CLASS ENVIRONMENTAL ASSESSMENT FOR GROUPS OF PROJECTS IN SOUTH AFRICA

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Recent trends in the Environmental Assessment (EA) field reveal a greater focus on integrating sustainability principles early in the planning process. Early integration requires an approach that is proactive and strategic rather than reactive. Class Assessment (CA) offers a framework for the early strategic assessment of many similar projects with relatively insignificant impacts, familiar environments and well known mitigation measures. It is argued that CA provides a more efficient way to assess groups of projects in South Africa than the current project-by-project focus of Environmental Impact Assessment. A motivation for applying CA in South Africa is provided with reference to an illustration that shows the inefficiency of the current approach, literature on EA theory and procedures and the Canadian approach to CAs. A framework is developed for CA in South Africa, in which Environmental Assessment Practitioners prepare either a Standard or Multiple Report. A Standard Report is a single document on a class of projects that do not require site specific reports, while a Multiple Report provides standard information to be incorporated into a number of Site Reports. CA is a proven process in different parts of the world and its adoption in South Africa is both overdue and timely.

Rationale for Class Assessment in South Africa

A motivation for using Class Assessment (CA) in South Africa is provided below, with reference to the South African regulatory framework for Environmental Impact Assessment (EIA) and an illustration that shows the inefficiency of the current approach to the assessment of groups of projects. Theoretical justification is provided from the Environmental Assessment (EA) literature, which places CA in the domain of Strategic Environmental Assessment, and reference is made to the implementation of CA in Canada as a basis for the development of a framework for CA in South Africa.

Regulatory Framework

In a bid to streamline the overregulated EIA process in South Africa, the National Environmental Management Second Amendment Act, No. 8 of 2004, was promulgated to provide a framework for a revised EIA regime. This Act classifies projects requiring EIA into two lists. List 1 refers to activities requiring a Basic Assessment (BA), while activities under List 2 require a Thorough Assessment (Ndlovu, 2005). The purpose of the BA process is to streamline EIA so that smaller-scale activities, such as road widening, construction of dams below 5m in height and many other types of projects, are not subjected to a full EIA process. However, the requirements for the BA process (DEAT, 2006) are relatively rigorous and, therefore, onerous and costly to implement.

Illustration of Current Approach: the Shell EIA Rectification Project

The National Environmental Management Second Amendment Act, No. 8 of 2004, provides for the rectification of unauthorized activities carried out in the past (Ndlovu, 2005). One such set of activities is the installation of fuel storage tanks by Shell Marketing (Pty) Ltd in South Africa. The illustration reported in this paper focuses on the Gauteng Province – the commercial centre of South Africa – with 176 such unauthorized tanks for which the Gauteng Department of Agriculture, Conservation and Environment (GDACE) required retrospective Basic Assessment (BA) reports in 2007.

GDACE provided a checklist which informed the methodology for the Basic Assessment of the fuel storage tanks. This checklist comprises interviewing the site managers of the tanks, assessing the tank

conditions in terms of leaks and spills, assessing the availability and servicing of fire extinguishers, presenting a photographic record in a northerly, easterly, westerly and southerly direction, and providing letters of notification to the site neighbours and to local environmental authorities. After the site investigations, the findings were interpreted in terms of a site sensitivity analysis and a statement of significance was allocated to every site, taking into consideration potential impacts on groundwater, soil and proximity to sensitive vegetation. A 40-page report was compiled for each of the sites and an estimated 400 reports were submitted as part of the Shell EIA rectification process in all of the provinces of South Africa. The question is, do the provincial environmental authorities have the human resources to assess these reports critically, and is the effort expended commensurate with the beneficial outcome, which is getting environmental approval?

Reflecting on this illustration, there appears to be an urgent need to streamline the process such that the repeated use of time and other resources in the assessment of groups of relatively small projects with similar impacts can be better invested in larger projects with more significant adverse effects.

