

**SAFETY HEALTH AND SAFETY (SHE) RISK ASSESSMENTS
BY JAMES BRICE, INTERNATIONAL CONSULTANT**

1. INTRODUCTION

1.1 The purpose of these standards are to provide the framework for PROCHEM to identify those aspects of its operations that do, have or can create safety and SHE impacts.

1.2 Furthermore, it provides the framework for determining the criteria by which the significance of these aspects shall be determined.

1. APPLICATION

Each site within the company

2. FLOW DIAGRAM OF THE PROCESS

None

3. RELEVANT PROCEDURES

ISO 14001: 1996 – Clause 4.3.1

OHSAS 18001: 1999 – Clause 4.3.1

4. PROCEDURE

5.1. Identification of SHE Aspects

5.1.1. Each plant manager, in conjunction with the SHEQ Team for each site and any other relevant operational personnel, ('The Team') shall determine the relevant aspects and impacts for each operation/area.

5.1.1. The Team considers all processes and equipment over which the relevant area of operation has responsibility and the related activities, products and services. The Team will identify the SHE aspects associated with each activity, product or service and the associated SHE impacts in the following process:

5.2. Determination of Scope of Activities for inclusion in the Aspects Register

5.2.1. For the activity under investigation to be investigated further, it would need to be included in the following :

- Does the activity, product or service occur on or originate from the site?
- Does a permanent staff member of Prochem perform the activity?
- Does a contractor under the employment or control of Prochem perform the activity or service, where the activity or service is directly related to the operations at the site?

5.2. Process Analysis

- 5.2.1. Break all of the activities on the site into tangible and clearly defined units or sections according to location, nature of activity (e.g. workshop, wastes) and/or internal department.
- 5.2.2. Identify the relevant manager for the specific activities under investigation and involve him/her in the aspects identification process to draw on historical and technical knowledge.
- 5.2.3. Group together all generic activities, which may be occurring in different departments or sections or locations (e.g. packaging, handling and storage).
- 5.2.4. Care should be taken not to be too general when identifying generic activities and activities should be separated if different impacts are being (or may be) caused (i.e. the environment in which the activity is conducted should also be taken into account). The level of detail for selecting an activity, product or service should allow meaningful examination and sufficient understanding.
- 5.2.5. Perform an inspection of each activity, considering how the activity may interact with the environment and the persons exposed under the following conditions:

N	Normal operation which is scheduled or planned. This impact is part of the design of the process, and is included whether legally compliant or not.
U	Unscheduled or unplanned activities, excluding emergency, scheduled maintenance, shutdown or start-up related activities. Examples of such would be power failures, once-off activities, temporary storage, etc.
E	Emergency condition, where an emergency plan is invoked due to: <ul style="list-style-type: none"> ▪ The risk to human life and health on a scale beyond normal activities, ▪ The risk to property, equipment or process, the assistance of emergency services, ▪ The notification of emergency or regulatory bodies, ▪ A large loss of chemicals or dangerous goods (as defined in SABS 0228), or hazardous substance (as defined in the Hazardous Substances Act), ▪ A serious threat to the environment.
M	Scheduled Maintenance, including upgrading, construction, renovating, repairs, etc.
S	Scheduled Shutdown/Start-up
The timing of each aspect of the activity must be further classified in terms of their timing as follows:	
P	Present, current
H	Historic (i.e. aspects that are no longer being generated, but whose impact persists to the present)
F	Future (where potential impacts may result)

5.3. Significance Rating of the Aspects

5.3.1. The (Aspects Rating Matrix) has been developed to systematically evaluate the risk of each respective aspect. The risk of each aspect is determined by four matrices of the following criteria, which are included as Appendices A – D to this procedure:

- Appendix A - Severity (EH&S)
- Appendix B - Exposure (Environment)
- Appendix C - Exposure (Safety)
- Appendix D - Frequency

