instituted to consult them.
- Information should be sufficient and meaningful to ensure stakeholders to contribute meaningful.
- Consultation must be done according to ability (e.g. highly technical documents should not be presented to non-technical stakeholders, some stakeholders can listen better than read).
- Stakeholders should be allowed more than one opportunity to comment throughout the process, and via various methods (e.g. meetings, workshops, comment sheets etc.).

- Grassroots consultation should be encouraged.
- Enough time should be allowed for stakeholders to comment.
- Stakeholders are responsible to familiarise themselves with the necessary documentation, to submit comments, to participate, contribute from the beginning of the process and to rise above their personal agendas.
- Previously disadvantaged people should require special attention to ensure their involvement due to the fact that they do not speak English, had little schooling, have no recourses to travel to meetings, etc.

The following are some of the principles Greyling (1999:7) states to be relevant under the various groups of participants in the process:

Proponent of the project

- Should believe in the value of public participation.
- Should understand that public participation takes time.
- Should have empathy with non-technical stakeholders.

Facilitator

- Has to be independent.
- Should ensure that stakeholders' comments are fairly considered.
- Should understand what the issues of the stakeholders really entail.
- The facilitator should be able to separate issues from personalities and cultural perspectives.
- Should be able to have empathy with all viewpoints, but in the same time prevent vociferous viewpoints from being the only ones that are heard.
- Must have good facilitation skills.
- Demonstrate commitment to the highest standards of integrity and ethics.

Technical specialists

- Specialists should have a true belief in the value of public participation and a clear demonstration of the desire to hear other views.
- Should have empathy and patience with non-technical people.

- Should ensure accuracy of technical information to be presented in a non-technical way.
- Should be willing to present technical work in an understandable way to non-technical people.
- Should use the issues raised by stakeholders as a reality check to ensure that the terms of reference for technical evaluation capture the concerns that must be investigated.

Sasol (2001:7) came up with three groups of principles:

- Group 1 – Principles relating to public involvement, which deal with the identification of the public who should participate in the process.
- Group 2 – Principles relating to the process, which address the numerous techniques for engaging with the identified stakeholder groups in order to render the process efficient and effective.
- Group 3 – Overarching principles, which are to be observed in any public participation process.

c) Principles relating to Public involvement

The following principles relate specifically to public involvement:

- Inclusivity, which is defined by Sasol (2001:7) as “a state of accommodation of all interested and affected parties and all views and opinions in the process of public participation”. According to Sasol (2001:7) it is a legal as well as ethical dictate for public participation. NEMA requires, for instance, a special effort to be made to include previously disadvantaged persons and groups, including women and youths, in the public participation.
- Diversity, according to Sasol (2001:8) refers to the “differences associated with race, gender, religion, ethnicity, language, age, economic status and sexual orientation among others. In a public participation process, these differences are often represented by divergent viewpoints and opinions. Since the object of public participation is not to seek consensus, but rather

to enrich decision-making, sensitivity towards diversity issues will ensure that all the main messages are adequately captured”.

- Representivity, seeks to ensure that all relevant interests are represented in a public participation process, so that all relevant viewpoints are considered.

d) Principles relating to Process

The following principles relate to the process being followed:

- Capacity building/employment, is according to Sasol (2001:9) the “active empowerment of role players so that they clearly and fully understand the objective of public participation and may in turn take such actions or conduct themselves in ways that are calculated to achieve or lead to the delivery of the objectives”.
- The choice of appropriate communication techniques, will be guided in each case, as stated by Sasol (2001:10), largely by “the ability of the chosen technique to deliver to the objective of the communication with the particular audience”. Sensitivity to diversity and other issues should help to determine the most suitable method of conducting effective communication with interested and affected parties.
- Transparency, as defined by Sasol (2001:11), is “openness, sincerity and honesty among all the role players in a public participation process. It presupposes the existence of trust and respect for the integrity of each role player and a commitment by all to the overriding objective of the process in the interests of the common good”. All relevant information should be brought to the open by all role players, whether positive or negative.
- Flexibility, refers to the ability to accommodate change for the overall benefit of public participation (Sasol, 2001:12). Timing and methodologies come to mind with respect to flexibility.
- With regards to accessibility, the participants in a public participation process should fully and clearly understand the aim, objectives, issues and

methodologies of the process, and should be able to participate effectively (should be able to make their inputs into the process).

- Accountability, according to Sasol (2001:14), involves the “assumption by all the participants in a public participation process of full responsibility for their individual actions and conduct as well as a willingness and commitment to implement, abide by and communicate as necessary all measures and decisions in the course of the process”.
- Efficiency, means that time, money and effort spent, should be in balance to ensure that the developer, the relevant authority and interested and affected parties, obtain optimal benefits from the process (Sasol, 2001:16).

e) Overarching principles

The overarching principles required for any public participation process, is stated by Sasol (2001:17-18) as:

- Trust;
- Commitment; and
- Respect.

EPA (1994:5) identified eight appropriate principles as guidance for the development of an effective and efficient EIA system:

- Participation - an effective and efficient EIA system is considered to be one that will involve the participation of all stakeholders in the EIA process, both in its ongoing development and in its operation.
- Transparency – according to EPA (1994:5) “transparency is achieved through an open assessment process ,which ensures all elements of the EIA system are known and clearly understood by participants”.
- Certainty – “Committed opportunities for participation in the EIA process would assist the certainty of the process for all parties even if the number

and type of opportunities are not consistent with the views of all parties” (EPA, 1994:5).

- Accountability – “Adequate and appropriate participation opportunities can assist in ensuring the EIA system is accountable to all participants and stakeholders” (EPA, 1994:5).
- Integrity – according to EPA (1994:6) “adequate and appropriate opportunities for public participation in the EIA process would contribute to the integrity of the process by enabling involvement in all stages of the assessment process”.
- Cost-effectiveness - choosing those options which are the most effective at the least cost for all parties.
- Flexibility – “The notion of flexibility in relation to the EIA process relates to the need for an EIA system to retain a sufficient degree of flexibility to allow the effective and efficient assessment of all proposals subject to the system” (EPA, 1994:6).
- Practicality - EPA (1994:6) states that “adequate and appropriate opportunities for public participation in the EIA process can contribute to the practicality of the process by enabling community concerns to be reflected in the process, preferably at an early stage. Also opportunities for public participation within the process should be practically achievable by all communities”.

Greyling (2001:6) states that “public participation does not imply that every individual or organization in the study area needs to be personally consulted, as public participation aims to generate issues representative of the various sectors of society, not of every individual. In the case of large, linear projects, there could be literally millions of people living in a 100 km corridor either side of a transportation route”.

f) Summary of the most relevant principles

The references discussed this far under paragraph 3.3.1 were used to identify the important/most relevant (generic) principles to be followed. A Table with all the different principles and references appear in Appendix B.

A numerical value of 1 was given each time a specific principle was recognised as important by a different reference. A graph was drawn up (Figure 3.3) to identify all the identified principles with a numerical value allocated to each. For the purpose of this study the most often cited principles are those highlighted in the figure and these will be used to assess the case studies in the following chapters.

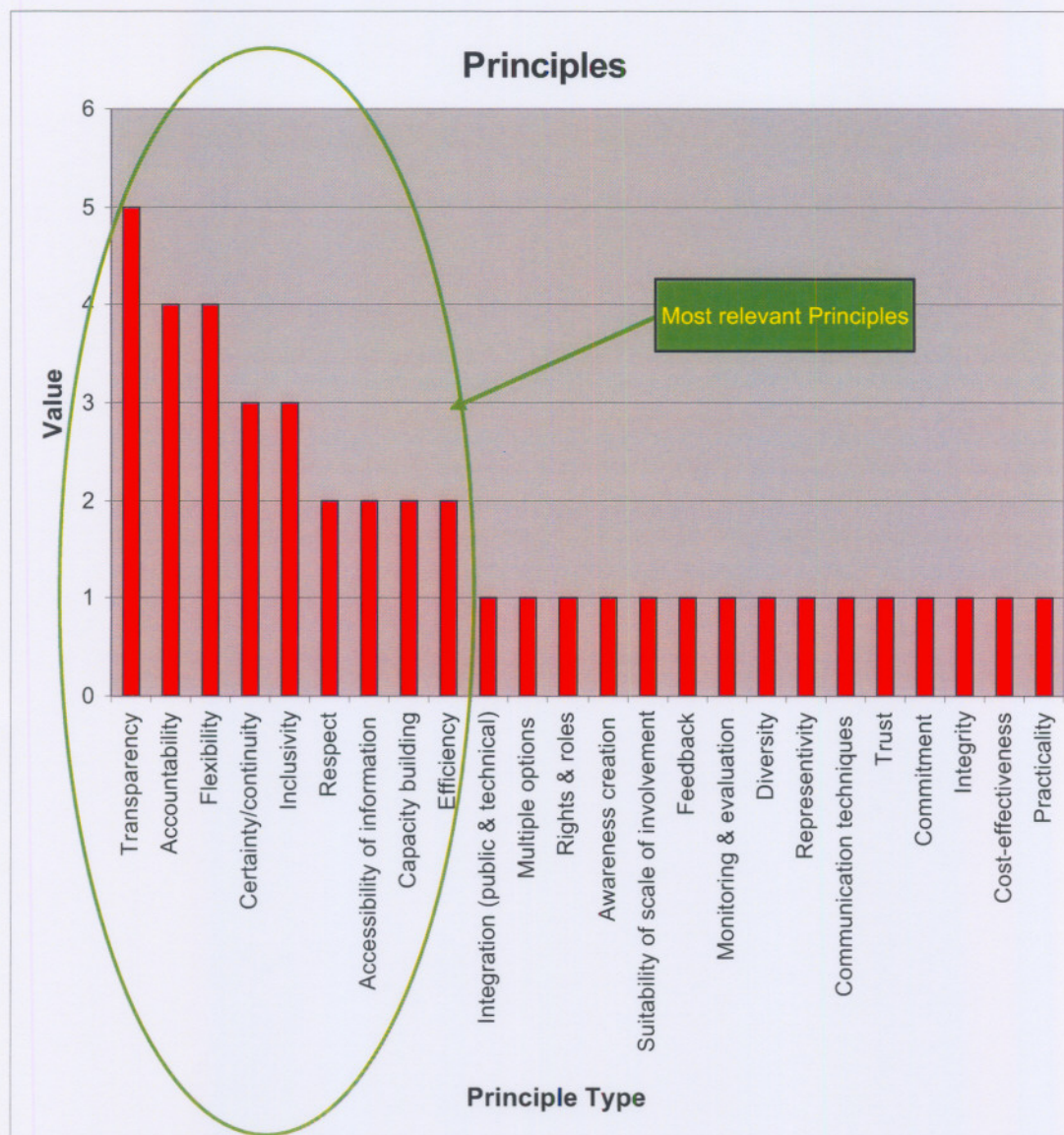


Figure 3.3: Most often cited Principles

3.3.2 TECHNIQUES AND METHODS

a) Specific methods and techniques

Greyling (2001:22) explains how to tailor public participation to project circumstances. Processes with low anticipated impacts and public sensitivity require less iterations in the public participation process, and vice versa.

According to DWAF (2001:45) "the best method for public participation is the most suitable one. This can only be identified once the objectives of the initiative and the purpose of the participation have been established."

The four basic dimensions, according to DWAF (2001:45), which should be considered when deciding which methods to use, are:

- "Cost effectiveness
- Breadth of distribution and reach
- Amount of time available
- Approach – interactive or one-way communication".

Techniques which are useful for disseminating information include newsletters, community group presentations, advertisements as well as press releases and Feature Articles (DWAF, 2001:46).

Techniques which are useful for gathering and exchanging information include public meetings, open houses/open days, semi-structured interviews, focus groups, community liaison groups, social profiles and workshops (DWAF, 2001:46).

The following communication techniques are highlighted by Sasol (2001:10-11), which may be used singly or in combination, to ensure effective public participation:

- Public meetings;
- Open days, with exhibitions and poster displays;
- Drama and theatre, which according to Sasol (2001:10) are "effective in disseminating information and transmitting complex messages in a simple manner accessible to the non-technical and the illiterate";
- Media;
- Toll free telephone numbers;
- Libraries, information centres and the internet; and
- Promotional material, e.g. flyers, posters, notice boards, etc.

It is important to keep stakeholders informed and to ensure that their contributions are obtained. Greyling (2001:24-25) discusses written and verbal techniques to ensure this.

Written methods include the following (Greyling, 2001:24):

- "Letters addressed to individuals and organizations, personally, every two months
- Background information documents(4 pp), initially
- Discussion documents (10 – 20 pp)
- Proceeding of meetings (note that these in themselves serve as discussion documents and often stimulate good comment, providing they give a thorough and accurate reflection of the meeting)
- Simplified summaries of technical documents
- Fact sheets (1 – 2 pp) e.g. answering frequently asked questions
- A newsletter (4 pp), quarterly, reporting on progress, ;issues raised to date, stimulating thinking
- Printed media (newsletters, journals)
- Broadcast media (especially local stations)
- Visual aids (overhead transparencies, roving poster displays, video etc)
- Email /Internet"

Verbal methods include the following (Greyling, 2001:24):

- Public meetings (40 or more participants, up to several hundred), providing the meetings are well organized, expertly facilitated, have a clear purpose and it is understood they will generate a diversity of opinion.
- Workshops (20 – 40 participants)
- Focus groups (10 – 15 people)
- Briefing sessions, e.g. at meeting organized by stakeholder groups themselves such as Residents Association meetings, Chambers of Commerce meetings, Farmers Days
- Community meetings, rural areas

- Small group or one-to-one technical discussions with members of technical team.

Open house and public meetings – some considerations according to Greyling (2001:24-25):

Where the open-house event has a distinct advantage in terms of visual information transfer, it must always be combined with events that create opportunity for verbal interaction.

A great advantage of public meetings is that they expose the views of different stakeholder groups to others. This often broadens peoples' perspectives, contributes to reasons prevailing and adds value to the project.

The key requirements of a successful and useful public meeting are noted below.

- The meeting must have a clear purpose, thus the objectives of what needs to be achieved by the meeting must be clearly defined and communicated to stakeholders in advance.
- Stakeholders should receive notification of the meeting date and its objectives at least four to six weeks in advance, as well as the provisional program, together with the opportunity to comment on the program.
- A formal advance registration process must be allowed.
- Stakeholders should receive documentation for the meeting at least five working days before the meeting, with a formal confirmation letter of their attendance.
- Previously disadvantaged people need to be briefed in advance.
- A thorough dry run meeting for project team members needs to be conducted in advance of the public meeting to agree on the content and comprehension levels of their presentations and to strategize for discussion sessions at this dry run. Representatives of the proponent and members of the evaluation team should be assisted to understand that they should not appear defensive and should openly admit if they do not know the answer to a question.

- It is helpful if the facilitator presents guidelines for productive discussions at the beginning of the meeting and obtain participants' agreement on these (e.g. focus on the issue, not the person; courtesy; one person at a time; everyone to work through the facilitator); it is also commendable for the facilitator to explain without hesitation that it is the diversity of opinion that will enrich the decision making, and that no one should be anxious about disagreeing with others.
- Stakeholders should receive already prepared name tags when they arrive at the meeting, as well as documentation. This helps to put a face to the name and could be the start of partnerships.
- Members of the project team should introduce themselves to stakeholders during registration and enter into discourse.
- Presentations should be presented in a way that all sectors of stakeholders can understand them. It is a good idea to distribute a presentation strategy to guide presenters even before the dry run takes place.
- Ample opportunity should be allowed for discussion.
- Seating arrangements should, where possible, be in half moon or herringbone shape so that participants can keep eye contact. The proponent and members of the technical team should sit with participants and not in the front - to avoid an us and them situation.