Class Assessment within the Domain of SEA

The concept of Strategic Environmental Assessment (SEA) entails the appraisal of the three 'Ps' – Policies, Plans and Programmes. Wood and Djeddour (1992: p. 82) define the three 'Ps' as follows: a policy provides "*inspiration and guidance for action*"; "*a plan as a set of coordinated and timed objectives for implementing the policy*"; and "*a program as a set of projects in a particular area*". This definition is consistent with the notion of tiering developed in the United States (US) under the National Environmental Policy Act (NEPA), which requires the preparation of a number of linked Environmental Impact Statements (EISs) in a hierarchy of assessment, from policies to plans to programmes. The US regulations describe two approaches to tiering (US: CEQ, 1978). The first approach is from a higher level of decision making to a lower level, for example, from a policy or programmatic EIS to a regional (or river catchment) statement, down to the level of a site-specific statement. The second approach is for an EIA of a specific action, in which there is a tiering of statements by the stage in the planning and design process, so that an early EIS would focus on the need for a project and site selection, while later statements would focus on impact mitigation at the chosen site (US: CEQ, 1978). Class Assessment is categorized as a programmatic environmental assessment because it deals with a set of projects with similar characteristics.

Class Assessment

Class Assessment is carried out on repetitive and replicable projects with similar characteristics and predictable environmental impacts of a relatively low significance. Examples of such projects are the dredging of rivers and the installation of culverts under roads. A CA document describes the class of project, design standards, mitigation measures and environmental effects (Tomlinson, 1981; Ontario MOE, 2002; Noble, 2003; Gerard, 2006; Spaling and Vroom, 2007). Class Assessments are generally developed for project types for which there have been many assessments performed in the past and the environmental effects of the projects are well known (Tiege, 2007; Virtue, 2007). Box 1, below, provides a summary of the attributes of Class Assessment.

Box 1: Attributes of Class Assessment

Repetitive projects

Replicable activities

Common environmental characteristics

Predictable and relatively insignificant environmental impacts

Known mitigation measures

Canadian Procedure for Preparing a Class Screening Report

The Canadian approach to CA can inform the South African framework because the former is a well developed process that has been in place for many years and those involved have gained considerable experience in implementation. The Canadian Environmental Assessment Agency (CEAA) has an operational policy statement on Class Screening to guide responsible authorities and project proponents in preparing a Class Screening Report. There are two major types of Class Screening Reports namely, Replacement and Model Reports.

The Replacement Report is a single document which does not require project or location specific information, provided that the proponent of the project adheres to stipulated design standards and mitigation measures. The Model Report process involves a two-stage assessment of projects that fall within a particular class. A Model Report typically describes the type of project, standards of design and mitigation measures peculiar to projects of this class. A Model Report is used subsequently as a guide in producing project or location specific information that is documented in a Project Assessment Report. The project or location specific report concludes on the significance of the environmental consequences.

A Suitable Framework for Class Assessment in South Africa

In the proposed 2007 amendments to section 24 of the National Environmental Management Act, the Minister of Environmental Affairs and Tourism is authorised to identify 'norms and standards' for some activities, rather than requiring a full EIA for these activities (Republic of South Africa: Government Gazette, 2007). The intent underpinning these norms and standards is similar to the CA approach and the Department of Environmental Affairs and Tourism (DEAT) can take a cue from the Canadian method of assessing groups of projects with similar impacts. Although CA is a proven process in some countries, focus in South Africa has been on project level EIA as required by law. Ongoing law reform processes now require more strategic approaches such as CA.

The Canadian process develops either a Replacement or Model Report, both of which involve public consultation, review and subsequent approval. Model Reports are then used as exemplars in developing Project Assessment Reports. The Canadian Environmental Assessment Agency (CEAA) supports responsible authorities by paying the cost of public consultation and also the cost of making available draft copies to the public. In the South African context, the assessment process and the associated public participation is the responsibility of Environmental Assessment Practitioners (EAPs), who operate in consultancies. Class Assessment reports could be prepared by EAPs, appointed by an applicant (also known as the proponent), and classified as either a Standard or Multiple Report. We propose these two terms for application in the South African context as more evocative and less confusing than the Canadian terminology. A Standard Report would be a single document without site specific reports, while a Multiple Report would be used as a standard – for subsequent class projects – in the production of Site Reports.