5.3.2. The risk for each aspect must be determined in the following manner:

- a) Rate the Severity of the aspect according to each criterion in the matrix, using the Severity page (from negligible to catastrophic). Determine whether the aspect is an 'input' (e.g. raw materials) or an 'output' (e.g. wastes) and then select the highest ratings of the aspect from each relevant column. Record these figures in the Aspects and Hazards Register form. The final severity figure is calculated by adding the five numbers together.
- b) Rate the Frequency of the aspect according to each criterion in the matrix, from rare to frequent.
- c) Rate the Exposure of the impact for each aspect according to each criterion in the matrix, using the exposure page (from negligible to extensive). Select the highest ratings of the impact in each RELEVANT column, and record it in the Aspects and Hazards Register form. The final exposure figure is calculated by determining the average of the columns used. The corresponding exposure rating table (i.e. Appendix B or C) must be used depending on whether the risk is of a H&S or Environmental Nature.

5.3.3. Determine the overall risk by multiplying the above totals together (i.e. SUM (Severity) x AVE (Exposure) x Frequency).

5.3.4. The aspects are categorised into low, medium and high risks, in accordance with the following tables:

Numerical value

Numerical value	Risk
1-99	Low
100-299	Medium
300+	High

The colour coding

Legal	If a block is shaded in yellow, this means there is some form of legal non compliance
H	High Risks are coloured in red text.
H	High Risks that also score a 3,4 or 5 in the legal column in the severity matrix (i.e. aspect is illegal to some extent) are coloured in red with black background
M	Medium or Low risks that score a 3,4 or 5 in the legal column in the severity matrix (i.e. aspect is illegal) have a light red background
L	

5.4. Updating the Aspects Register

5.4.1. The Aspects and Hazards Register is updated whenever there are changes to:

- a) Legal requirements;
- b) Operations, activities or processes;
- c) Storage or use of current and new materials, chemicals;
- d) Generation of wastes, emissions, discharges etc.; and
- e) Controls of the current aspects.

5.4.2. In the event of an activity, product or service changing or ceasing to exist, then the Plant Manager will be informed of such during the production meeting or Management meeting. He/she will amend the Aspects and Hazards Register accordingly, by either:

- Deleting the aspects if the activity, product or service ceases to exist,
- Changing the aspects to reflect the changes in Prochem's operations.

5.4.3. The member of staff responsible for implementing the change in aspects, products, services, projects, developments and activities will notify the SHE Manager for that site of such changes via the Management Improvement Program (MIP) procedure.

5.4.4. The Plant Manager will then determine and rate any new or altered aspects resulting from this change.

5.4.5. The Plant Manager will then forward the revised Aspects and Hazards Register to the SHE Manager who will review these scores for consistency amongst the site.

5.4.6. Once the SHE Manager is satisfied that the ratings are comparative he/she shall present the updated Aspects Register at the next Quarterly Management Meeting, where the register shall be reviewed for suitability, effectiveness, and appropriateness.

5.4.7. The SHE Manager shall link the aspects and impacts to the relevant sections of the Register of Legal and Other Requirements (under the Legal column).

5.4.8. Controls shall be assigned by the Plant Manager in conjunction with the SHE Manager for the site to ensure that the Objectives and Targets are attainable. These are then translated into:

- Management Improvement Programs (MIP's) – for once-off projects (such as process modifications, changes to site, implementation of new safety features, etc.)
- Procedures and Work Instructions, or modifications to existing procedures – for on-going changes to activities or processes.

5.4.9. The rating of the aspects registers must be redone following the implementation of the controls for that aspect.

5.4.10. Objectives and Targets and MIP's will be developed according to the ratings of the aspects, in accordance with the procedure: Determination of Objectives and Targets.

APPENDIX A - SEVERITY RATING MATRIX (EH&S)