Wood (1999:163) drew up a table, "considering the advantage and disadvantage of some techniques, of information provision and methods of information collection, consultation and participation. The list is not exhaustive but serves to illustrate the point that every technique has some disadvantages. There is no single approach applicable to a specific situation".

Table 3.1: Some practical techniques and methods, by mode (Wood, 1999:164).

METHOD	ADVANTAGES	DISADVANTAGE
MODE 1: INFORMATION PROVISION		
LEAFLETS	• Can target a specific audience	• May appear to be reaching a widespread audience but can

	• Relatively cheap to produce and disseminate. • Can be use to inform people of basic issues and as means of leads in to the subject. • Improves public availability of information.	• be treated as junk mail. • No direct response mechanism for questions or concerns. • Will inevitably raise more questions than answers. • Difficult to evaluate.
ADVERTISING	• Relatively cheap. • Effective for introducing an issue.	• Limited scope to convey messages.
LOCAL NEWSPAPER	• Readily available. • Relatively cheap. • Readers see editorial matter as an independent source of information.	• Limited audience. • No direct response to questions. • There may be problems with editorial control. • Ineffective in arousing public. • Involvement.
TELEVISION AND RADIO	• Can convey powerful images. • High familiarity of the medium. • Potential to reach a very large audience.	• Expensive to organize, produce and transmit a program. • One off coverage of issues. • Potential lack of control. • Requires careful planning.
VIDEO	• Can convey powerful images (such as computer aided design views) to illustrate the nature and scale of a proposed facility. • Can be innovative and eye catching. • Can be used at viewer's convenience. • Complete editorial control .	• Relatively expensive • Access to a limited audience (i.e. those attending exhibitions) • Unlikely to be regarded as independent; information may be dismissed as too biased to be of value.
EXHIBITIONS	• If staffed, provide one to one contact. • Flexible in content and design. • Can provide information at various levels to suit the audience. • Can provide useful feedback about concerns. • Good for a specific population such as residents around a proposed site • Particularly effective if staffed.	• Generally limited attendance • Coverage of potential audience • Attracts only a small subset of a wider population.
TELEPHONE HELP LINES	• Relatively easy access for those interested or concerned. • If staffed, then feedback is possible • Useful in promoting a feeling of accessibility.	• If pre-recorded then limited flexibility or chance to obtain feedback. • Pre recorded information is limited to simple facts.

NEWSLETTERS	• Allow ongoing contact and may help promote trust. • Flexible, so can be designed to meet the changing needs of the audience. • Feedback possible. • Can be useful to support liaison groups.	• May not be perceived as independent, therefore possible lack of information credibility. • Only a relatively small proportion of a population will bother to read a newsletter.
MODE 2: INFORMATION COLLECTION AND FEEDBACK		
INTERVIEWS	• Open up opportunities for later contact and participation • Can identify different values and concerns	• Time consuming • If not undertaken by independent people can result in bias • Difficult to get representative sample of people
SURVEYS	• Can get specific and detailed information • Have been used in EIAs in relation to socio-economic, landscape and visual impacts, and perceptions • Can identify the existing level of knowledge and concerns. • Information can then be targeted more effectively.	• Can be expensive, especially if a representative sample is required • If not undertaken by independent people, can result in bias • Must be random to ensure validity and reliability • Only provide a snapshot of views at a point in time.
MODE 3: CONSULTATION		
PUBLIC MEETINGS	• Attendance Can Generate Respect • If Run Well (By An Independent And Respected Person), Public Meetings Can Be A Useful Way Of Meeting More Members Of The Community	• Difficult to control • Possible mob effect • Poor as a method of information • Provision and developing dialogue • Rarely meet the objectives of any participant.
SMALL GROUP MEETINGS	• Good for listening and responding to concerns. • Can promote trust and respect between individuals and groups • Good for discussing complex issues.	• Time consuming and expensive if representative sample is required.
MODE 4: PARTICIPATION		
COMMUNITY ADVISORY GROUPS	• Access to key stakeholders and community leaders. • Allows exploration of key issues and concerns. • Exposes the real complexity of environmental	• Need careful planning and independent control. • Participants require a clear remit from the outset. • Time consuming. • Requires significant commitment from

	management issues • Can promote trust. • Highlights the process of decision making as well as the outcome.	participants. • Relatively expensive.
WORKSHOPS – FULL OR HALF DAY	• Relatively easy to organize • Can be targeted at specific stakeholder groups. • Can examine specific issues in detail from a variety of alternative perspectives. • Allow some feedback.	• Once off events is limited in subject coverage. • Unlikely to reach a wide audience.

b) Considerations for public participation methods

According to Greyling (2001:14) information must be easily accessible, as follows:

- “Presented in a language and style that stakeholders can understand, with simple explanations of complex concepts.
- Presented both in writing (letters, information sheets, discussion documents, newsletter, roving poster displays) and verbally (during meetings, workshops or small-group discussions), since some stakeholders are better at hearing than at reading, and vice versa.
- Easily obtainable, i.e. discussion documents should be mailed or e-mailed to individuals, and available at stakeholders representative organizations, on the Web and in public places such as libraries or community centres”.

Greyling (2001:14) further states that it is a good idea to include a comment sheet with each round of communication. Stakeholders should comment on the process to date, the findings to date, to raise issues in regard to a particular topic, or to suggest sectors or individuals to serve on a participation structure, whatever the need may dictate at the time.

EPA (1994:40) mentions the following tips when conducting Public ‘Scoping’ meetings:

- “Publicize meeting times and locations widely.
- Use moderators trained in ‘meeting facilitation skills’.

- Keep the meeting focus on the 'positive purpose', i.e. obtaining a useful environmental impact analysis.
- Rely on small group discussions, by breaking up large groups into subgroups ,for part of the meeting.
- Use agency staff as resource people (not discussion leaders) in small group discussions.
- Tape record meetings or use a stenographer to record activities.
- Avoid interagency coping meetings that are closed to the public".

Greyling (2001:17) states the following about public meetings:

- "Many stakeholders resent sitting in meetings all day, especially where duplication of issues is perceived. One could hook on to existing events (e.g. farmers days, local council meetings, residents association meetings) where there is a need for briefing sessions or to obtain a sector's view.
- Announce major meetings at least four to six weeks before the event. Set clear objectives for meetings and structure the agenda accordingly. Always prepare discussion documents and always distribute them in advance – the best ideas occur to prepared minds. The agenda and documentation should reach stakeholders at least four working days before the meeting. Make special efforts to ensure that key stakeholders attend, otherwise the meeting may have to be repeated".

c) Summary of the most relevant methods & techniques

The references discussed this far under paragraph 3.3.2 were used to identify the important/most relevant (generic) written and verbal methods and techniques to be followed. The different methods and techniques and references appear in the Table in Appendix C.

A numerical value of 1 was given each time a specific method/technique was recognised as important by a different reference. A graph was drawn up for written (Figure 3.4) and verbal (Figure 3.5) methods and techniques. For the

purpose of this study the most often cited methods and techniques are those highlighted in the figures and these will be used to assess the case studies in the following chapters.

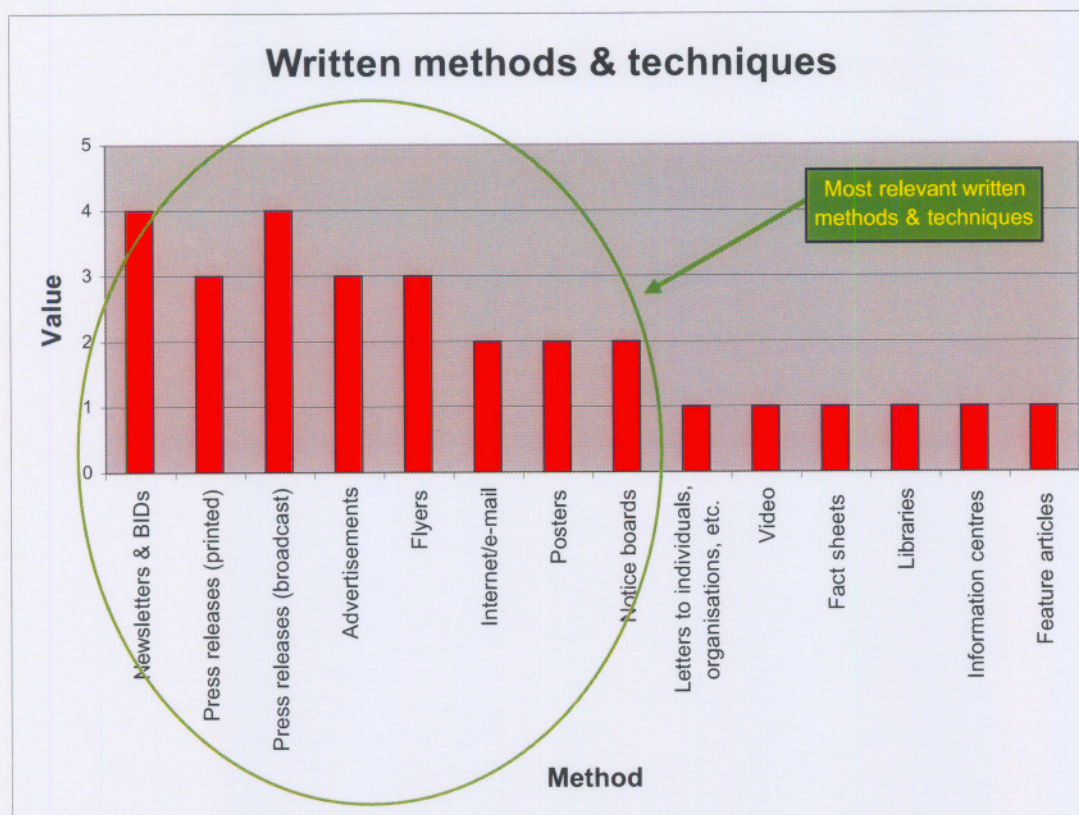


Figure 3.4: Most often cited written methods & techniques

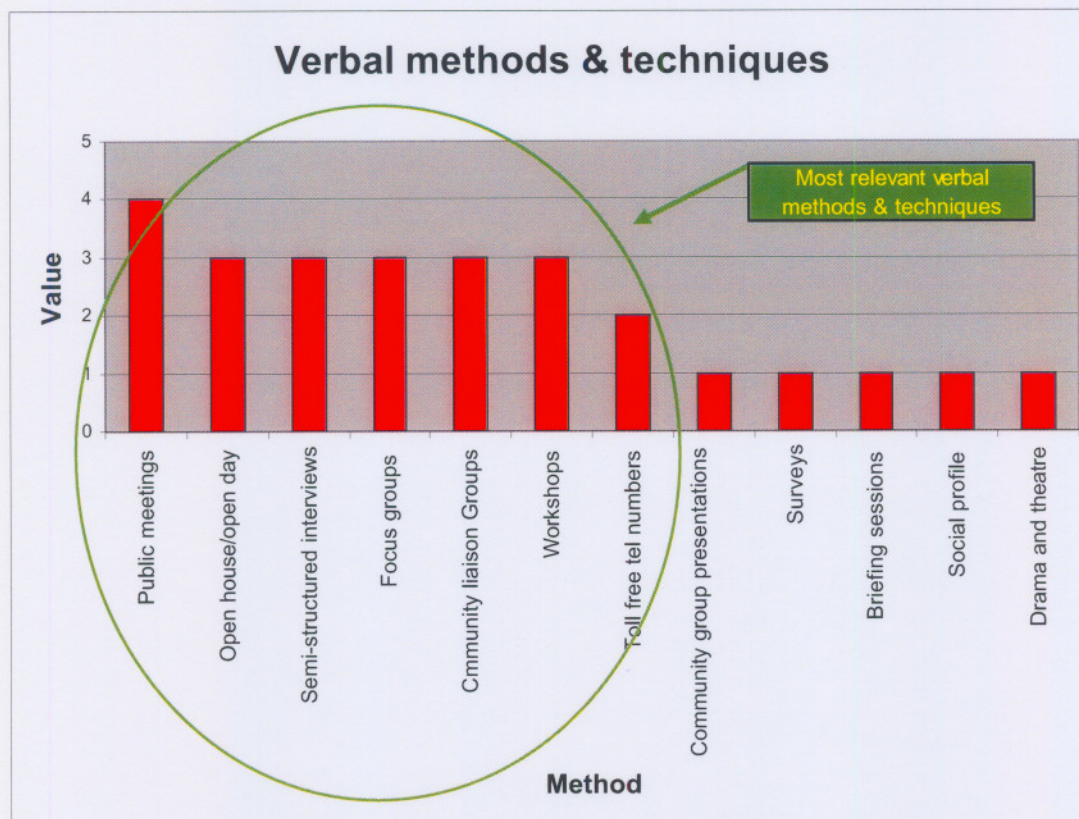


Figure 3.5: Most often cited verbal methods & techniques

3.4 Conclusion

Public participation is a process which allows I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project. It is also a process which provides authorities with sufficient information to be able to make better decisions.

According to DEAT (2002:7) "the International Association for Public Participation (IAP2, 2000) describes public participation as a spectrum of increasing levels of public impact on decision-making. This spectrum ranges from the public being informed, consulted, involved, collaborating with decision-makers, or fully empowered through delegated decision-making".

Public participation aims to improve decision-making; bring about sustainable development and normalise the attitudes of stakeholders. It is also required

by legislation. The Constitution of the Republic of South Africa (Act No. 108 of 1996); the Environment Conservation Act (ECA) (Act No. 73 of 1989) and the National Environmental Management Act (NEMA) (Act No. 107 of 1998) are some of the Acts dealing with Public participation. Regulations 1182 and 1183 governed under ECA require Public Participation during environmental impact assessments (refer to Chapter 2).

Although we are still striving to find the ultimate public participation process, there are certain principles as well as methods and techniques that can be followed to assist with the process.

The following principles were highlighted as the most relevant and will be used to assess the case studies in following chapters of this report:

- Transparency
- Accountability
- Flexibility
- Certainty/continuity
- Inclusivity
- Respect
- Accessibility of information
- Capacity building
- Efficiency

The following written and verbal methods and techniques were highlighted as the most relevant and will be used to assess the case studies in following chapters of this report:

Written

- Newsletters and BIDs
- Press releases (printed)
- Press releases (broadcast)
- Advertisements

- Flyers
- Internet/e-mail
- Posters
- Notice boards

Verbal

- Public meetings
- Open house/open day
- Semi-structured interviews
- Focus groups
- Community liaison groups
- Workshops
- Toll free telephone numbers

CHAPTER 4: PUBLIC PARTICIPATION AS A COMPONENT OF EIAs

4.1 LEGAL REQUIREMENTS FOR PUBLIC PARTICIPATION IN SOUTH AFRICA

The Constitution (Section 32(1)) states that "everyone has the right of access to-

- a) any information held by the state; and
- b) any information that is held by another person that is required for the protection of any rights".

According to the Constitution (Section 32(2)) "national legislation must be enacted to give effect to this right, and may provide for reasonable measures to alleviate the administrative and financial burden of any rights".

Greyling (1999:6) states that "EIAs and the public participation they require became mandatory with the publication in September 1997 of the Department of Environmental Affairs and Tourism's EIA Guidelines".

The law, according to Andrews (1999:6) requires public participation "by regulation in certain specific circumstances when an environmental impact assessment is done". These regulations are Regulation 1182 and 1183, passed on 5 September 1997 in terms of the Environment Conservation Act 73 of 1989. Andrews (1999:6) further states in terms of the National Environmental Management Act (NEMA) that public participation has to be promoted whenever the Government allows something to happen that may have a significant effect on the environment. The needs, interests and values of all interested and affected parties need to be taken into account.