The CEAA provides support in the form of making available a Class Screening Coordinator who guides responsible authorities in the development of a CA report. In South Africa, this could be somebody from the national environmental authority or one of the nine provincial authorities. It is important to bear in mind the limited resources available to environmental authorities in South Africa. Canada has a highly developed economy with significantly more resources available to government agencies than is the case in developing countries such as South Africa. Thus, a pertinent question is who should compile CA reports in the South African context. With reference to the illustration of fuel storage tanks discussed earlier in this paper, multiple proponents in the private sector, in this case a number of oil companies, e.g., Shell, Chevron, BP and others, could form a consortium – or use existing associations such as the South African Petroleum Industrial Association (SAPIA) – to jointly commission and pay an EAP to produce a Standard or Multiple Report. Government agencies, such as the Department of Water Affairs and Forestry in the case of water-related activities such as the dredging of rivers, could similarly commission EAPs to produce CA reports as appropriate, and recover costs from users where possible. The situation where so many responsibilities vest in consultants rather than the environmental authorities has, however, been roundly criticised by environmental Non Governmental Organizations, who believe that consultants should rather be appointed by the environmental authorities even if paid by a proponent.

With respect to implementation, once a provincial authority approves a CA report, the applicant could be required to submit audit reports of facilities on a periodic basis. This would serve both as a compliance monitoring device and also facilitate the evaluation of Class Assessment as a method of environmental management.

The benefit of the Class Assessment approach to provincial environmental authorities cannot be over emphasised. The authorities are understaffed and are not always able to meet the deadlines for giving environmental authorisations to project proponents on their proposals. The CA approach would limit this problem and enhance the use of departmental resources on broader and more important development proposals that require more attention because of the complexities and significance of the environmental impacts involved.

Figure 1, below, is an illustration of the potential application of CA in South Africa. The framework for application is in three stages.