Score	Rating	OUTPUT (discharges, emissions, wastes)		INPUT (raw materials, resource consumption, utility services e.g. electricity / water)		C	D	E
		A	B	A	B			
		Severity of substance/ Nature of Hazard	Volume or quantity or concentration released Level of Safety Hazard	Type of resource consumed	Quantity consumed / relative contribution (Elec: total elec current for all users included in that aspect)			
5	Catastrophic	Highly toxic, persistent, explosive, releasing toxic by-products Danger Group 1 (SABS 0228) Hazard Rating I (Wastes) Highly mobile/water soluble, easily dispersed Rapid deterioration of environment (visible damage after less than 1 hour) Extremely dangerous (e.g., working at heights, sharp, rotating machinery, high speed or powerful moving parts, heavy objects stored at elevated heights, no control mechanisms in place (guarding, procedures, Work instructions)	Uncontrollable or only stoppable by stopping source Spill of > 10 m3 in an uncontained area Gases: strong odour at plant boundary Dust: 80% opacity at any time Waste: Storing and handling: >3 skips/month Effluent discharge: > 100 m3 per day H&S: Level > 2 x limiting value (OEL, lux, dB, °C)	Pristine resources, non-renewable and very scarce, protected by legislation (e.g. groundwater or surface water used for drinking purposes etc). Raw Material: 100% Virgin material	Large industrial user/consumer. Only one or one of few consumers in the region/country Electricity: > 200 Amps Water use: > 500 m3/day	>3 Weeks H&S: Staff member exposed for > 8 hours	National press coverage (same day and thereafter), strikes and/or demonstrations	Pressure to close business (from government), immediate inspections, legal proceedings against company, blatantly illegal
4	Critical	Moderately to highly toxic, flammable, Danger Group II Hazard Rating 2 Very mobile in environment, easily dispersed Causes measurable / visible damage to environment Highly Dangerous (e.g. sharp edges, moving parts, slippery surfaces, protruding parts, insufficient /inadequate control mechanisms	Difficult to control or requiring special equipment to control Spill of > 2000 liters in an uncontained area Gases: strong odour at plant boundary Dust: 60% opacity at any time Waste: Storing and handling: > 1 skip per month Effluent discharge: > 30 m3 per day H&S: Level is 1 - 2 x limiting value (OEL, lux, dB, °C)	Non-renewable and limited (e.g. raw materials, land-fill space, protected species, rivers and groundwater not used for drinking purposes, chemicals) or renewable and costly. Raw Material: Has <25% recycled content	Medium industrial user/consumer Only one or one of few consumers in the municipal area Electricity usage: > 150 Amps Water use: > 200 m3/day	> 1 week H&S: Staff member exposed for > 6 hours per shift	Widespread or prolonged media attention, coverage beyond immediate area	Contravenes legal limits regularly. Regulatory bodies already aware of issue, and formal warning or prosecution imminent.
3	Serious	Mildly toxic, flash point > 61°C, persistent, compatible but different load Danger Group II or III Hazard Rating 3 or 4 Environmental damage unless human intervention Very Dangerous (slippery surfaces, moving machinery, sharp edges, protrusions) Limited control mechanism in place (Control mechanisms to be modified	Spill between 50 - 2000 liters of a dangerous good in an uncontained area Gases: Odour noticeable/detected by means of equipment outside of immediate area of application Dust: 40 % opacity at any time. Waste: storing and handling: < 1 skip per month Effluent discharge: > 20 m3 per day H&S: Level = limiting value	Non-renewable & plentiful or renewable & scarce/protected (e.g. protected species, unprotected soil, rivers and groundwater, hazardous waste landfill space, virgin paper, packaging material etc). Raw Material: Has <50% recycled content	Small industrial user/consumer Affecting local market/facilities, equivalent impact to a small town Electrical usage: > 100 Amps Water use: > 100 m3/day	>1 Day H&S: Staff member exposed for > 4 hours	Complaints from the public (organised) and/or individuals (unorganised) Local media attention	Contravenes legal limits occasionally, but the general trend is within legal limits. No pressure to conform.
2	Marginal	Toxic only in large quantities, reactive only under special conditions not normally found in the environment Same load, non-corrosive, biodegrades naturally to harmless chemicals Danger Group III Hazard Rating 4 Same load Moderately Dangerous (e.g. poor housekeeping, protruding parts, moving parts, slightly slippery surfaces, light machinery or tools)	Spill less than 50 litres of any dangerous good in an uncontained area, or spill greater than 2000l in a contained area. Gases: detectable only in area of application Dust: 20 opacity at any time Waste: storing and handling: > 1 210 L drum per month Effluent discharge: > 10 m3 per day H&S: Level 1/2 - 1 X limiting value (OEL, Lux, dB(A), °C)	Renewable or plentiful/recycled (e.g.: gas, electricity, diesel, municipal water). Raw Material: Has a high (>75%) recycled content	Minor user/consumer. Equivalent to 100 people or a small company, one of many consumers Water use: 50 - 100 m3/day	>1 Hour H&S: Staff member exposed for > 2 hours	Few complaints/queries from immediate community or staff	Does not conform to good industrial practice Close to legal limits
1	Negligible	Not listed in SABS 0228 Non-hazardous, inert Naturally occurring in that area Negligibly dangerous (no moving parts, automated processes, no sharp edges, no protrusions)	Spill/leak: No release or release of < 50 litres Gases: barely detectable at all at site Dust: barely visible Waste: storing and handling: < 1 210L drum per month Effluent discharge: < 10 m3 per day H&S: Level < 1/2 limiting value (OEL, lux, dB, °C)	Plentiful or readily available (e.g.: soil, air, solar energy) Raw materials: Recycled content > 90%	Negligible user/consumer. Equivalent to public/individual contribution, insignificant relative to other users (e.g. Office) Electricity: < 20 Amps (such as an office) Water use < 50 m3/day	< 1 Hour H&S: Staff member exposed for < 1 hour per shift	No complaints or queries	Well within legal limits