The National Environmental Management Act (NEMA) principles provide more concrete expression to these rights of stakeholders, also known as interested and affected parties. The principles of NEMA require the promotion of

participation of all interested and affected parties in environmental governance. This should include vulnerable and disadvantaged people. According to Section 2 of NEMA decisions which are taken should take into account the interests, needs and values of all such persons, including all forms of knowledge (Sasol, 2001:6).

According to Greyling (2001:3) statutory requirements for public participation as in the EIA Guidelines, DEAT, 1997 are the following:

- "Public participation must be facilitated by an independent agency in an honest and open manner.
- The agency must produce readable reports.
- The agency must have good record keeping abilities.
- Interested and affected parties (I&APs) have to participate in the identification of issues and alternatives during scoping.
- I&APs should be given the opportunity (including adequate time) to comment on assessments for impacts and proposed mitigation measures.
- I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. scoping report and environmental impact report).
- I&APs have the responsibility to submit their contribution within the allocated time period.
- I&APs' contributions must be reflected in environmental investigation reports".

The following NEMA (Act 107 of 1998) principles are specific to public participation, as stated by Greyling (2001:3):

- The participation of all interested and affected parties in environmental governance must be promoted. All people should have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons. Women and youths should also participate.

- Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.
- Community wellbeing and empowerment must be promoted through environmental education, raising environmental awareness, sharing knowledge and experience and other appropriate means.
- Workers' rights to refuse work which is harmful to human health should be acknowledged and they should be informed of dangers in the environment and be protected.
- Decisions must be taken in an open and transparent manner. Access to information must be provided in accordance with the law.

DWAF (2001:10-12) also notes that:

- The National Water Act (Act No.36 of 1998) and the White Paper on Water Policy (30 April 1997), require one to redress the consequences of past racial and gender discrimination, promote sustainable use of water in the public interest and facilitate social and economic development. According to Section 2 of the Water Act, this can only be achieved with appropriate community, racial and gender representation, by means of public participation.

Thornhill (2001:1) states that "after the implementation of the 1997 Environmental Impact Assessment Regulations (GG 18261 No. R1883) and the subsequent National Environmental Management Act (Act No. 107 of 1998), public participation, as part of the decision-making process, quickly established itself as an element which had no hard and fast rules which apply uniformly to all development projects.

Thus, public participation is a legal requirement in EIAs.

4.2 SPECIFIC OBJECTIVES OF PUBLIC PARTICIPATION IN THE DIFFERENT EIA PHASES

It is important to note that the public participation process is not an isolated process, but is part of the bigger EIA process. It should therefore be seen as a process within a "bigger picture".

The objectives that public participation should achieve during an EIA are to provide sufficient and accessible information to stakeholders to:

During the scoping phase

- raise issues of concern and suggestions for enhanced benefits
- verify that their issues have been recorded
- assist in identifying reasonable alternatives
- contribute relevant information to the environmental assessment

During the Impact assessment phase

- contribute relevant information to the environmental assessment
- verify that their issues have been considered in the environmental investigations.
- comment on the findings of the environmental assessments

(Greyling, 2004)

In paragraph 2.4.2 of this document it is mentioned that most of the EIAs in South Africa end after scoping phase. This means that all the identified environmental aspects/impacts are not only identified, but also resolved/answered (mitigatory measures are in place).

When an EIA for a specific project ends after the scoping phase, another objective of public participation comes into effect during this phase: Stakeholders should be able to verify that their issues have been considered in the formulation of mitigatory measures.

4.3 THE PUBLIC PARTICIPATION PROCESS AS PART OF THE EIA PROCESS

The three broad phases, into which a public participation process may be divided, according to DWAF (2001:23), are:

- The planning phase, which consists of a decision analyses, participation planning and implementation planning.
- The participation phase, which consists of the informing of stakeholders, meeting with stakeholders, feedback to and from stakeholders as well as monitoring and evaluation.
- The exit phase, which consists of ensuring that all goals have been reached and officially concluding the process.

As discussed in Chapter 2 of this document, the EIA process has three phases, followed by a decision by the relevant authorities. According to DEAT (2002:11) the public participation process is aligned with the EIA process as follows in the quest to achieve the objectives discussed in paragraph 4.2:

Application for Authorisation/Screening/Plan of study for scoping Phase:

- Identify stakeholders.
- Establish rapport and initiate cooperation and commitment to the stakeholder engagement process.
- Establish boundaries for stakeholder engagement process (time, extent and decision making).

Scoping Phase:

- Ensure all relevant stakeholders have been identified and invited to engage in the process.
- Inform stakeholders about the proposal.
- Provide opportunity for stakeholders to contribute issues of concern and suggestions for enhancing potential benefits.
- Maintain rapport and ensure ongoing cooperation and commitment.

- Agree on plan and approach for future stakeholder engagement.
- Identify potential issues of conflict and engage in proactive conflict management.

EIA Phase:

- Inform stakeholders of what is being assessed.
- Keep stakeholders informed during the course of the specialist studies to maintain interest and prevent alienation from the process.
- Provide opportunity for stakeholders to comment on the Environmental Impact Report.
- Test the acceptability of proposed mitigation measures.
- If trade-offs are required, identify areas of conflict and adopt a proactive approach to conflict management.

Decision-making

- Inform (with justification) stakeholders of the decision made.
- Explain conditions attached to the decision (including the opportunity for continuous involvement in monitoring of the construction and operational phases of the development).
- Provide opportunity for stakeholders to appeal against the decision.
- Conflict management and resolution.

When Chapter 2 regarding the EIA process is read in conjunction with the above, the following conclusion can be made:

The planning phase, which ties in with phase 1 of the EIA, requires that I&APs be identified and that a plan of study for scoping be prepared.

The participation phase, which starts in the scoping phase (phase 2) and ends after the EIA phase (phase 3) of the EIA, requires engagement of I&APs – ensuring that they are well informed, have opportunity to raise issues/concerns, etc.

The Exit phase ties in with the decision-making phase and the post decision follow-up and requires that I&APs are well informed about the decision. I&APs should also have the opportunity to see how the issues/concerns are addressed during the implementation phase of the EIA.

Greyling (1999:6) states that "it is important to develop an appreciation of requirements for public participation at an early stage, to plan for these, and then still be flexible to address emerging issues and needs. The challenge is to distinguish between a flexible process and one where tail wags dog".

Note the term "stakeholders" are used more and more, rather than "interested and affected parties". According to DEAT (2002:6) "the engagement of I&APs in the decision making process is frequently referred to as public participation. However, a review of definitions for public participation reflects some of the current difficulties associated with the term and provides the motivation for replacing it with stakeholder engagement".

4.4 TAILORING PUBLIC PARTICIPATION TO PROJECT AND STAKEHOLDER REQUIREMENTS

According to the Consultative Forum on Mining and the Environment (2002:14) "it has been suggested that the total investment of a proposed project may be a determinant of the level of effort and costs of environmental technical assessment and public participation. This is only true on a very broad scale. A new development in an already disturbed area may require massive capital investment but little public participation. Conversely, a small-sized new facility with limited capital investment in an undisturbed or environmentally sensitive area may require major technical assessment and public participation".

Statistics based on recent EIAs show that the level of effort in EIAs and also the public participation required for a project is a function of a combination of the following:

- The scale of anticipated impacts.
- The scale of public sensitivity.

(Consultative Forum on Mining and the Environment, 2002:14).

Figure 4.1 illustrates that when both the scale of anticipated impacts and the scale of public sensitivity are expected to be high the process is likely to be complex, with high cost, high publicity and many time-consuming iterations.

When both the scale of anticipated impacts and the scale of public sensitivity are expected to be low the process will be simple, inexpensive, take little time and is not likely to attract any publicity.

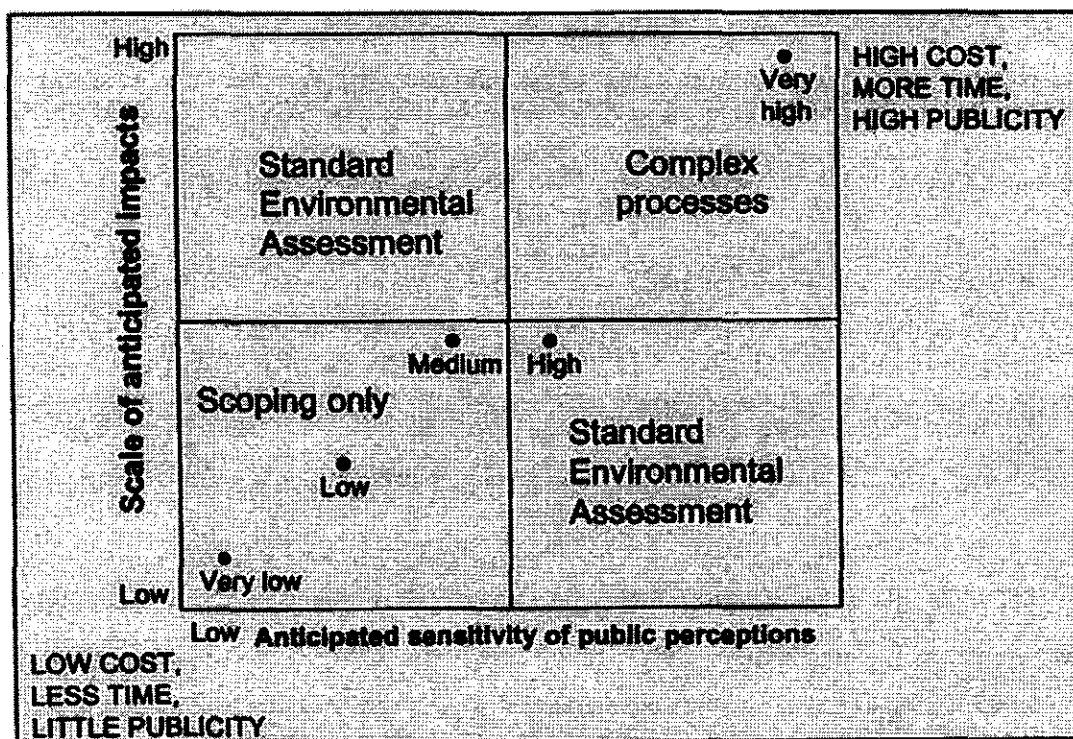


Figure 4.1: The degree of environmental assessment and public participation required for a project is a function of a combination of the scale of anticipated impacts and the scale of sensitivity of public perceptions. The latter is often linked to the sensitivity of the receiving environment and to socio-economic factors. (Consultative Forum on Mining and the Environment, 2002:15)

4.5 CONCLUSION

The following list of legal requirements, according to DEAT (1997) and NEMA (Act 107 of 1998), must be met when conducting public participation for projects:

- Public participation must be facilitated by an independent agency in an honest and open manner.
- The agency must produce readable reports.
- The agency must have good record keeping abilities.
- All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged people.
- Women and youths must also participate.

- Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.
- Interested and affected parties (I&APs) have to participate in the identification of issues and alternatives during scoping
- I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.
- I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).
- I&APs have the responsibility to submit their contribution within the allocated time period.
- I&APs' contributions must be reflected in environmental investigation reports.
- Decisions must be taken in an open and transparent manner and access to information must be provided in accordance with the law.

The objectives that public participation should achieve during an EIA are to provide sufficient and accessible information to stakeholders to:

During the scoping phase

- raise issues of concern and suggestions for enhanced benefits
- verify that their issues have been recorded
- assist in identifying reasonable alternatives
- contribute relevant information to the environmental assessment

During the Impact assessment phase

- contribute relevant information to the environmental assessment
- verify that their issues have been considered in the environmental investigations.
- comment on the findings of the environmental assessments

When an EIA for a specific project ends after the scoping phase, another objective of public participation comes into effect during this phase: Stakeholders should be able to verify that their issues have been considered in the formulation of mitigatory measures.

The public participation process should have a planning phase; a participation phase and an exit phase. The planning phase, which ties in with phase 1 of the EIA, requires that I&APs be identified and that a plan of study for scoping be prepared.

The participation phase, which starts in the scoping phase and ends after the full EIA phase of the EIA, requires the engagement of I&APs – ensuring that they are well informed, have opportunity to raise issues/concerns, etc..

The exit phase ties in with the decision-making phase and the post decision follow-up and requires that I&APs are well informed about the decision and about the criteria used by the authorities to make the decision. I&APs should also have the opportunity to see how the issues/concerns are addressed during the implementation phase of the EIA.

The level of effort in EIAs and also the public participation required for a project is a function of a combination of the following:

- The scale of anticipated impacts.
- The scale of public sensitivity.

CHAPTER 5: EVALUATING THE PUBLIC PARTICIPATION PROCESS FOR GAS PIPELINES

5.1 BACKGROUND TO SASOL GAS PIPELINES

The Sasol II and Sasol III plants in Secunda operated by Sasol Synthetic Fuels produce a methane rich gas, through the gasification of coal. The gas is cleaned and is either sold as "Sasol gas" to clients in Gauteng and KwaZulu Natal or is further processed to produce either chemicals or petroleum type products such as those typically associated with and oil refinery. Sasol Gas was established in 1964 and presently operates approximately 1 400 km of pipeline to supply approximately 700 customers with gas (Ecoserv, 2001:1).

The history of Sasol goes back to 1927. A White Paper was tabled in Parliament, outlining the need for the establishment of a synthetic fuel industry in South Africa. It was realised at the time that South Africa has no crude oil or natural gas reserves and that a local industry had to be developed to protect the country's balance of payments related to crude oil imports (Nature & Business Alliance, 2001:8).

The Sasol Group of companies was established in 1950 with the construction of the first oil-from-coal plant in Sasolburg. In 1964 it was decided to diversify into the production of pipeline gas from coal, as a heating source for the industrial market. Sasol Gas was then established (Nature & Business Alliance, 2001:8).

Nature & Business Alliance (2001:8) states that "in 1973, following the international crude oil shortage, and 1979 when the Shah of Iran was dethroned, it was decided to build a second and third oil-from-coal plant in Secunda to further reduce South Africa's dependence on crude oil imports".

Today Sasol is a global enterprise with manufacturing and marketing facilities in most countries around the world. Sasol is a major contributor to the economy of South Africa in the form of, inter alia, employment creation, contribution to the fiscus through taxes, wealth creation, value-adding, beneficiation of raw materials and fixed investment in new plant and equipment (Nature & Business Alliance, 2001:8).

5.1.1 The pipelines and the Gas inside

Sasol Gas pipelines are designed for high or low pressure. High pressure of the gas in the pipeline can have a greater risk. The environmental impact assessment process and more specific the public participation process stays exactly the same whether it is a high- or low pressure pipeline.

For the purpose of this study, the pipeline pressure will therefore not be taken into consideration and will not be discussed.

Properties of Sasol Gas

Sasol gas is similar in composition to natural gas. Natural gas consists of a high percentage of methane (generally above 85 percent) and varying amounts of ethane, propane, butane, and inert (typically nitrogen, carbon dioxide, and helium).

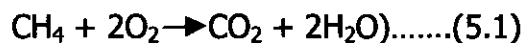
The typical composition of Sasol gas is given in Table 5.1.

Table 5.1: Composition of Sasol Gas (Nature & Business Alliance, 2001:15).

Component	Typical volume percent
Methane (CH ₄)	88,6 %
Other hydrocarbons	0,3 %
Carbon monoxide (CO)	2,1 %
Nitrogen and argon	6,4 %
Hydrogen	2,6 %

Pipeline gas is flammable and can cause an explosion if contained in a closed area and ignited. It can cause asphyxiation if inhaled in a closed area. A stanching agent (minute quantities of sulphur) is added to the gas to give it a distinctively bad odour, as a safety measure (Nature & Business Alliance, 2001:15).

According to Ecoserv (2001:4) Methane is combusted (i.e. burnt) according to the chemical reaction given in the equation below.