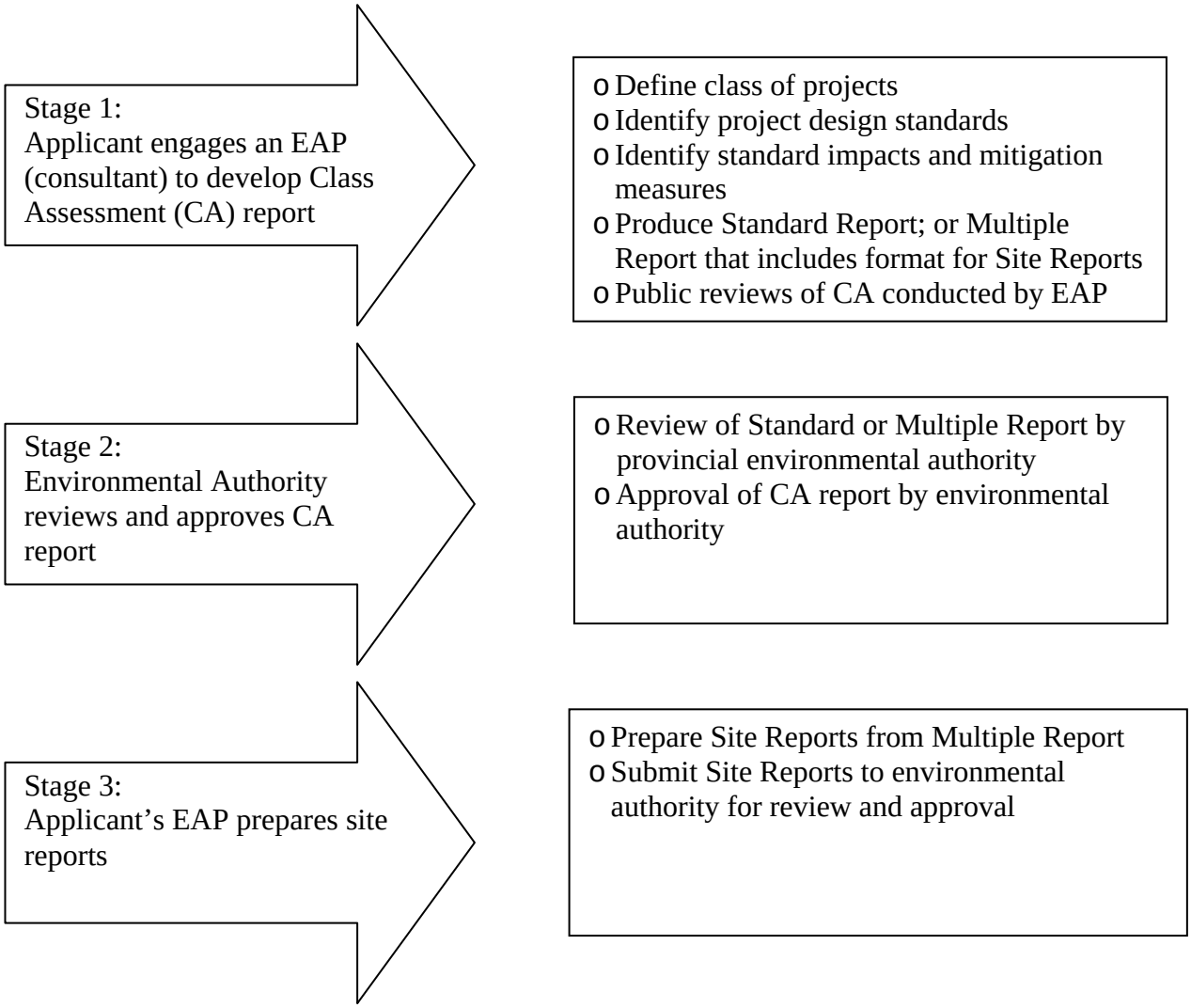

Figure 1: Proposed framework for Class Assessment in South Africa

In Stage 1, the environmental authority and the applicant – together with his/her appointed Environmental Assessment Practitioner (EAP) – define the class of project and broad content of a CA, which is followed by the preparation of a CA report by the EAP. Stage 2 entails the review and approval of a CA report by the environmental authority. A CA process that only incorporates a Standard Report ends at Stage 2. Stage 3 incorporates the use of a Multiple Report to inform the preparation of shorter Site Reports.

Conclusions

Drawing on the EA literature, Canadian experience of CA and the context of the South African EIA system, two types of Class Assessment are proposed for South Africa, namely, Standard and Multiple Reports.

The Standard Report provides a detailed environmental assessment of all the projects within a particular class and identifies standard mitigation measures. The Multiple Report is a two-stage assessment of projects that fall in a particular class. The Multiple Report describes the type of project, standards of design and the necessary mitigation measures, and is used subsequently as a guide in producing Site Reports that conclude on the significance of environmental consequences.

Further research is needed to explore the conditions critical to the success of Class Assessment in South Africa. Such conditions include the screening process needed to differentiate between Standard and Multiple reporting; improved information management by environmental authorities; and optimising co-operative governance in the EIA system, in order to allocate appropriate roles and responsibilities for the implementation of CA in South Africa to different spheres and sectors of government, the private sector and civil society.

This paper proposes additions to the existing EA system in South Africa to address the issue of routine and repetitive Basic Assessments for many similar projects with relatively insignificant impacts, familiar environments and well known mitigation standards. Class Assessment – a variant of strategic assessment, streamlines the process thereby freeing administrative and other resources for dealing with more significant EA issues. Class Assessment is a proven process in different parts of the world and its adoption in South Africa is both overdue and timely.

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