APPENDIX B - EXPOSURE RATING MATRIX (ENVIRONMENT)

(Take an average from scores in columns A, B, C and D OR use column E only for contractors, suppliers and when evaluating secondary impacts)

SCORE	EXPOSURE	To be applied when considering water, fuel/energy sources and raw materials				To be applied to waste contractors/transporters, effluent discharge, all chemical/raw material suppliers
		A	B	C	D	E
		Period of exposure	Scale of exposure (site of occurrence)	Nature of (receiving) environment	Cost factors to consider and ease of remediation	Contractors and Suppliers of Goods and Services*
		<u>Resource:</u> time for resource to replenish / scarcity	<u>Resource:</u> source / origin of resource	<u>Resource:</u> from this environment or of this environment		
5	Extensive	<p>> 2 years; persistent to permanent, chemical is bioaccumulative. Significant loss of resources, species or habitat will occur.</p> <p><u>Resource:</u> Non-renewable resource (fossil fuels - oil, natural gas, coal; ores; e.g. plastics, metals, fine chemicals). Water: water from threatened water resource/water-scarce area with regular water-restrictions.</p>	<p>National to global. (Example CFCs, greenhouse gases)</p> <p><u>Resource:</u> Sourced from overseas countries</p>	<p>Fragile, Unique. Highly sensitive, threatened, protected or endangered area. Groundwater downstream use: drinking water. Water table is less than 1 m deep. Sandy soils. Drains to sensitive (natural) water course which is <200m away. Neighbouring communities (including residential, educational, religious buildings) are immediately adjacent to site</p> <p><u>Resource:</u> Raw material sourced from sensitive or protected environment (e.g. mined from sensitive area, threatened river or groundwater aquifer, forests from protected areas)</p>	<p>Devastating or loss > R1 million</p> <p>Extensive studies and permanent/long term treatment</p>	<p>Unregistered facilities or operation out of normal permit conditions, gross negligence and environmental impacts. Frequent incidents and public complaints.</p>
4	Widespread	<p>Up to 2 years;</p> <p><u>Resource:</u> 50 years to replenish - e.g. slow growing trees, bulk chemicals. Water: From moderately-threatened resource (e.g. small, perennial river)</p>	<p>Local/Regional. Impact of the substance is noticeable in the surrounding community or municipal region. Possibility of complaints from general public.</p> <p><u>Resource:</u> Sourced from country or neighbouring countries</p>	<p>Stormwater drains to sensitive (natural) water course which is 200 m - 2 km away. Water tables 1 - 10 m deep. Downstream groundwater use: agricultural Sensitive, threatened, protected and endangered areas 1 to 2 km from site. Communities within 1km.</p> <p><u>Resource:</u> Raw materials sourced from unprotected but undisturbed areas (e.g. mineral mines, oil or gas from sea rigs). Water from moderately-threatened resource.</p>	<p>Widespread - serious damage or loss between R100 000 - R1 million</p> <p>Specialist knowledge required, treatment period > 5 years with specialist equipment</p>	<p>Registered and/or registration/permit has expired, but not legally compliant in terms of their own performance.</p>