As illustrated in Equation 5.1 carbon dioxide (CO₂) and water vapour are the principal combustion products from burning Sasol gas. Carbon dioxide is a non-toxic gas (although it is classified as a greenhouse gas and is thought to contribute to global warming) (Ecoserv, 2001:4).

Other combustion products from burning Sasol gas include the following (Ecoserv, 2001:4):

- Carbon monoxide and hydrocarbons emitted in trace quantities depending on the efficiency of combustion.
- Sulphur dioxide (SO₂) emitted in trace quantities (the sulphur in the gas derived from the odorising agents, is converted on combustion, to SO₂).
- Nitrogen oxides (NO_x).
- Argon.

5.1.2 Study area (existing Sasol Gas pipelines in SA)

According to Nature & Business Alliance (2002a:1.1) "Sasol Gas markets pipeline gas manufactured from coal at Sasol's factories in Sasolburg and Secunda. About 40-million gigajoule of pipeline gas from these plants is marketed annually to more than 700 industrial users in Gauteng, Free State, Mpumalanga and KwaZulu-Natal, through a pipeline network covering more than 1 400 kilometres".

5.1.3 Why is an EIA necessary for Sasol Gas pipelines? (legal requirements)

Government Notice (GN) R1182 in Government Gazette (GG) 18261 of 5/9/1997, which was promulgated under the Environment Conservation Act 73 of 1989, identifies activities which require environmental impact assessments to be conducted.

Activity 1(C) reads as follows (DEAT, 1998:10):

"The construction or upgrading of transportation routes and structures, and manufacturing, storage, handling or processing facilities for any substance which is considered as dangerous or hazardous and is controlled by legislation.

This includes transportation routes for any dangerous or hazardous substances transported by road, railway, pipeline, or by air".

The construction of Sasol Gas pipelines falls within the above description.

5.2 CASE STUDIES

Four projects were chosen as case studies. These four projects were specifically chosen as they differ from province to province (provincial authorities), pipeline length, surrounding land-use and public participation process conducted.

The following projects, indicating the Province where the pipelines were installed, were chosen as case studies:

- Alliance Peroxide Gas pipeline (Kwazulu-Natal):
Gas pipeline in the AECI Industrial Complex in Umbogintwini.
- Rosslyn-Babelegi Gas pipeline (Gauteng to North-West Province):
Gas pipeline from the Rosslyn industrial area to the premises of Samca Tiles in the industrial area of Babelegi
- Sapref Gas pipeline(Kwa-zulu Natal):
Short pipeline section within the Sapref industrial area.
- Sasolburg – Egoli Gas pipeline (Free-state to Gauteng):
Gas pipeline from Sasolburg to Egoli-Gas in Johannesburg.

Each case study will be evaluated individually according to the requirements as spelled out in Chapters 3 and 4 as well as questionnaires distributed to various role players in the specific project's EIA process and telephonic interviews regarding the project and the questionnaires. The comments raised by I&APs throughout the various public participation processes will also be used in the evaluation process.

A questionnaire was drawn up with questions relating to legal requirements, general process requirements and principles, as discussed in Chapters 3 and 4 of this document. A number of general questions were also part of the Questionnaire.

A table (evaluation table) was drawn up for each of the case studies to evaluate the public participation process of each; measured against legal requirements, general process requirements, principles and methods & techniques used throughout the process, as well as comments by I&APs.

The information in these tables was derived from the questionnaires completed by various participants, as well as information obtained during the literature study on each project.

Values were awarded to the findings in the questionnaires and the average points of the different participants were used in the evaluation tables:

- 1=very poor
- 2=poor
- 3=average
- 4=good
- 5=excellent

Anything below an average point of 4 is highlighted in red in the tables and requires attention.

The public participation process for each case study was also measured against the specific objectives of public participation during the various phases of an EIA.

Finally the evaluations of the individual case studies will be compared with each other, and will assist in providing answers to the original question in Chapter 1:

How should an appropriate and cost and time effective public participation process for a proposed new Sasol Gas pipelines be conducted?

In Chapter 2 of this document it is mentioned that there are 3 phases to an EIA. The EIA can however stop after phase 1 (if an exemption is obtained), phase 2 (if the scoping report addresses the issues) or phase 3. None of the case studies were required to go further than phase 2 of the EIA.

Taking the above into consideration the objectives that the public participation processes for each case study had to achieve were to provide sufficient and accessible information to stakeholders to:

During the scoping phase

- raise issues of concern and suggestions for enhanced benefits

- verify that their issues have been recorded
- assist in identifying reasonable alternatives
- contribute relevant information to the environmental assessment (as part of the scoping phase)
- verify that their issues have been considered in the formulation of mitigatory measures as part of the scoping report.

5.2.1 Alliance Peroxide Gas pipeline

a) Project background

This project entailed the construction, operation and maintenance of a Sasol gas pipeline approximately 450m in length from Huntsman Tioxide to Alliance Peroxide within the AECI Industrial Complex in Umbogintwini.

The pipeline runs through industrial areas, undeveloped land and commercial properties (Ecoserv 2001: 4).

b) Description of the public participation process followed

The two relevant authorities who reviewed the documentation for this project and decided on project approval were: KwaZulu-Natal Department of Agriculture & Environmental Affairs (KZN-DAEA), and Durban Metro Environmental Management. DAEA was the lead agent who gave the final authorisation. Both these decision-making bodies stipulated their scoping requirements for the environmental assessment of the proposed Sasol Gas project. They were as follows:

- Public participation including the four non governmental organisations (NGOs) in the area.
- Four local and regional newspaper advertisements.
- Public meeting.
- One of the non governmental organisation (NGO) representatives requested another meeting to be held. A second public meeting

was held after the Authorities indicated that the request should be complied with.

The requirements of Durban Metro & KZN-DAEA were fulfilled by the following actions:

Plan of study for Scoping:

A plan of study for scoping was submitted to KZN-DAEA. The plan was approved.

Notification & invitations:

- At the initial implementation of the process, four NGOs were contacted to inform them of the proposal and establish a suitable meeting date and venue for a public meeting.
- Other I&AP groups that were identified included the Isipingo Environmental Committee (IEC), Athlone Park residents and AECI site neighbours.
- Other relevant authorities identified, included Durban Metro City Health, Department of Environmental Affairs & Tourism (DEAT), South Local Council Planning & Fire Department, Durban Metro Disaster Management and Fire Department.
- Notification of the public meeting was sent to I&APs, site neighbours and authorities. Background Information Documents (BIDs) were distributed simultaneously. Hard copies of the BID were delivered to the SDCEA (South Durban Community Environmental Association) offices.
- The project was advertised in various local and regional newspapers.
- One hundred pamphlets (flyers) were distributed (to residents' postboxes).

(Ecoserv 2001:24)

Participation

- A public meeting was conducted with the independent consultant acting as facilitator.
- A second public meeting was held after a request from one of the NGO representatives.
- Comment sheets were handed out to attendees of the meeting.
- A draft scoping report was drawn up and distributed to I&APs for comment (10 day commenting period).
- One of the NGOs did not comment within the prescribed commenting period. The consultant followed up with them and obtained their comments.

c) Evaluation of the public participation process

- Questionnaire

The questionnaire was distributed to the following people:

- The independent Environmental consultant who was appointed to conduct the EIA for the Alliance Peroxide Gas pipeline;
- a representative of the Sasol Technology Environmental & Risk Engineering Division who was responsible for co-ordinating all the EIA activities for Sasol Gas.

The completed Questionnaires appear in Appendix D of this document.

- Comments from I&APs regarding the public participation process followed

The following comments were raised by I&APs regarding the public participation process that was followed for the Alliance Peroxide project:

- "NGOs did not have an opportunity to caucus prior to the meeting";

- "Want to have time to go through the information after the meeting and come back with issues during a follow up meeting".

- Evaluation table

Table 5.2: Alliance Peroxide – Evaluation Table

Description	
General requirements (from Questionnaires):	Average Point
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?	4.0
Did the process help to provide authorities with sufficient information to be able to make better decisions?	4.5
Did the process bring about sustainable development?	4.5
Did the process help to normalise the attitudes of stakeholders?	3.5
Legal Requirements (from Questionnaires):	Average Point
<i>Were the following legal requirements met?</i>	
Public participation must be facilitated by an independent agency in an honest and open manner.	5.0
The agency must produce readable reports.	5.0
The agency must have good record keeping abilities.	5.0
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	3.0
Women and youths must also participate.	3.5
Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.	3.5
Interested and affected parties (I&Aps) have to participate in the identification of issues and alternatives during scoping	3.5
I&APs should be given the opportunity (including adequate time) for commenting on assessments for impacts and proposed mitigation measures.	4.0
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	5.0

I&APs have the responsibility to submit their contribution within the allocated time.	2.5
I&APs' contributions must be reflected in environmental investigation reports.	5.0
Decisions must be taken in an open and transparent manner and access to information must be provided in accordance with the law.	5.0
Process requirements (from Questionnaires & project information):	Yes/No
Did the process have a planning phase?	Yes
Did the process have a participation phase?	Yes
Did the process have an exit phase?	Yes
Principles (from Questionnaires):	Average Point
Were the following principles applied and used throughout the process?	
Transparency	4.5
Accountability	4.0
Flexibility	2.5
Certainty/continuity	4.0
Inclusivity	4.0
Respect	5.0
Accessibility of information	4.5
Capacity building	4.0
Efficiency	3.0
Methods & techniques (from Project Information):	Yes/No
<i>Which of the following written methods were used?</i>	
Newsletters / BIDs	Yes
Press releases (printed)	Yes
Press releases (broadcast)	No
Advertisements	Yes
Flyers	Yes
Internet/e-mail	Yes

Posters	No
Notice boards	Yes
<i>Which of the following verbal methods were used?</i>	
Public meetings	Yes
Open house/open day	No
Semi-structured interviews	No
Focus groups	No
Community liaison Groups	No
Workshops	No
Toll free telephone numbers	No
Was the process a success (from Questionnaires)?	3.5

- Objectives of public participation

From the comments and the evaluation table above, it can be seen that the objectives of public participation (paragraph 5.2) were not achieved successfully during this project's EIA.

- *Discussion*

Judging Table 5.2, comments from I&APs, the objectives of public participation as well as additional information presented in Appendix D regarding the questionnaires, it can be concluded that the public participation followed for this project was not very successful.

The general public participation requirements were met except that more attention could have gone into normalising the attitudes of all stakeholders.

All legal requirements were met but a number of them were not successful and requires attention.

The project did have a planning phase, a participation phase as well as an exit phase. Although a lot of effort went into the planning of the public participation, not enough time was allowed to conduct it successfully. The participation phase needed attention and the main reason for this was also the time issue. Even though the process had an exit phase, follow up participation still requires attention. I&APs need to be informed regarding the implementation of the project.

All the relevant principles were met but the flexibility and efficiency of the process needed attention.

Most of the written methods and techniques were used throughout the process but the verbal methods proved to be lacking from the process.

5.2.2 Rosslyn-Babelegi Gas pipeline

a) Project background

Sasol Gas has extended its gas pipeline network from Springs and Olifantsfontein to the Rosslyn industrial area in 1995. The pipeline under review starts with a connection to an existing pressure reducing station in Rosslyn. It ends at a pressure reducing station on the premises of Samca Tiles in the industrial area of Babelegi.

The total length of the proposed pipeline is approximately 47 km. The pipeline crosses industrial-, commercial- and residential areas as well as a number of services, roads, etc (Nature & Business Alliance 2001:10).

b) Description of the public participation process followed

After several visits to the proposed pipeline route area, including all alternative routes, it became apparent that the best way in which effective communication with interested and affected parties could be enhanced, was to segment the various audience groups. This would

- Utilisation of local authority structures

Pre-meetings have been held with local authority and tribal community leaders in order to explain the proposed project to them and to request their assistance with the facilitation of public meetings, including the creation of an awareness of public meetings among community members. It is concluded that the utilisation of the existing informal communication channels are vitally important in projects such as these.

The local community leaders were also requested to facilitate the participation of the South African National Civics Organisation (SANCO) at the public meetings.

- Mass advertising

The Environment Impact Assessment Process was advertised extensively through the mass advertisements in Sowetan, Pretoria News and Beeld. The advertisement covered three languages, namely English and North-Sotho in Sowetan and Afrikaans in Beeld. The advertisements appeared one week before the first meeting.

In addition, 21 posters (A3 size) had been mounted along the proposed pipeline route at an average interval of 1,3 kilometres. A further 20 posters (A4 size) had been mounted at various public gathering places in the communities of Sekampaneng, Majaneng and Temba.

More than 2,7 million people had been reached in total, based on the newspaper circulation figures. A background information document containing the relevant project information was distributed to all registered, interested and affected parties.

- Distribution of leaflets

A total of 1 000 leaflets of A5 size, with the same contents as the mass advertisement, were distributed to increase the reach among those people who did not have access to the print media.

Participation

- Five public meetings were held at different venues. An interpreter was used to interpret between English/Afrikaans and Northern Sotho.
- Forms for the recording of comments and suggestions were made available, with pens. After completion, these forms were put in a separate comment box.
- A visual stationary display, supplemented with video material, was exhibited at each venue, to provide attendees with as much information about the project proposal as possible. Special consideration was given to illiterate or handicapped people.
- Interested and Affected Parties who registered their interest, whether they attended the workshop or not, received feedback about the issues raised at the workshop in the form of a Record of Key Issues. This was done in writing.
- A draft scoping report was drawn up and distributed to I&APs for comment.

c) Evaluation of the public participation process

- Questionnaire

The questionnaire was distributed to the following people:

- The independent Environmental consultant who was appointed to conduct the EIA for the Rosslyn-Babelegi Gas pipeline;
- a representative of the applicant's (Sasol Gas) SHER (Safety, Health, Environmental & Risk) Department;

- a representative of the Engineering Company responsible for the design, construction and overall management activities for the pipeline;
- a representative of the Sasol Technology Environmental & Risk Engineering Division who was responsible for co-ordinating all the EIA activities for Sasol Gas.

The completed Questionnaires appear in Appendix D of this document.

- Comments from I&APs regarding the public participation process followed

The following comments were raised by I&APs regarding the public participation process which was followed for the Rosslyn-Babelegi project:

- "Please consult truly with communities to be affected";
- "Seek maximum participation and support from the civil organs";
- "In your community participation plan, make sure that legitimate representatives are consulted";
- "You must co-ordinate between the community and the local authority. Let the Civics represent us";
- "Someone needs to be elected to facilitate future consultation with the community".

- Evaluation table

Table 5.3: Rosslyn-Babelegi – Evaluation Table

Description	
General requirements (from Questionnaires):	Average Point
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?	5.0
Did the process help to provide authorities with sufficient information to be able to make better decisions?	5.0
Did the process bring about sustainable development?	4.0
Did the process help to normalise the attitudes of	3.5

stakeholders?	
Legal Requirements (from Questionnaires):	Average Point
<i>Were the following legal requirements met?</i>	
Public participation must be facilitated by an independent agency in an honest and open manner.	4.8
The agency must produce readable reports.	4.5
The agency must have good record keeping abilities.	4.5
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	4.3
Women and youths must also participate.	4.5
Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.	4.0
Interested and affected parties (I&As) have to participate in the identification of issues and alternatives during scoping	4.3
I&As should be given the opportunity (including adequate time) for commenting on assessments for impacts and proposed mitigation measures.	4.5
I&As have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	4.5
I&As have the responsibility to submit their contribution within the allocated time.	5.0
I&As' contributions must be reflected in environmental investigation reports.	5.0
Decisions must be taken in an open and transparent manner and access to information must be provided in accordance with the law.	5.0
Process requirements (from Questionnaires & project Information):	Yes/No
Did the process have a planning phase?	Yes
Did the process have a participation phase?	Yes
Did the process have an exit phase?	Yes
Principles (from Questionnaires):	Average Point
Were the following principles applied and used throughout the process?	

