

ENVIRONMENTAL ISSUES and CONSTRUCTION: The Contractual Process



Laws

- To enable humans to live harmoniously with each other and the Natural Environment
- Difficult to be precise when dealing with natural environment - situations vary

Before We Start

- Your “Client” should be the Environment
- Must be consistent in your standpoint – would make your life easier

Application of Laws

Not so easy when:

- The Applicant is paying you

So need Consistency between
Professionals

Application of Laws

- Should be in the "Spirit of the Law"
- Law Enforcers should use discretion and understand the "Spirit of the Law"

Continuity

- There should be continuity of involvement throughout a Project
- Same Organisation should do the EIA, EMPr and become ECO
- That Organisation then has the required background knowledge to be able to guide the Construction Process

Desired Result

- In 1829 Sir Robert Peel started the London “Bobbies” with 9 Basic Principles



Desired Result

- **To recognise always that the test of police efficiency is the absence of crime and disorder, and not the visible evidence of police action in dealing with them.**

The Process

- Environmental Authorisation
- WULA Approval
- EMP_r

All made out to the Applicant

Authorisation

- The EA and WULA give the Applicant (and us) approval to “break” the Environmental Laws
- The EMPr tells us how we can do it
- EMPr is an important document

Writing the EMP

- Do not work outside your field of expertise
eg specifying peak floods if you are not a hydrologist
- Specify what is required to protect the Environment
eg minimise river bank erosion while diverting the river
- Do not specify unrealistic detail
eg river may not be diverted more than 10m from its original course

The EMP

- Keep it simple - Assembly of graminoid species???
- Must be clear to the user



The EMP

- Keep supporting documentation in the Appendices
- Avoid repetition – you are likely to contradict yourself
eg top soil depths
- Avoid conflicts with the Tender Document

Suggestions

Linear Projects (ESKOM lines, pipelines)

- Make the area wide enough for minor diversions
- Physically visit the site

Engineering Contracts

Client appoints Consulting Engineer(s) who

- Carry out the design
- Compile the Tender Document
- Supervise the Construction

Engineering Contracts

- Client must delegate responsibility to Consulting Engineer(s) to comply with the EMPr and give descriptions and details of these responsibilities
- Consultants should be aware of the Environmental requirements

Engineering Contracts

- Consulting Engineer must draw up a Tender Document with a Bill of Quantities
- Delegate responsibilities to the Contractor regarding the EMPr and give descriptions and details

Engineering Contracts

- If responsibilities are not delegated, those responsibilities remain with the Applicant
- Hence the need for the link between the Tender document and EMPr

The Process

- Engineering Contracts are regulated by well thought out and tested Rules
- Contract is between the Client and Contractor and managed by the Engineer
- Contractor only takes instructions from the Engineer

Engineering Contracts

- General Conditions of Contract (GCC)
- New Engineering Contract (NEC)
- FIDIC
- Joint Building Contracts Committee(JBCC)

Engineering Contracts

- **SABS 1200 gives specific details of work required**

Eg: Intermediate Excavation requires the use of a back acting excavator of flywheel power exceeding 0.1 kW per mm of tined bucket width.

The ECO

- Should become an integral part of the Project team
- Requires practical experience for credibility
- Look at the big picture
- Anticipate problems

Safety Aspects

- Most ECO's are not qualified as Safety Officers
- Can express concern re safety issues and should liaise with Safety Officer
- SACPCMP web site gives requirements for a Safety Officer

What the Legal Process is

- The ECO cannot give direct instructions to the Contractor unless that is part of the Tender Document
- If so, you need to understand the “Rules of the Game” otherwise you may cost your Company or the Client money – which eventually the Tax payer pays...

Working Together

- Form a relationship with the Engineer and Contractors Site Management
- Do not give instructions to Site Personnel
- Resolve problems with the Site Management Staff during your site visit

Working Together

- Get away from the “Us and Them”
- Question and Listen and you will learn
- Discuss and resolve issues with Site Management if you feel the Contractor is not complying

Qualities Required

To inspire confidence

- Integrity
- Consistency
- Ability to listen and assess
- Knowledge

Will go a long way....