3	Significant	<p>Up to 6 months</p> <p><u>Resource:</u> up to 15 years to replenish - fast growing trees (e.g. paper and certain woods), animal products. Water: medium water availability (medium rainfall and resources, e.g. medium perennial river)</p>	<p>Neighbours and surrounding properties are affected.</p> <p><u>Resource:</u> Sourced from province or region</p>	<p>Stormwater drains to water course >2km from site. Groundwater table > 10 m deep. Downstream groundwater use: industrial Sensitive or protected areas are in wider proximity (>2 km from site). Communities are 1 to 5 kms away from site.</p> <p><u>Resource:</u> Raw materials sourced from moderately sensitive areas (i.e. previously disturbed, e.g. colliery, oil from land sources). Medium water resource.</p>	<p>Significant damage or loss between R10 000 - R100 000</p> <p>Remediation project < 1 year with non-specialist equipment, well-understood process</p>	<p>Compliance with legislation and/or industry codes questionable, no internal system, poor management control and monitoring, some complaints and a history of incidents.</p>
2	Restricted	<p>Up to 1 month</p> <p>Substance has dissipated or disappeared within a month of release. Minimal loss of resource, species or habitat.</p> <p><u>Resource:</u> Up to 1 year (water from small rivers), animal products (e.g. leather) Water: non-threatened water resource (e.g. large river) or rainfall > 1 m per year, very few water restrictions</p>	<p>Site. Only the site controlled by the organisation is affected.</p> <p><u>Resource:</u> Sourced from nearby cities or towns</p>	<p>Discharge/spills drain to small municipal treatment works at a distance <2km. Groundwater table > 20 m deep and/or no downstream abstraction. Watercourses far away (>5 km) from site. No sensitive areas nearby. Communities >7km away.</p> <p><u>Resource:</u> Raw materials sourced from area of plentiful renewable resources in a previously disturbed area (e.g. forests on agricultural land).</p>	<p>Minor damage or loss less than R10 000</p> <p>Some remediation required without specialist knowledge (e.g. excavation, simple filtration)</p>	<p>Legally compliant, some form of internal management system but not independently audited. Some training to operators but not optimal, average response systems to emergencies and reasonable record of incidents. Few complaints.</p>
1	Negligible	<p>< 1 month: no effects of pollutant are evident (the substance is no longer impacting on the environment)</p> <p>Within one day there is no observable or detectable sign of the pollutant.</p> <p><u>Resource:</u> replenished quickly (e.g. large and perennial rivers with no water restrictions ever; renewable energies (solar, wind, hydroelectric energy)</p>	<p>Immediate area (department, building, working area) where substance is generated/released contains substance</p> <p><u>Resource:</u> sourced from surrounding area</p>	<p>Discharge to large municipal treatment works with sufficient distance or retention mechanisms. Sufficient time to warn municipality or to stop flow. Inactive, benign area (e.g. area is zoned as industrial). Very deep water table (>50m) and/or very clayey soils. No communities nearby to be affected (>10 km away).</p> <p>Raw materials sourced from areas dedicated to abstraction with no risk of environmental impacts (e.g. recycled HFO).</p>	<p>Insignificant damage or loss</p> <p>No or little remediation required (e.g. litter clean-up, sweeping)</p>	<p>Legally compliant in terms of own permit/internal standards and standard codes (e.g. SABS), with few incidents over period of operation, experienced and knowledgeable staff (e.g. Hazchem training), independently certified (i.e. have gone beyond minimum legal requirements)</p>

APPENDIX C - EXPOSURE RATING MATRIX (SAFETY & HEALTH)

(Take an average from scores in columns A, B, C and D OR use column E only for contractors, suppliers and when evaluating secondary impacts)