Transparency	4.3
Accountability	4.3
Flexibility	5.0
Certainty/continuity	5.0
Inclusivity	4.8
Respect	5.0
Accessibility of information	5.0
Capacity building	5.0
Efficiency	5.0
Methods & techniques (from Project information):	Yes/No
<i>Which of the following written methods were used?</i>	
Newsletters / BIDs	Yes
Press releases (printed)	Yes
Press releases (broadcast)	No
Advertisements	Yes
Flyers	Yes
Internet/e-mail	Yes
Posters	Yes
Notice boards	Yes
<i>Which of the following verbal methods were used?</i>	
Public meetings	Yes
Open house/open day	No
Semi-structured interviews	Yes
Focus groups	Yes
Community liaison Groups	Yes
Workshops	No
Toll free telephone numbers	Yes
Was the process a success (from Questionnaires)?	4.5

- Objectives of public participation

From the comments and the evaluation table above, it can be seen that the objectives of public participation (paragraph 5.2) were achieved successfully during this project's EIA.

- *Discussion*

Judging Table 5.3, comments from I&APs, objectives of public participation as well as additional information presented in Appendix D regarding the questionnaires, it can be concluded that the public participation followed for this project was a success.

The general public participation requirements were met except that more attention could have gone into normalising the attitudes of all stakeholders.

All legal requirements were met and the project did have a planning phase, a participation phase as well as an exit phase. The process was very well planned but more effort had to be made to understand the internal politics of the communities and their traditions. Even though the process had an exit phase, follow up participation still requires attention. I&APs need to be informed regarding the implementation of the project.

All the relevant principles were met and most of the written and verbal methods and techniques were used throughout the process.

5.2.3 Sapref Gas pipeline project

a) Project background

The project entailed the expansion of the Sasol Gas high-pressure pipeline to Sapref. The pipeline is approximately 7 meters long with a customer meter station on Sapref's property.

The pipeline is connected to the existing high-pressure gas pipeline next to the private airport road.

The pipeline ends at the proposed customer meter station on the premises of Sapref.

The proposed pipeline was constructed in an industrial area that had already been developed. The pipeline crosses the private airport road (Sasol, 2002c:2).

b) Description of the public participation process followed

It is important to note that this pipeline has only a 7 meter length and was planned inside an industrial area. However, even though Sasol Gas applied for exemption from formal scoping, after consultation with authorities it was decided that interested and affected parties should be allowed to comment on the proposed project. Therefore, public participation was required by the provincial Authorities.

Plan of study for Scoping:

A plan of study for scoping was not submitted as this project did not go through the scoping phase.

Notification and invitations

- An advert was placed in three local newspapers and one regional one, informing the interested and affected parties about the proposed project and availability of the background information document.

Participation

- SAPREF had a meeting with the NGO in the area to show them the site of the proposed project and to discuss relevant issues.

- The background information document was made available at two different venues (public libraries) allowing two weeks for perusal and comments.
- The final background information document (capturing the comments of the I&APs) was submitted to the authorities and was made available to registered interested and affected parties.

c) Evaluation of the public participation process

- *Questionnaire*

The questionnaire was distributed to the following people:

- A representative of the applicant's (Sasol Gas) SHER (Safety, Health, Environmental & Risk) Department;
- a representative of the Engineering Company responsible for the design, construction and overall management activities for the pipeline;
- a representative of the Sasol Technology Environmental & Risk Engineering Division who was responsible for co-ordination all the EIA activities for Sasol Gas.

The completed Questionnaires appear in Appendix D of this document.

- *Comments from I&APs regarding the public participation process followed*

No comments were raised by I&APs regarding the public participation process that was followed for the Sapref project.

- *Evaluation table*

Table 5.4: Sapref – Evaluation Table

Description	
General requirements (from Questionnaires):	Average Point
Did the process allow I&APs an opportunity to share their	4.0

issues/concerns/questions/contributions regarding the proposed project?	
Did the process help to provide authorities with sufficient information to be able to make better decisions?	4.5
Did the process bring about sustainable development?	Not Applicable
Did the process help to normalise the attitudes of stakeholders?	Not Applicable
Legal Requirements (from Questionnaires):	Average Point
<i>Were the following legal requirements met?</i>	
Public participation must be facilitated by an independent agency in an honest and open manner.	Not Applicable
The agency must produce readable reports.	Not Applicable
The agency must have good record keeping abilities.	Not Applicable
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	Not Applicable
Women and youths must also participate.	Not Applicable
Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.	Not Applicable
Interested and affected parties (I&As) have to participate in the identification of issues and alternatives during scoping	Not Applicable
I&As should be given the opportunity (including adequate time) for commenting on assessments for impacts and proposed mitigation measures.	4.0
I&As have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	4.0
I&As have the responsibility to submit their contribution within the allocated time.	4.0
I&As' contributions must be reflected in environmental investigation reports.	4.0
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.	4.0
Process requirements (from Questionnaires & project information):	Yes/No
Did the process have a planning phase?	Yes
Did the process have a participation phase?	Yes
Did the process have an exit phase?	Yes

Principles (from Questionnaires):	Average Point
Were the following principles applied and used throughout the process?	
Transparency	5.0
Accountability	4.0
Flexibility	4.0
Certainty/continuity	5.0
Inclusivity	1.0
Respect	5.0
Accessibility of information	4.0
Capacity building	5.0
Efficiency	5.0
Methods & techniques (from Project information):	Yes/No
<i>Which of the following written methods were used?</i>	
Newsletters / BIDs	Yes
Press releases (printed)	Yes
Press releases (broadcast)	No
Advertisements	Yes
Flyers	No
Internet/e-mail	No
Posters	No
Notice boards	No
<i>Which of the following verbal methods were used?</i>	
Public meetings	No
Open house/open day	No
Semi-structured interviews	No
Focus groups	No
Community liaison Groups	Yes
Workshops	No
Toll free telephone numbers	No

Was the process a success (from Questionnaires)?	4.5

- Objectives of public participation

From the comments and the evaluation table above, it can be seen that the objectives of public participation (paragraph 5.2) were achieved successfully during this project's EIA.

- *Discussion*

Judging Table 5.4, comments from I&APs, objective of public participation as well as additional information presented in Appendix D regarding the questionnaires, it can be concluded that the public participation followed for this project was a success - taking into consideration that the scale of anticipated impacts as well as the anticipated sensitivity of public perceptions were very low.

A number of general public participation requirements as well as legal requirements were not applicable for this project as the project did not go through a scoping exercise and the applicant received an exemption from the use of an independent environmental consultant. However, those requirements which were applicable were achieved successfully.

The project did have a planning phase, a participation phase as well as an exit phase. Even though the process had an exit phase, follow up participation still requires attention. I&APs need to be informed regarding the implementation of the project.

All the relevant principles were met except for the Inclusivity which may be seen as not applicable for this type of process.

Very few methods and techniques were used throughout the process due to the type of project, however this leaves room for improvement.

5.2.4 Sasolburg – Egoli Gas pipeline

Important to note: At the time this report was compiled the Sasolburg-Egoli pipeline has not been completed. The public participation process was conducted but it still requires the exit phase.

a) Project background

The project entails the construction of a second, temporary gas pipeline from the Sasol One plant in Sasolburg to Egoli Gas, Iscor and the industries in Boksburg-Benoni, to supplement the supply of hydrogen-rich gas to these consumers while their distribution networks and burner equipment are converted for operation on natural gas. The total length of the pipeline from Sasolburg to Johannesburg is approximately 100 km.

The pipeline crosses industrial-, commercial- and residential areas as well as a number of services, roads, etc (Nature & Business Alliance, 2002a:4.1).

b) Description of the public participation process followed

A detailed examination of the pipeline route areas, including all the alternative routes, indicated that the best way in which effective communication with interested or affected parties could be enhanced, was to segment the various audience groups. The purpose of the segmentation was to (Nature & Business Alliance 2002b:4):

- reduce the geographic distance that interested or affected parties had to travel so that they could be able to attend the meetings in the most convenient way;
- reduce the size of audience groups, to make individual and personal participation, in a two-way communication manner, more manageable;

- allow more freedom of choice for interested or affected parties as far as their preferred venue for the meeting was concerned; and
- ensure that the public participation process was as inclusive and representative as possible.

Seven different audience segments were identified. Subsequently, a total of seven public participation meetings were arranged to include all audience groups (Nature & Business Alliance 2002b:4).

Plan of study for scoping:

A plan of study for scoping was submitted to the relevant authorities and approved.

Notification & invitations:

Three methods were used to make interested or affected parties aware of the planned public participation meetings, namely the utilisation of local authority structures, the distribution of leaflets and mass advertising.

- **Utilisation of local authority structures**

A number of local authorities were contacted and informed about the public participation meetings.

Pre-meetings were held with them, to explain the proposed project and to request their assistance with the facilitation of public meetings, including the creation of an awareness of public meetings among community members.

- **Distribution of leaflets**

Leaflets (A5 size) were distributed into mailboxes in the residential areas, advertising the meeting as well as giving a brief overview of the purpose of the public participation meetings. They were used to

increase the reach among those people who do not have access to the print media.

- Mass advertising

The Environmental Impact Assessment Process was advertised extensively through mass advertisements in various local newspapers as well as regional newspapers and a national newspaper. An estimated 1,2-million people have been reached in this way, based on the newspaper circulation figures. In addition, 20 posters (A3 size) had been mounted along the proposed pipeline route at an average interval of five kilometres. A background information document containing the relevant project information was distributed to all registered interested or affected parties by mail and had been posted on the Internet. The advertisements appeared one week before the first meeting.

Industries in the Benoni/Boksburg area which were affected by the project were invited to the public participation meetings telephonically and by letter, using the information from the Sasol Mineral Rights Department database.

Participation

- Seven public meetings were held at different venues. The public participation meetings took place in the evenings to allow day workers to attend. There was no one-way presentation with visual overhead material. Previous experience indicated that it is not the most effective way of communicating such relatively complex matters to uninitiated audiences. Time is a limiting factor and does not allow for the assimilation of the presented material. Therefore attendees were issued with a detailed project information document upon arrival as a hand-out, which acted as a visual aid during the presentation and included project details and relevant maps.

Interested or affected parties were given opportunity to ask questions and to provide input on relevant matters that might affect them, in a two-way, participative and interactive manner.

- Forms for the recording of comments and suggestions were made available, with pens. After completion, these forms were put in a separate comment box.
- A visual stationary display, supplemented with video material, was exhibited at each venue, to provide attendees with as much information about the project proposal as possible. Special consideration was paid to illiterate or handicapped people.
- Interested and Affected Parties who registered their interest, whether they attended the workshop or not, received feedback about the issues raised at the workshop in the form of a Record of Key Issues. This was done in writing.
- A draft scoping report was drawn up and distributed to I&APs for comment.

c.) Evaluation of the public participation process

- Questionnaire

The questionnaire was distributed to the following people:

- The independent Environmental consultant who was appointed to conduct the EIA for the Sasolburg – Egoli Gas pipeline;
- a representative of the applicant's (Sasol Gas) SHER (Safety, Health, Environmental & Risk) Department;
- a representative of the Engineering Company responsible for the design, construction and overall management activities for the pipeline;
- a representative of the Sasol Technology Environmental & Risk Engineering Division who was responsible for co-ordinating all the EIA activities for Sasol Gas.

The completed Questionnaires appear in Appendix D of this document.

- Comments from I&APs regarding the public participation process followed

The following comments were raised by I&APs regarding the public participation process that was followed for the Sasolburg-Egoli Gas project:

- “Why are there no representatives of environmental organizations present at the meeting? Has enough been done to invite all such organizations via the provincial departments of environmental affairs?”
- “How will Sasol Gas ensure continued involvement of the community?”
- “The project was not well advertised”.
- “The starting time of the meeting was not convenient to everybody. Please consider a meeting during the weekend next time”.
- “When will the next meeting be?”
- “Will it be possible to have more meetings in connection with the gas pipes, because a lot of people keep themselves stupid”.

- Evaluation table

Table 5.5: Sasolburg-Egoli – Evaluation Table

Description	
General requirements (from Questionnaires):	Average Point
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?	5.0
Did the process help to provide authorities with sufficient information to be able to make better decisions?	4.7
Did the process bring about sustainable development?	4.0
Did the process help to normalise the attitudes of stakeholders?	4.3

Legal Requirements (from Questionnaires):	Average Point
<i>Were the following legal requirements met?</i>	
Public participation must be facilitated by an independent agency in an honest and open manner.	5.0
The agency must produce readable reports.	4.7
The agency must have good record keeping abilities.	4.7
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	5.0
Women and youths must also participate.	4.7
Decisions must take into account the interests, needs and values of all interested and affected parties, including the recognition of traditional knowledge.	4.7
Interested and affected parties (I&As) have to participate in the identification of issues and alternatives during scoping	4.7
I&As should be given the opportunity (including adequate time) for commenting on assessments for impacts and proposed mitigation measures.	4.7
I&As have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	4.7
I&As have the responsibility to submit their contribution within the allocated time.	4.7
I&As' contributions must be reflected in environmental investigation reports.	4.7
Decisions must be taken in an open and transparent manner and access to information must be provided in accordance with the law.	4.7
Process requirements (from Questionnaires & project information):	Yes/No
Did the process have a planning phase?	Yes
Did the process have a participation phase?	Yes
Did the process have an exit phase?	Not Applicable
Principles (from Questionnaires):	Average Point
Were the following principles applied and used throughout the process?	
Transparency	4.7

Accountability	4.7
Flexibility	4.7
Certainty/continuity	4.7
Inclusivity	5.0
Respect	5.0
Accessibility of information	5.0
Capacity building	5.0
Efficiency	5.0
Methods & techniques (from Project Information):	Yes/No
<i>Which of the following written methods were used?</i>	
Newsletters / BIDs	Yes
Press releases (printed)	Yes
Press releases (broadcast)	No
Advertisements	Yes
Flyers	Yes
Internet/e-mail	Yes
Posters	Yes
Notice boards	Yes
<i>Which of the following verbal methods were used?</i>	
Public meetings	Yes
Open house/open day	No
Semi-structured interviews	Yes
Focus groups	Yes
Community liaison Groups	Yes
Workshops	Yes
Toll free telephone numbers	Yes
Was the process a success (from Questionnaires)?	5.0

- Objectives of public participation

From the comments and the evaluation table above, it can be seen that the objectives of public participation (paragraph 5.2) were achieved very successfully during this project's EIA.

- *Discussion*

Judging Table 5.5, comments from I&APs, objectives of public participation as well as additional information presented in Appendix D regarding the questionnaires, it can be concluded that the public participation followed for this project was very successful.

The general public participation requirements were all met as well as all the legal requirements.

The project did have a planning phase a participation phase as well as an exit phase. The process was very well planned. However, the I&APs indicated some shortcomings regarding the meetings, which could have been avoided during this phase. This project still needs to go through an exit phase.

All the relevant principles were met and most of the written and verbal methods and techniques were used throughout the process.

5.3 Comparing the case studies

Each of the case studies was evaluated and discussed in paragraph 5.2. From these discussion and the graphs below, showing the comparison between the projects, it can be seen that the Rosslyn-Babelegi and the Sasolburg-Egoli project's public participation proved to be the most successful. However, the Sapref projects' process was also successful but a lot of the requirements, etc. was not applicable in this case.

The Alliance Peroxide Project's public participation process was less successful and the main reason for this was the tight project schedule. This lead to a

shortened public participation process, which caused a negative impact on the process.

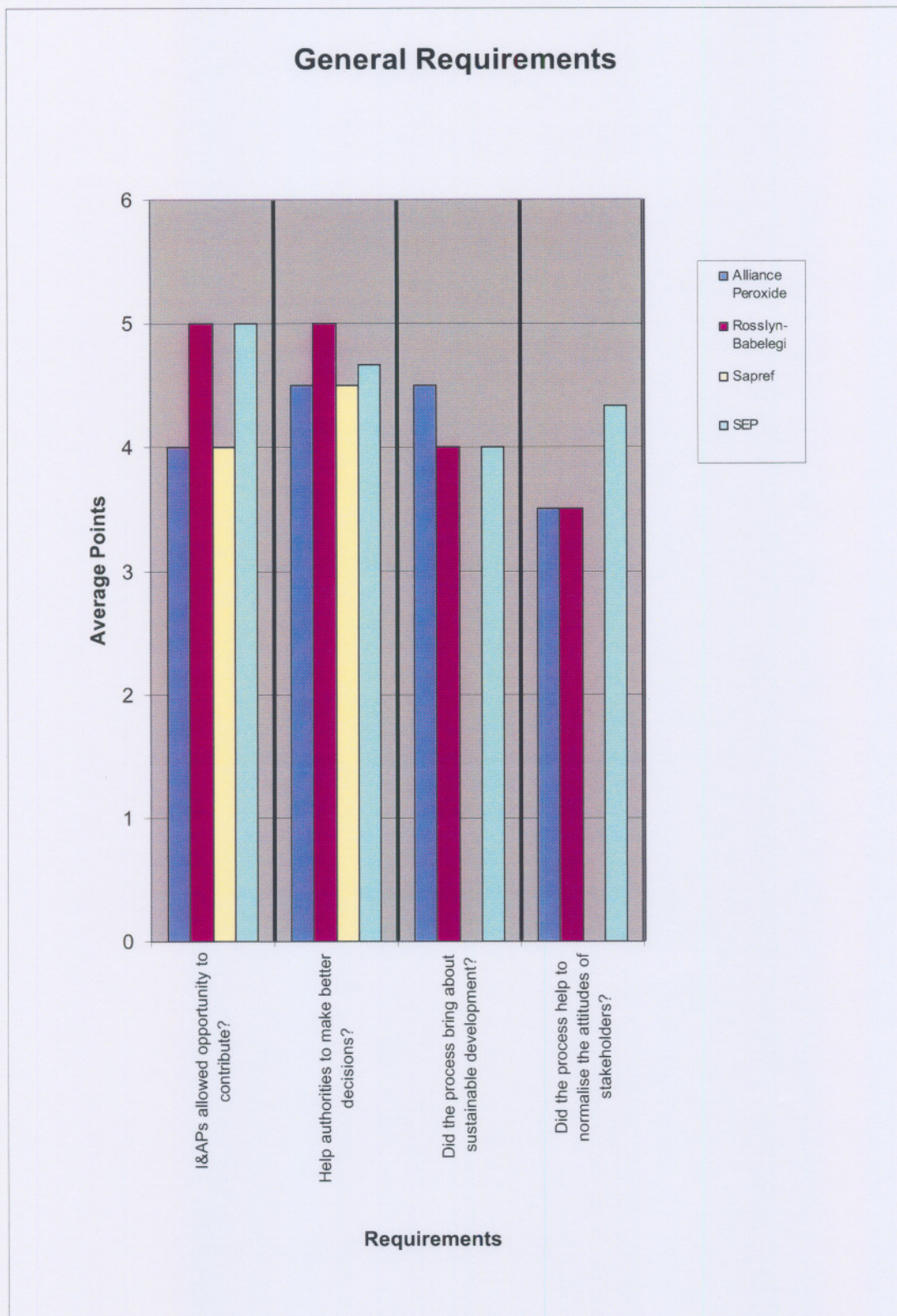


Figure 5.1: Comparing general requirements

Legal Requirements



Figure 5.2: Comparing legal requirements

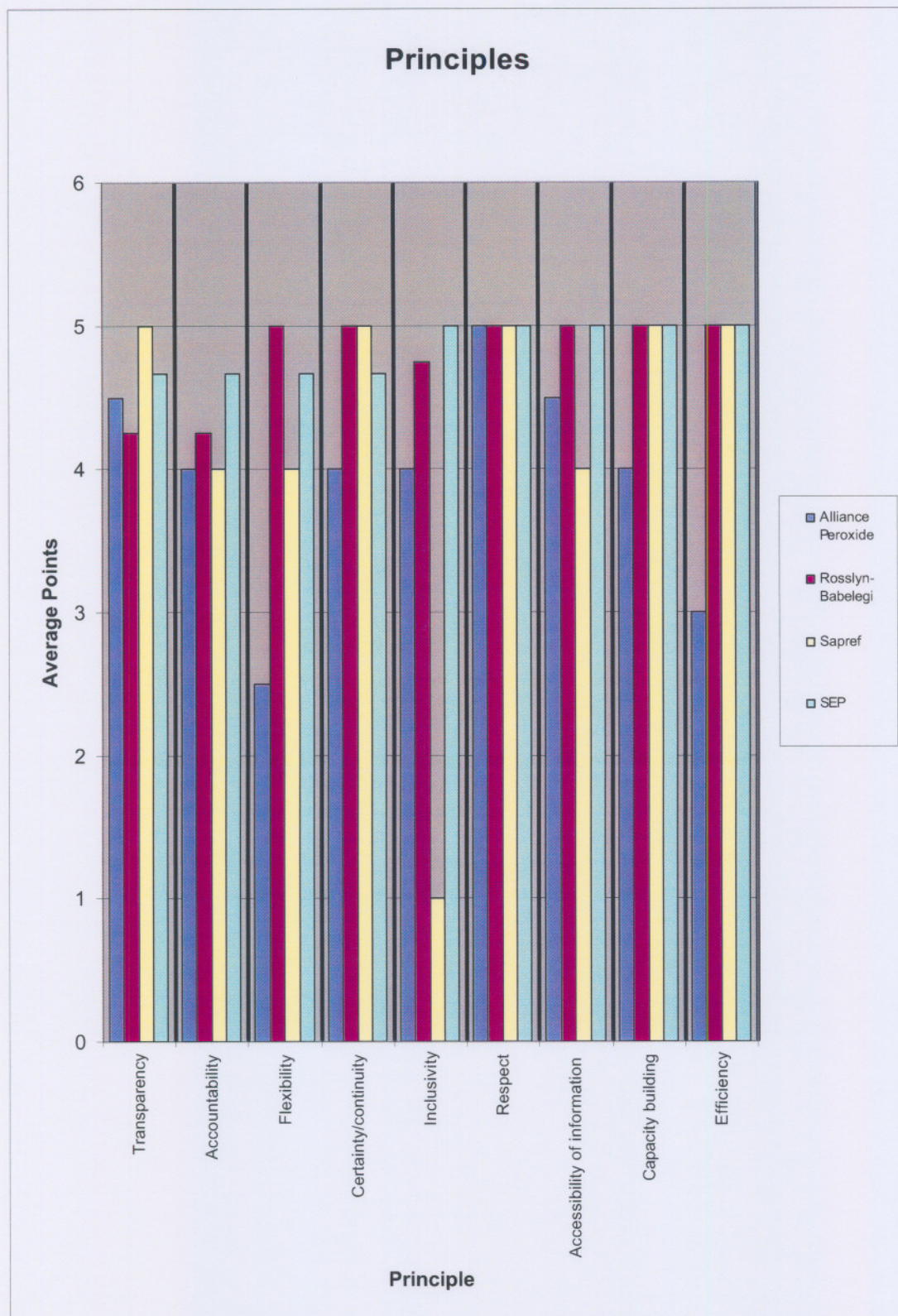


Figure 5.3: Comparing principles

5.4 CONCLUSION

From the evaluations and discussions above, the Rosslyn-Babelegi and the Sasolburg-Egoli projects' public participation proved to be the most successful.

However, the evaluations showed that both these processes did have room for improvement.

The Sapref project's public participation process also proved to be successful even though a lot of the requirements, principles, methods & techniques were not applicable to this project.

From all the discussions and evaluations throughout this report it is evident that an answer on the question "How should an appropriate and cost and time effective public participation process for proposed new Sasol Gas pipelines be conducted?" is not a straight forward one which is "cast in stone".

However, the following should be taken into consideration when an answer to the above mentioned question needs to be developed:

- Plan for enough time to conduct the public participation to ensure an effective process.
- Certain Sasol Gas pipeline projects need a very extensive public participation process.
- A "limited" public participation process can be done on certain Sasol Gas pipeline projects, which can still be effective.
- The criteria to be used to decide how extensive the public participation process should be must be based on the following:
 - the scale of anticipated impacts; and
 - the scale of public sensitivity.

(Refer to paragraph 4.4 of this report).

- Each public participation process may be different from the next one but certain objectives, principles and requirements need to be met for any public participation process to ensure its success.
- All of the case studies that were evaluated had positive and negative points regarding the public participation process it followed. To formulate an answer to the question above, a combination of all the best practices of these case studies will be used.
- The exit phase of all Sasol Gas pipeline projects' public participation need attention.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

6.1.1 The Environmental Impact Assessment Process in South Africa

The first sub-question which was highlighted in Chapter 1 of this report, related to the current process being followed in South Africa to assess the potential impacts of projects on the environment.

This question was successfully answered by a comprehensive literature study and a documentation of this information, explaining the EIA process in detail, in Chapter 2 of this report.

It was evident that the EIA process followed in South Africa is clearly spelled out in legislation but that a few inadequacies and loop holes still exist.

The process assists in determining how a new project will impact on the environment, during construction as well during commissioning and operations, etc. EIAs contribute to decision-making; it is an aid to the formulation of development actions; an instrument for sustainable development and last but not least, it ensures public involvement in the execution of identified activities.

The Application procedure / EIA process to be followed to obtain authorisation to commence with a listed activity can be divided into three phases. These phases include a screening/application/plan of study for scoping phase, a scoping phase and an assessment phase.

Most of the EIAs in South Africa end after the scoping phase, as potential impacts on the environment are not only identified, but also addressed during this phase.

6.1.2 Public participation defined

In order to answer the second sub-question that was posed in Chapter 1 relating to the meaning of public participation, a comprehensive literature study was conducted.

This question was successfully answered in Chapter 3 of this report.

Public participation is a process which allows I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project. It is also a process which provides authorities with sufficient information to be able to make better decisions.

The ultimate ideal public participation process, the one in which everyone will be equally happy with the process as well as the outcome, the one which will not delay development, cause frustration for stakeholders or convey confused messages to authorities, does not exist.

There are, however, certain aims/objectives that need to be reached in a public participation process to make it a success. To achieve these aims/objectives, there are principles as well as methods and techniques that can be followed.

6.1.3 Public participation as a component of EIAs

The third sub-question which was highlighted in Chapter 1 of this report, related to public participation as a component of EIAs.

This question was successfully answered by a comprehensive literature study and a documentation of this information in Chapter 4 of this report.

Public participation is required by legislation, but the South African legislation does not spell out exactly what to do and how to conduct the most successful process. There is however a list of legal requirements which must be met when conducting public participation for projects.

There are specific objectives of public participation that need to be achieved during the different phases of an EIA.

The public participation process should have a planning phase; a participation phase and an exit phase which ties in with the different phases of the EIA as discussed in chapter 4.3 of this document.

The level of effort in EIAs and also the public participation required for a project is a function of a combination of the following:

- The scale of anticipated impacts.
- The scale of public sensitivity.

6.1.4 Case studies

A number of case studies were evaluated in Chapter 5 of this report, which successfully answered sub-question 4, relating to specific problems and lessons learned in previous Sasol Gas pipeline projects.

These problems and lessons learned, together with the information that was gathered on the EIA (Chapter 2) and the public participation process (Chapters 3 & 4) assisted to formulate an answer to the research question.

formulate and answer to the question above, a combination of all the best practices of these case studies should be utilized.

- The exit phase of all Sasol Gas pipeline projects' public participation needs attention.

The following is recommended to conduct public participation for Sasol Gas pipeline projects:

Ensure that the public participation process has a definite planning phase, a participation phase and an exit phase.

The public participation for Sasol Gas pipelines projects should be divided into two types:

- Type 1 - Projects which require limited public participation. These should include projects with potentially low significant impacts; which are shorter than 200 meter (or another pipeline length as agreed with the relevant Authorities); which are constructed within an affected environment where the potentially Affected Parties are only the client (e.g. within an industrial area)
- Type 2 - Projects which require full public participation. These projects should include any other project, which is not a Type 1 project.

To assist with deciding on whether a proposed projects is a type 1 or type 2 project determine the scale of anticipated impacts as well as the scale of public sensitivity. (Refer to paragraph 4.4 of this report).

According to the Consultative Forum on Mining and the Environment (2002:15) the following criteria for determining the scale of predicted impacts and the scale of public sensitivity should be considered:

Scale of anticipated impacts

The level of effort for technical environmental evaluation and public participation will increase with:

- Size of footprint of impacts.
- A Greenfields vs Brownfields project.
- Where aggregate and cumulative impacts are anticipated to be significant, for example, negative socio-economic consequences in areas where this may recently have occurred.
- Increasing scale at which the impacts would be felt in particular in regard to social and economic impacts.
- Number of issues expected to be raised by the authorities and other stakeholders that would need to be incorporated into specialist studies. By implication, the more specialist studies, the more stakeholder groups will be involved, increasing the time and cost of the public participation process.

(Consultative Forum on Mining and the Environment, 2002:15)

Sensitivity of public perceptions

According to the Consultative Forum on Mining and the Environment (2002:15) "the sensitivity of public perceptions is often linked to the sensitivity of the receiving environment, but not limited to this. Public perceptions linked to the socio-economic context are becoming increasingly sensitive".

The Consultative Forum on Mining and the Environment (2002:15) further states that "public sensitivity will be higher when any of the following features stand to be impacted:

- Important water catchment areas, or stressed catchments with multiple sectors of users where there is conflict between users.
- Major drainage lines / rivers.
- Areas of archaeological or historical value.
- Areas with spiritual or religious value.
- Areas with a sense of place such as nature reserves".

Other determination of the sensitivity of public perceptions are linked to fears and loss of credibility and trust as well as certain socio-economic factors such as impact to private land and communal land and the relocation of people. (Consultative Forum on Mining and the Environment 2002:16).

Once a decision was made whether the proposed pipeline is a type 1 or a type 2 project, the process can be planned in detail. The two proposed processes, as discussed in the following paragraphs, are internally also flexible.

6.2.1 Planning phase

During the planning phase the project needs to be classified in terms of a Type 1 or a Type 2 project. This will be done during the internal screening exercise (Sasol and the independent consultant). The internal screening exercise will include understanding of the scope of the project by all internal role-players as well as internal identification of aspects and their potential impacts.

a) Type 1 projects

- Identify I&APs in the surrounding area;
- Identify the key NGO(s) in the area;
- Prepare a BID;
- Identify the local newspaper(s) and local radio stations (if any) to advertise;
- Identify venues in the area (municipal libraries, etc.) where BIDs can be made available and one or two places along the pipeline route where posters can be presented.
- Conduct a Pre-application meeting with the relevant authorities to discuss the public participation process and to obtain additional comment from them.

b) Type 2 Projects

- Examine the pipeline route areas, including all the alternative routes, in detail;
- Identify all I&APs;
- Identify local authorities along the proposed pipeline route;
- Identify the NGO(s) in the area;
- Identify Community liaison groups;
- Segment the various audience groups along the pipeline route and determine the number of public meetings/open days to be held;
- Prepare a BID;
- Identify the local newspaper(s) and local radio stations (if any) to advertise;
- Identify what the most common language in the area is;
- Identify at least one national newspaper to advertise;
- Identify the necessity to advertise the project over a national radio station and identify the most applicable one;
- Identify venues in the area (municipal libraries, etc.) where BIDs can be made available;
- Identify places along pipeline route where posters can be presented as well as notice boards where notices can be put up;
- Compile a plan of study for scoping, which includes the detailed public participation process to be followed;
- Conduct a pre-application meeting with the relevant authorities to discuss the public participation process and to obtain additional comment from them. Also submit the plan of study for scoping to the relevant authority and obtain an approval.