SCORE	EXPOSURE	To be applied when considering Occupational- related incidences			To be applied to contractors/transporters, material suppliers
		A	B	D	E
		Nature of effect on employee	Scale of exposure (site of occurrence)	Cost factors to consider and ease of remediation to operation/production process	Contractors and Suppliers of Goods and Services*
5	Extensive	Fatal or 100% permanent disablement. Chronic health effect (terminal) illness not treatable. Disease leaves employee permanently disabled, or is fatal at any stage.	Entire staff or operation affected.	Devastating or loss more than R1 million. Replacement cost of plant machinery and equipment and product. Permanent to long term shutdown of site.	Gross negligence and EHS impacts. Frequent incidents and legal implications
4	Widespread	Partial permanent disablement. Chronic health effects- symptoms treatable. More than 14 days lost. Partial disability. 40%-70% permanent disablement.	Affecting a broad section of the plant or area of operation	Widespread damage or loss between R100 000 - R1 million. Replacement or maintenance cost of plant machinery and equipment. Maintenance or material replacement project period > 5 years	Not legally compliant in terms of dangerous goods transportation system. Not in compliance with site safety rules and guidelines.
3	Significant	Temporary disablement. Acute exposure. More than 3 days lost. Employee to be treated off-site (e.g. Acid burn, inhalation of noxious fumes). Amputations (2%-40% permanent disablement).	Affecting more than one staff member in the area of operation. May entail temporary shutdown of process operation.	Significant damage or loss between R10 000 - R100 000 Replacement cost of plant machinery , equipment and material replacement (e.g. replacing a carcinogenic solvent with a non-carcinogenic solvent). Remediation project <1 year.	Compliance with legislation and/or industry codes questionable, no internal system, poor management control and monitoring and a history of EHS incidents.
2	Restricted	Minor incident. Less than 3 days lost time. Acute exposure. Effect visible but treatable on-site by nurse or first aider (e.g. dermatitis, arc eyes, heat exhaustion.) Noted in first aid book or kept on record by nurse or first-aiders. Hazardous only in large quantity or direct contact.	Exposure limited to more than one operator in the same area.	Minor damage or loss less than R10 000 Replacement cost of plant machinery , equipment and product. Once off capital expense	Legally compliant, some form of internal management system but not independently audited. Some training to operators but not optimal, average response systems to emergencies and reasonable record of EHS incidents.
1	Negligible	Effects of incident absent or not apparent. No lost time. Acute exposure. Noted in first aid book or kept on record by nurse or first-aiders. Non hazardous, more of an irritant. (e.g. Inhalation of toxin resulting in cough)	Exposure limited to individual	Insignificant damage or loss No or little remediation required (e.g. House Keeping, refresher training)	Legally compliant in terms of internal company standards and standard codes (e.g. SABS), with few EHS incidents over period of operation, experienced and knowledgeable staff (e.g. Hazchem training), independently certified (i.e. have gone beyond minimum legal requirements).

Lost time = Working shift lost due to occupational injury

APPENDIX D - FREQUENCY

(Assess the frequency of occurrence of the aspects)

SCORE	CLASSIFICATION	FREQUENCY
5	Frequent	Continuously
4	Regular	Less than once a day
3	Occasional	Less than once a week
2	Uncommon	Less than once a month
1	Rare	Less than once a year

FUND MOBILIZATION FOR ENVIRONMENTALLY SOUND MANAGEMENT (ESM) PROJECTS IN AFRICA: SOURCES, PROBLEMS AND PROSPECTS

BY

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INTRODUCTION

One of the important challenges facing many organisations in Africa is how to attract a broad base of support to finance activities and Environmentally Sound Management (ESM) programmes and projects. The critical challenge is how and where to mobilize resources for implementing such projects.

In this paper, some of the critical fundamentals of fundraising are discussed, as well as, some elements of effective donor prospecting. The objective is to prepare participants for the challenges of resource mobilization and fundraising for executing Environmentally Sound Management (ESM) projects in different countries of Africa.

Firstly we will discuss some of the elements for successful fund raising. An understanding of these elements, especially for those who have not raised money before, will make the process much easier and less intimidating.

Elements of Fundraising

Fund raising is a systematic process of requesting for financial support for a given objective, usually, a project or a programme. It is an integral part of an organizations existence. It is not a one time act, it is based on a system.

Relationships are an important key to fund raising. Building relationships with prospects and donors builds a foundation for grants today and tomorrow. However, just knowing an agency head or a program manager will not guarantee a grant award. The project submitted for funding must fit the agenda of the donor.

Donor fit is critical. It means fitting the project/programme to be funded to the guidelines or agenda of the donor. If it does not fit, this may be the wrong project for wrong donor.

Research is critical. The applicant must know as much as possible about the projects for which funding support is requesting for. He must also know as much as possible about the donor. For instance, he must know the activities of the donor, what the agenda of the donor is, whom do the donor agency gives the money to, what motivates the donor.

Rejection: The applicant should not be afraid of rejection. It is not personal. It is the acceptances of request for funding that count. Rejection should used as a way to learn more about the project.

Donors are different. Corporations, foundations and governments and International Government Organisations (IGO's) are not the same. Each donor organisation needs to be studied in detail.

CATEGORIES OF DONORS

There are a wide variety of funding sources that offer support for development projects. Below is a list of donor categories containing a few examples of specific donor organizations within a particular category.

a) Official Development Assistance (ODA) Agencies.

These are special department or agencies which are owned by governments of the developed world and they operate in Africa and other developing countries. Often they are housed in the embassy of the country of origin and they provide financial aid for development projects and programmes.

Apart from the ODA units or agencies, some embassies of developed countries also manage grants programmes to support community based organisations and other development programmes and projects in Africa and other developing countries. Examples of such agencies include – Canadian International Development Agency (CIDA), the Department of International Development (DFID/UK), the United States Agency for International Development (USAID), the Swedish International Development Agency (SIDA/Sweden), the Japan International Cooperation Agency (JICA), the European Union (EU), the Australian Agency for International Development (AUSAID), and the Ministry for Economic Cooperation and Development (MBZ/Germany).

- (b) United Nations Agencies. These are referred to as multilateral agencies. Often multilateral assistance is frequently directed toward government programs, but many UN agencies work closely with NGOs. Examples of such agencies are the following: the International Labor Organisation (ILO), United Nations International Children's Emergency Fund (UNICEF), the United Nations Development Program (UNDP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), United Nations Population Fund (UNFPA), World Health Organisation (WHO), and United Nations Development Fund for Women (UNIFEM).
- C) Multilateral Development Banks. Multilateral Development banks are also considered multilateral because many governments contribute to their operations. Such banks may be global or regional in geographical focus. Although their primary business is offering loans and policy advice to client governments, often their local country offices make small grants to NGOs and community-based organizations. Examples of Multilateral Development Banks include: the African Development Bank (headquartered in Cote d'Ivoire), Asian Development Bank (headquartered in the Philippines), the European Bank for Reconstruction and Development (headquartered in the United Kingdom), the Inter-American Development Bank (headquartered in the United States), the Japan Bank for International Cooperation (headquartered in Japan), and the World Bank (headquartered in the United States).
- (d) International Foundations. Foundations are independent entities in the business of making grants to NGOs and community-based organizations. Often they derive

their income from an endowment, a wealthy benefactor, a corporation, or constant fundraising. Examples of international foundations include: the Asian Development Trust (Japan), W.K. Kellogg Foundation (United States), Kaiser Family Foundation (United States), the Bernard van Leer Foundation (Netherlands), Fundacion CODESPA (Spain), the John D. and Catherine T. MacArthur Foundation (United States), the Rockefeller Brothers Foundation (United States), the Wellcome Trust (United Kingdom), Fondation de France (France), Fondation Rio Baudouin (Belgium), the Soros Network of Foundations/Open Society (United States), and the Aga Khan Foundation (Switzerland).