6.2.2 Participation phase

a) Type 1 projects

- Distribute BIDs to the identified I&APs and NGOs;

- Place advertisements in the local newspaper to inform I&APs about the proposed project and to inform them about the BIDs, which are available at public places;
- Where relevant, broadcast the same information as above over the local radio station and on posters, to be presented along the identified places;
- Place BIDs at the identified public venues;
- Make comment sheets available with the BIDs;
- Conduct a workshop/meeting with the identified NGO(s) to present the BID to them;
- Allow two weeks for comment from the date the BIDs were made available;
- Obtain comments (issues, concerns, etc.) after the two week period and address them;
- Prepare a final report (BID), including all I&APs' issues/concerns as well as answers/mitigations to these;
- Distribute the final report to all **registered I&APs** and allow an additional two week commenting period.

b) Type 2 Projects

Notification & invitations:

- Distribute BIDs to the identified I&APs and NGOs;
- Conduct meetings with the local authorities to inform them about the proposed project and the public meetings to be held.
- Place advertisements in the local newspaper(s) and national newspaper to inform I&APs about the proposed project and to inform them about the BIDs, which are available at public venues;
- Where relevant, broadcast the same information as above over the local radio station and/or a national radio station as well as on posters and notice boards, to be presented along the identified places;
- Place BIDs at the identified public places;
- Make comment sheets available with the BIDs;

- Identify which of the additional methods (most suitable for the specific project) should be used to notify I&APs about the proposed project and to invite them to participate:
 - Flyers
 - Internet/e-mail
 - Advertisements in other media (e.g. magazines)

Participation:

- Conduct a workshop/meeting with the identified NGO(s) to present the BID to them;
- Conduct meeting(s) with the identified community liaison groups;
- Allow two to three weeks for comment from the date the BIDs were made available;
- Conduct a public meeting at each of the areas as identified during the planning phase;
- Prepare a draft scoping report , including all I&APs' issues/concerns as well as answers/mitigations to these (assuming the EIA stops after scoping);
- Distribute the draft report to all **registered I&APs** and allow an additional two to three week commenting period;
- Make draft scoping report available at public venues (as with the BID);
- Obtain final comments from I&APs and finalise scoping report. At this stage of the participation, additional meetings with the registered I&APs can be conducted to present the draft scoping report and to obtain final comments from I&APs.
- Finalise the scoping report and make copies available to I&APs.

It is very important to note that open days rather than public meetings can be arranged. These can help to eliminate certain problems, which are commonly experienced during meetings, e.g. people trying to steel the spotlight during a meeting for personal gain as leader for the community. During an open day

any individual can take his/her own time to familiarise him/herself with the project and raise issues and concerns.

Where required in certain areas, semi-structured interviews should also be considered.

Throughout the participation phase a toll free telephone number can be made available for I&APs to utilise, either to obtain certain information or to submit comments.

By following the above mentioned process, for either a type 1 or a type 2 project, all the legal requirements and important principles will be adhered to. However, ensure that the following principles, as defined in Chapter 3 of this report, are incorporated throughout the public participation process for both type 1 and 2 projects: Transparency; accountability; flexibility; certainty/continuity; inclusivity; respect; accessibility of information; capacity building and efficiency.

6.2.3 Exit phase

a) Type 1 projects

- Inform the registered I&APs about the Record of Decision (ROD);
- Make the ROD available to I&APs;
- Inform the registered I&APs when construction starts;
- Make audit reports available to registered I&APs;
- Inform registered I&APs when the pipeline is commissioned

b) Type 2 Projects

- Same as for Type 1 projects; and
- A follow up meeting can be considered during implementation to inform I&APs about the progress of the project and the findings of the audits.

References

ACTS see SOUTH AFRICA.

ANDREWS, A. 1999. Public Participation and the law – An Environmental Activist's Guide. Wynberg, Cape Town.

BARNARD, D. 1999. Environmental law for all. Pretoria. Impact Books CC.

CULLINGWORTH. 1984. Canadian planning and public participation. University of Toronto. Centre for urban and community studies.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 1992a. Guidelines for Review. Vol 4. Department of Environmental affairs.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 1992b. The Integrated Environmental Management Procedure. Department of Environmental affairs.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 1992c. Guidelines for Scoping. Department of Environmental affairs

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 1997. Regulations 1182, 1183, 1184 of GG 18261, 1997-09-05. EIA Regulations Government Printer, Pretoria.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 1998. Regulations; Implementation of section 21, 22 and 26 of the Environmental Conservation Act, 1989. Guideline Document, Pretoria.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM. 2002. Stakeholder Engagement, Integrated Environmental Management, Information Series 3, DEAT, Pretoria.

DEPARTMENT OF WATER AFFAIRS AND FORESTRY, 2001. Generic Public Participation Guidelines. Pretoria.

ECOSERV. 2001. Scoping Report for the proposed Extension of Low-Pressure Gas Pipeline to Alliance Peroxide. Durban

ENVIRONMENT PROTECTION AGENCY. 1994. Public Participation in the Environmental Impact Assessment Process.

FUGGLE, R.F. 1992. Environmental Evaluation. In Fuggle, R.F. & Rabie, M.A. 1992 (Ed). Environmental Management in South Africa. Cape Town. Juta & Co. Ltd.

GLASSON, J. et al. 1995. Introduction to Environmental Impact Assessment. Principles and procedures, process, practice and prospects. UCL Press London.

GREYLING, T. 1999. Towards Managing Environmental Disputes: Appropriate Public Participation. Proceedings of the Conference on Environmental Dispute Resolution, Fourways, June 1999. AIC Centre of Mining.

GREYLING, T. 2001. Guide to public participation in South Africa. Theory and Practice. Pretoria, South Africa.

GREYLING, T. 2004. (Board member of IAP2) Planning for effective Public Participation. Student Workbook.

INTERNATIONAL ASSOCIATION FOR PUBLIC PARTICIPATION. 2003.
www.iap2.org.

KINHILL ENGINEERS Pty Ltd. 1994. Public participation in the environmental impact assessment process. Input to the public review of the commonwealth environmental impact assessment process. Prepared for the commonwealth environmental protection agency. Turner ACT.

Nature & Business Alliance. 2001. Scoping Report for the proposed construction and operation of a coal gas pipeline from the industrial area of Rosslyn to the industrial area of Babelegi, and the future conversion of the coal gas to natural gas. Westgate, Gauteng.

Nature & Business Alliance. 2002a. Scoping Report for the proposed construction, commissioning and operation of a fuel gas pipeline in three integral parts, from Sasolburg to Johannesburg (Egoli Gas), at Vanderbijlpark and Benoni-Boksburg, to facilitate the conversion of the existing hydrogen-rich Sasol Gas distribution network to natural gas. Westgate, Gauteng.

Nature & Business Alliance. 2002b. Public participation plan for the proposed construction, commissioning and operation of a fuel gas pipeline in three integral parts, from Sasolburg to Johannesburg (Egoli Gas), at Vanderbijlpark and Benoni-Boksburg, to facilitate the conversion of the existing hydrogen-rich Sasol Gas distribution network to natural gas. Westgate, Gauteng.

PETTS, J. 1999. Handbook of Environmental Impact Assessment. Excel Typesetters CO.

CONSULTATIVE FORUM ON MINING AND THE ENVIRONMENT (Consisting of NGOs and CBOs, Labour and Mining Industry). 2002. Public participation for stakeholders in the mining industry. The Chamber of Mines of South Africa
www.bullion.org.za

SOUTH AFRICAN BUREAU OF STANDARDS. 1996. SABS ISO14001 environmental management systems specification with guidance for use. South Africa.

SASOL. 2001. Public Participation Guidelines. Rosebank, Gauteng.

SASOL. 2002a. Quality Management System 918: Progressing an Environmental Impact Assessment. Sasol Technology.

SASOL. 2002b. Quality Management System 919: Environmental Verification Inspections on Projects. Sasol Technology.

SASOL. 2002c. Background information document for the proposed Sasol Gas pipeline extension to Sapref. Sasol Technology.

SHELL. 2000. The triple bottom line in action.

SMIT, DWJ. 2002. EIA Regulations: Implementation of Sections 21, 22 and 26 of the Environment Conservation Act 73 of 1989 (ECA) with specific reference to the Review Process. Class hand out notes.

SOUTH AFRICA. 1996. Constitution of the Republic of South Africa, Act No. 108 of 1996.

SOUTH AFRICA. 1989. Environment Conservation Act, No. 73 of 1989.

SOUTH AFRICA. 1998. National Environmental Management Act, No. 107 of 1998.

THORNHILL, H.H. 2001. Public Participation: A Generic Overview.

UNIVERSITY OF POTCHEFSTROOM, 1999. Managing the Environmental Impact Assessment Process: A Practical Guide for South African Environmental Managers and Administrators. University of Potchefstroom.

WATHERN. 1995. An introductory guide to EIA.

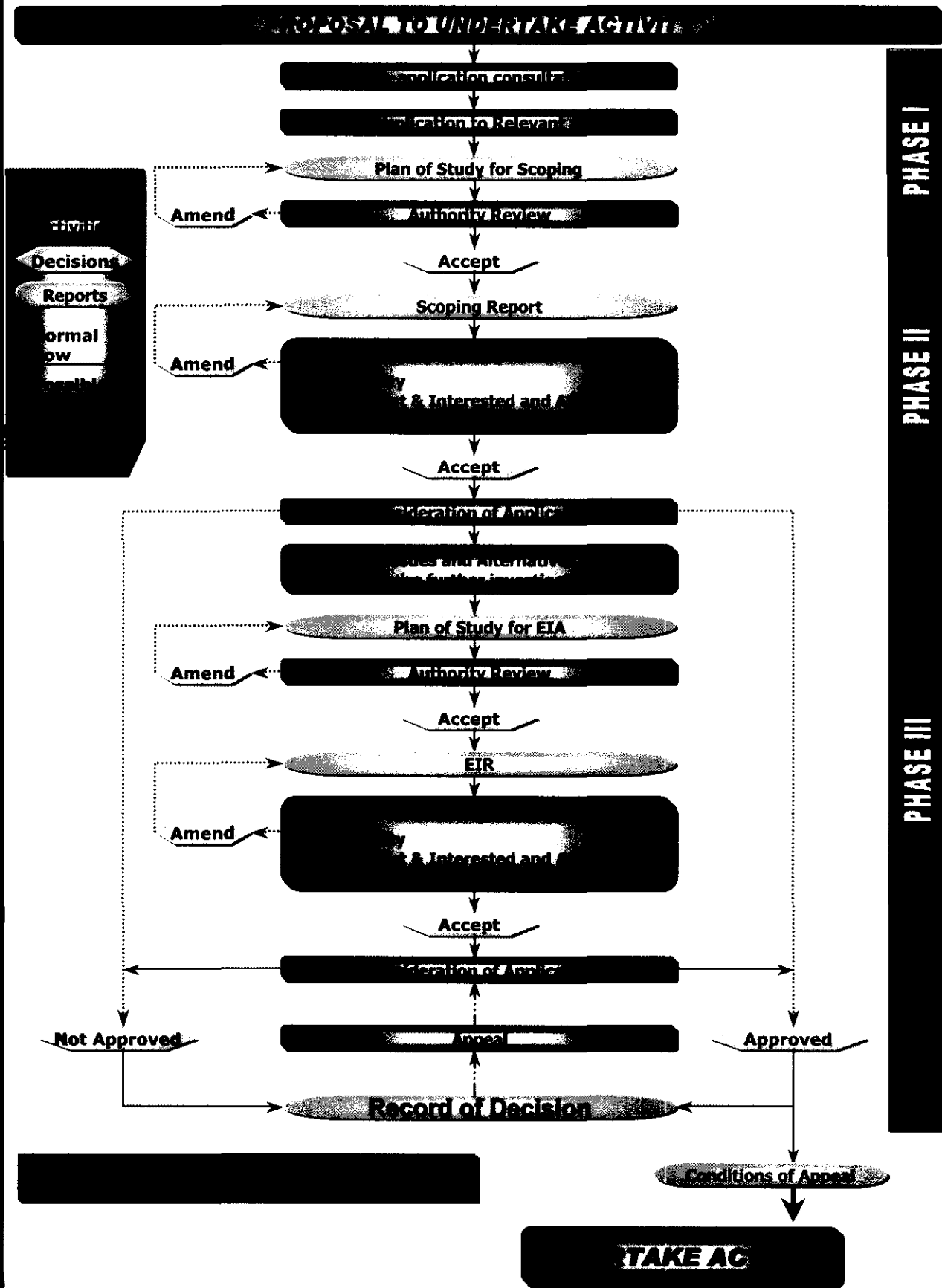
WOOD, C. 1995. Environmental Impact Assessment: A Comparative review. Longman Scientific + Technical, Malaysia. (Pages: 1-15).

WOOD, C. 1999. Handbook of Environmental Impact Assessment. Blackwell Science Ltd.

WOOD, C. 2000. Screening and Scoping. In Lee, N & George, C. 2000. (Ed.) Environmental Assessment in Developing and Transitional countries. Wiley & Sons: England (pp. 71-84).

APPENDIX A: THE EIA PROCESS

THE EIA PROCESS



APPENDIX B: LIST OF PRINCIPLES AND REFERENCES

Reference	Transparency	Correspondence	Accountability	Flexibility	Inclusivity	Integration (public & technical)	Respect	Multiple options	Equity & justice	Accessibility of information	Adaptation & innovation	Capacity building	Efficiency	Suitability of scale of intervention	Feasibility	Monitoring & evaluation	Diversity	Representativeness	Communication technologies	Trust	Commitment	Integrity	Cost-effectiveness	Practicality
OECD Principles	y	y	y																					
Thompson	y			y	y																			
UNEP	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y								
World	y		y	y	y		y			y		y	y				y	y	y	y	y			
EPA	y	y	y	y																		y	y	y

y = yes, the specific reference identified the principle as important.

APPENDIX C: LIST OF METHODS & TECHNIQUES AND REFERENCES

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

y = yes, the specific reference identified the method (technique) as important.

APPENDIX D: COMPLETED QUESTIONNAIRES

Did the process have an exit phase?	yes						the RCO, the preparation of an EMP and an audit of the EMP
Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						y	
Accountability						y	
Flexibility				y			There were time constraints and therefore flexibility pertaining to the granting of IAPs extra time to participate was limited. (The opposite was also true in that IAPs tried to play for more time in order to frustrate the process)

Certainty/continuity					y	
Inclusivity					y	
Respect					y	
Accessibility of information					y	
Capacity building				y		
Efficiency				y		

General Questions:	Answers
Outstanding positive comments regarding the process followed?	
Outstanding negative comments regarding the process followed?	
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?					yes		

Questionnaire 2

Public participation questionnaire - Alliance Peroxide								
General requirements:	point	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
I&APs allowed opportunity contribute?	3				X			
Help authorities to make better decisions?	4					X		
Did the process bring about sustainable development?	4					X		
Did the process help to normalise the attitudes of stakeholders?	2			X				One individual who was a political roleplayer tried to catch the spotlight and therefor did spoke "on behalf of" all I&AP's.

Legal Requirements:		Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>								
Facilitated by an independent agency in an honest and open manner.	5					X		
The agency must produce readable reports.	5					X		
The agency must have good record keeping abilities.	5					X		
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	2			X				One individual who was a political roleplayer tried to catch the spotlight and therefor did spoke "on behalf of" all I&AP's.
Women and youth must also participate	3				X			
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.	3				X			
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping	2			X				Some people where scared be raise their opinion once the "political leader" has influenced them.
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.	3				X			
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	5					X		
I&APs have the responsibility to submit their contribution within the allocated time period	2			X				IAP's requested additional time for comment and requested additional public meetings
I&APs contributions must be reflected in environmental investigation reports	5					X		
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.	5					X		

Process requirements:	Points	yes	No	Additional comments
Did the process have a planning phase?	5	X		
Did the process have a participation phase?	5	X		
Did the process have an exit phase?	5	X		I&AP's were not kept involved in the exit phase.

Principles:	Points	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?								
Transparency	4					X		
Accountability	3				X			
Flexibility	2			X				Project schedule forced a quite rigid process to be followed.
Certainty/continuity	3				X			
Inclusivity	3				X			
Respect	5						X	
Accessibility of information	4					X		
Capacity building	4					X		
Efficiency	2			X				The process was not as efficient as it's supposed to be due to the fact that there was a tight project schedule. The one person that influenced the I&AP's also made it difficult for all I&AP's to speak freely.

General Questions:	Answers
Outstanding positive comments regarding the process followed?	Good effort for such a tight schedule.
Outstanding negative comments regarding the process followed?	Tight project schedule and "political leader" trying to make his statement.

Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	Open day could have been a better idea - rather than a meeting. That would have allowed each individual to raise his personal concerns and not be influenced by one person.
--	---

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						X	

Questionnaire 3

Public participation questionnaire - Rosslyn Babelegi Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	1
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?					X		2
Did the process help to normalise the attitudes of stakeholders?					X		3

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>						X	
Public participation must be facilitated by an independent agency in an honest and open manner.						X	
The agency must produce readable reports.						X	
The agency must have good record keeping abilities.						X	
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.						X	4
Women and youth must also participate.						X	
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.						X	5
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping						X	
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.						X	
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).						X	
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability						X	
Flexibility						X	

Certainty/continuity							X	
Inclusivity							X	
Respect							X	
Accessibility of information							X	
Capacity building							X	
Efficiency							X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	6
Outstanding negative comments regarding the process followed?	7
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						X	8

Questionnaire 4

Public participation questionnaire - Rosslyn Babelegi Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?					X		
Did the process help to normalise the attitudes of stakeholders?				X			

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>							
Public participation must be facilitated by an independent agency in an honest and open manner.					X		
The agency must produce readable reports.					X		
The agency must have good record keeping abilities.					X		
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.					X		
Women and youth must also participate.					X		
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.				X			
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping				X			
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.							
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).					X		
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		The EIA process was co-ordinated very well
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency				X			
Accountability				X			
Flexibility						X	

Certainty/continuity						x	
Inclusivity						x	
Respect						x	
Accessibility of information						x	
Capacity building						x	
Efficiency						x	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	The EIA process was well planned and executed in a structured and methodical
Outstanding negative comments regarding the process followed?	There was no awareness/understanding of the politics of certain areas, especially the local communities who follow a mixture of traditional and government law.
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	Due to the large cultural diversity of SA, it will take far too long for one person to study and understand the different cultures and communities resulting in problems during the execution phase of a project. We should rather try to obtain a person from the specific culture/community at the beginning of the EIA process to help us understand and develop the process in such a way that all issues can be revealed and resolved before project execution. Some communities are extremely difficult and sometimes there are hidden agendas (eg. unjustified enrichment)

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						x	

Questionnaire 5

Public participation questionnaire - Rosslyn Babelegi Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?	X						
Did the process help to normalise the attitudes of stakeholders?					X		

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>							
Public participation must be facilitated by an independent agency in an honest and open manner.						X	
The agency must produce readable reports.						X	
The agency must have good record keeping abilities.						X	
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.						X	
Women and youth must also participate.						X	
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.						X	
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping						X	
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.						X	
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).						X	
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability						X	
Flexibility						X	

Certainty/continuity						X	
Inclusivity						X	
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	The process ensured that all I&AP's were part of the project from the start of the project
Outstanding negative comments regarding the process followed?	Some communities hijacked the project, using the EIA process, to enrich themselves to the disadvantage of the public. The method enforced on the Project Team to cross the Apies river resulted in extensive damage to the environment, in contrast to the very small effect the VGI method would have had.
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	When the project was stopped by the community, the police should have been contacted directly to avoid the project from being hijacked illegally.

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?					X		

Questionnaire 6

Public participation questionnaire - Rosslyn Babelegi Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?					X		
Did the process help to normalise the attitudes of stakeholders?				X			

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following legal requirements met?							
Public participation must be facilitated by an independent agency in an honest and open manner						X	
The agency must produce readable reports.					X		
The agency must have good record keeping abilities.					X		
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.				X			
Women and youth must also participate.					X		
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.				X			
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping					X		
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.					X		
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).					X		
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		Follow up participation still requires attention. (Keep I&AP's informed regarding the implementation of the project).

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency					X		
Accountability					X		
Flexibility						X	
Certainty/continuity						X	
Inclusivity					X		
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	Very effective as five public meetings were held to ensure all I&APs were reached.
Outstanding negative comments regarding the process followed?	The process was very well planned but more effort had to be made in the planning phase to understand the internal politics of the communities and their traditions. Follow up participation still requires attention. (Keep I&AP's informed regarding the implementation of the project).
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	Get a better understanding of the people and their culture.

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?					X		

Questionnaire 7

Public participation questionnaire - Sapref							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?					X		There were no public meetings, but the information was available in 3 libraries for 2 weeks.
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	The comments after the public process was included in the documentation and resubmitted to the authorities.
Did the process bring about sustainable development?	X						The construction was only a 7m pipeline.
Did the process help to normalise the attitudes of stakeholders?	X						

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>							
Public participation must be facilitated by an independent agency in an honest and open manner.	X						Sasol had permission from the authorities to place adverts without using an independent agency.
The agency must produce readable reports.	X						
The agency must have good record keeping abilities.	X						
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	X						
Women and youth must also participate.	X						
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.	X						
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping	X						Project didn't go through scoping.
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.	X						
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).	X						
I&APs have the responsibility to submit their contribution within the allocated time period.	X						
I&APs contributions must be reflected in environmental investigation reports.	X						
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.					X		

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		Part of Sasol requirements and internal process.
Did the process have a participation phase?	X		Part of Sasol requirements and internal process.
Did the process have an exit phase?	X		Part of Sasol requirements and internal process.

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability					X		
Flexibility						X	
Certainty/continuity						X	
Inclusivity							
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	
Outstanding negative comments regarding the process followed?	The process up to receiving the RoD took nearly 7 months and the construction phase
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	No, but in KZN, and especially Durban, remember to involve SDCEA!

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						X	Sasol got a positive RoD without anybody appealing. I will regards that as a success.

Questionnaire 8

Public participation questionnaire - Sapref							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?					X		
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?					X		
Did the process bring about sustainable development?	X						
Did the process help to normalise the attitudes of stakeholders?	X						

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
<i>Were the following legal requirements met?</i>							
Public participation must be facilitated by an independent agency in an honest and open manner.	X						
The agency must produce readable reports.	X						
The agency must have good record keeping abilities.	X						
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.	X						
Women and youth must also participate.	X						
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.	X						
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping	X						
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.					X		
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).					X		
I&APs have the responsibility to submit their contribution within the allocated time period.					X		
I&APs contributions must be reflected in environmental investigation reports.					X		
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.					X		

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability					X		
Flexibility				X			
Certainty/continuity						X	
Inclusivity		X					
Respect						X	
Accessibility of information				X			
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	
Outstanding negative comments regarding the process followed?	The process up to receiving the RoD took nearly 7 months and the construction phase was 3 weeks with minimal impacts.
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	No, but in KZN, and especially Durban, remember to involve SDCEA!

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?					X		Sasol got a positive RoD without anybody appealing. I will regards that as a success.

Questionnaire - 9

Public participation questionnaire - Sasolburg Egoli Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?					X		
Did the process help to normalise the attitudes of stakeholders?					X		

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following legal requirements met?						X	
Public participation must be facilitated by an independent agency in an honest and open manner.						X	
The agency must produce readable reports.						X	
The agency must have good record keeping abilities.						X	
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.						X	
Women and youth must also participate.						X	
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.						X	1
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping						X	
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.						X	
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).						X	
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability						X	
Flexibility						X	
Certainty/continuity						X	
Inclusivity						X	
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	
Outstanding negative comments regarding the process followed?	
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						x	

Questionnaire 10

Public participation questionnaire - Sasolburg Egoli Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	A large number of comments (a lot of them significant) were received and acted upon.
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?					X		All the comments were collated and a summary answer was given in the Issues chapter, and references were made to the detail text in the report.
Did the process bring about sustainable development?	X						In all honesty, I can't answer
Did the process help to normalise the attitudes of stakeholders?					X		Excellent facilitated meetings and personal feedback helped allay fears among the I&AP's

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following legal requirements met?							
Public participation must be facilitated by an independent agency in an honest and open manner.						X	Nature & Business Alliance was appointed and the meetings were a great success
The agency must produce readable reports.					X		The reports were written in a clear and easily followable style
The agency must have good record keeping abilities.					X		This was done very professionally
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.						X	The public meetings incorporated various means of ensuring good understanding
Women and youth must also participate.					X		This did happen
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.					X		The EIA determined the route of the pipeline where the least impact would occur
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping					X		I&AP's did not help choose the main route selection, but contributed to issues that needed to be investigated
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.					X		This was done above what the law requires
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).					X		The Scoping reports were distributed widely for comment
I&APs have the responsibility to submit their contribution within the allocated time period.					X		This was done and where it was possible to incorporate late comments, this was done
I&APs contributions must be reflected in environmental investigation reports.					X		A whole chapter deals with this
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.					X		Decisions, and the reasoning behind them, were communicated in a transparent manner to I&AP's.

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		6 formal meetings and various smaller meeting were held with stakeholders
Did the process have an exit phase?		X	The project has not reached that phase yet

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency					X		
Accountability					X		
Flexibility					X		
Certainty/continuity					X		
Inclusivity						X	
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	A very wide audience was reached and encouraged to contribute. Every person that contributed was informed afterwards of the response to their comments.
Outstanding negative comments regarding the process followed?	None
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	Toll-free number could have been used

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						X	

Questionnaire 11

Public participation questionnaire - Sasolburg Egoli Pipeline							
General requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Did the process allow I&APs an opportunity to share their issues/concerns/questions/contributions regarding the proposed project?						X	
Did the process help to provide authorities with sufficient information for them to be able to make better decisions?						X	
Did the process bring about sustainable development?	X						
Did the process help to normalise the attitudes of stakeholders?						X	

Legal Requirements:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following legal requirements met?							
Public participation must be facilitated by an independent agency in an honest and open manner.						X	
The agency must produce readable reports.						X	
The agency must have good record keeping abilities.						X	
All people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equal and effective participation, especially vulnerable and disadvantaged persons.						X	
Women and youth must also participate.						X	
Decisions must take into account the interests, needs and values of all interested and effected parties, including the recognition of traditional knowledge.						X	
Interested and affected parties (I&APs) have to participate the identification of issues and alternatives during scoping						X	
I&APs should be given the opportunity (including adequate time) for comment on assessments for impacts and proposed mitigation measures.						X	
I&APs have to comment on the findings of any environmental investigation as contained in its reports (e.g. Scoping Report and Environmental Impact Report).						X	
I&APs have the responsibility to submit their contribution within the allocated time period.						X	
I&APs contributions must be reflected in environmental investigation reports.						X	
Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.						X	

Process requirements:	yes	No	Additional comments
Did the process have a planning phase?	X		
Did the process have a participation phase?	X		
Did the process have an exit phase?	X		

Principles:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Were the following principles followed and used throughout the process?							
Transparency						X	
Accountability						X	
Flexibility						X	
Certainty/continuity						X	
Inclusivity						X	
Respect						X	
Accessibility of information						X	
Capacity building						X	
Efficiency						X	

General Questions:	Answers
Outstanding positive comments regarding the process followed?	The process ensured that all I&AP's were part of the project from the start of the project
Outstanding negative comments regarding the process followed?	None
Were there anything throughout the process that should have been done differently to ensure more effective participation? Provide recommendations.	I am of the opinion that the process followed were very successful.

Final Question:	Not Applicable	Very poor	Poor	Average	Good	Excellent	Additional comments
Was the process a success?						X	

QUESTIONNAIRE FOR WERNER PETRICK

ADDITIONAL COMMENTS

A ROSSLYN-BABELEGI GAS PIPELINE

1. A special effort was made to ensure as many stakeholders as possible are involved in the decision-making process. The entire pipeline route was sectorised into 5 separate community sectors. Public meetings were held in each sector and interested and affected parties were identified per sector. IAPs were given the opportunity to register their issues at these meetings as well as through follow-up individual communication sessions in the form of telephone calls, e-mails, faxes and personal visits to them by the EIA consultant team.
2. Sustainable development was achieved in the sense that the supply of pipeline gas to the Babelegi region will in the long-term lead to industrial and socio-economic development. However, as far as social development is concerned, the applicant could have done more to ensure the long-term social upliftment of poor communities. That would have ensured a long-term partnership between the applicant and some of the communities along the pipeline route and create more positive perceptions.
3. Poor communities are inevitably more vulnerable to outside influences that affect their well-being. One such community, Bosplaas, fell victim to the influence of an outside lawyer who wanted to make a financial gain from the pipeline project through threats of litigation. They claimed that the community of Bosplaas was not properly consulted despite the fact that their local municipality was closely involved in the consultation process through its Mayor, Town Clerk and Community Liaison Officer. The lawyers eventually abandon their case, after the national Department of Environmental Affairs and Tourism (DEAT) expressed their satisfaction with the consultation process. The principle is: interested and affected communities have an equal responsibility to reach out to project proponents if they know that they are busy with consultation sessions in their area. It is not a one-way process.
4. Public participation sessions were held in as many communities as possible, at venues and times that were convenient to them.
5. Special efforts were made to involve traditional leadership structures in the public consultation process. The Tribal Authorities of Majaneng and Kekana Gardens participated actively.
6. Although it was not mandatory in terms of environmental legislation, we compiled a Public Participation Plan in the beginning of the EIA process and explained it to the applicant to obtain approval. The Plan was also submitted to the authorities for prior approval. The purpose of the Plan was to ensure that all affected communities are reached, that the best possible communication techniques were used and that sufficient proof was provided to DEAT that the public consultation process was well planned and thorough.

7. Four of the five communities in this case were extremely complex in terms of social structuring, leadership order, social status, poverty levels, infrastructural deficiencies and general needs. The Public Participation Plan was a great help in this regard. It was to be expected that a lawyer could take advantage of the project proposal in an effort to exploit the project proposal and to try and make money from the applicant.
8. Considering the extreme diverse positions of the various communities along the pipeline route and the complex social structures, the process achieved a lot through building capacity, broadening skills, enhancing communication and creating positive perceptions.

B SASOLBURG EGOLI GAS PIPELINE

1. The socio-political structuring of communities along this pipeline route demanded that we closely involve the Local Ward Councilors in the public participation process, for example Boipatong, Wattville and Riverlea.
2. An intensive media campaign was launched for the Southern suburbs of Johannesburg, to create awareness and understanding of the project proposal. This campaign was highly successful and led to one secondary school launching an environmental project for their learners, with the gas pipeline as theme.
3. After the Record of Decision for this application was issued, we conducted an environmental workshop in the Wattville community of Benoni, among the black youth. The purpose was to create sensitivity about environmental management and to educate the youth about the legislation and methods used when an impact assessment is conducted.

ALFONSO NIEMAND
NBA