- (e) Global Corporations. Many global companies demonstrate their social responsibility by supporting projects in communities where they operate. Examples include: ABB ASEA Brown Boveri Ltd., (Switzerland), Aegon NV (Netherlands), Bertelsmann AG (Germany), Robert Bosch (Germany), Citibank (United States), Coca-Cola (United States), Deutsche Bank (Germany), H.B. Fuller (United States), Honda (Japan), Grand Met (United Kingdom), Imetal (France), Levi Strauss & Company (United States), MicroSoft (United States), J.P. Morgan (United States), Odebrecht (Brazil), Shell (Netherlands), and Sony (Japan).
- (f) International Nongovernmental Organisations. International NGOs are global charities that raise funding from a variety of sources, including the general public, to support projects in the developing world. Sometimes they are specialist organizations focusing on environment, health, agriculture, emergency relief, education, community development, or micro lending, or a combination of areas. Examples of such organizations include: ActionAid (United Kingdom), CARE (United States), Concern Worldwide (Ireland), Helvetas (Switzerland), Intermon (Spain), Norwegian People's Aid (Norway), Groupe Development, (France), Medecins Sans Frontieres (France), Oxfam (United Kingdom), PLAN International (United Kingdom), Save the Children (United States), and Terra des Hommes (Switzerland).

(g) Country-Based Institutions

In addition to the above institutions, it is important not to overlook host country institutions which may be important funding agencies for Environmentally Sound Management (ESM) and other development projects in Africa. Some of these include:

- Government Sources, such as the Ministries of Environment, Health and Education.
- Local Businesses, such as banks, real estate companies, service and industrial companies,
- Local Independent Foundations and Trusts, such as the Kagiso Trust (South Africa).
- *Community Foundations:* Community foundations are independent, grant making organizations that mobilize resources from a variety of sources, including the general public. Such foundations are dedicated to addressing critical societal needs and on improving the quality of life of specific segments of a community in a limited geographic area. Examples of such foundations include: the Kenya Community Development Foundation (Kenya), and the Rustenberg Community Foundation, (South Africa).

- *Service Clubs and Membership Associations:* Local service clubs and membership organizations are often another source of funding for local projects. Examples of such associations include: Rotary International, Lions Clubs International, chambers of commerce, and trade associations of specific industries.

Researching Donor Organisations

After one has narrowed down the categories of donors one would like to contact, the next step is to find out as much information as possible on their programmatic priorities, geographical priorities, and application procedures. There are two ways to go about this. One way is to approach an embassy, public, or university library and research the various published directories that fund development programs, and the second way is to research the various portals that provide linkages to the Websites of specific donors.

a. Published Directories

The following list contains some examples of directories in print and newsletters that are useful for identifying sources of funding for development programs: directory.

- Directory of Japanese Giving, Corporate Philanthropy Report, 2727 Fairview Avenue East, Suite D, Seattle, WA 98102 USA
- Canadian Directory to Foundations, Canadian Centre for Philanthropy, 1329 Bay Street, Suite 200, Toronto, Ontario, Canada M5R 2C4
- Danish Foundations, Foundation for International Understanding, Nyt Nordisk Forlag, Arnold Busck A/S, 49 Kobmagergade, DK-1150, Copenhagen, Denmark
- Directory of International Corporate Giving in America & Abroad, The Taft Group, 27500 Drake Road, Farmington Hills, MI 48331-3535
- EFC Monitor (quarterly publication), International Guide to Funders Interested in Central and Eastern Europe, Directory of Foundations and Corporate Members of the European Foundation Centre (updated yearly) European Foundation Centre, Publications Office, 51 rue de la Concorde, B-1050 Brussels, Belgium.
- Grants for Foreign and International Programs, Guide to Funding for International & Foreign Programs, The Foundation Centre, 79 Fifth Avenue, New York, NY 10003-3076 USA
- Grants from Europe, National Council for Voluntary Organisations, Regent's Wharf, 8 All Saints Street, London N1 9RL United Kingdom.
- Guide to European Community Grants and Loans, Europe plc, Guidegate House, Pelican Lane, Newbury, Berkshire, RG13 1NX, England.
- InterAction Member Profiles, American Council for Voluntary International Action, 1717 Massachusetts Avenue, NW, Suite 801, Washington, DC USA 20036

- International Encyclopedia of Foundations (1990), Greenwood Press, 88 Post Road West, Westport Connecticut, USA 06881.
 - International Foundation Directory, Europa Publications Limited, 18 Bedford Square, London, EC1b 3JN U.K.
 - National Directory of Grantmaking Public Charities, The Foundation Center, 79 Fifth Avenue, New York, NY USA 10003-3076
- b. Electronic Resources for Researching the Web

In addition to the directories mentioned above, one should consider going online and researching the World Wide Web. The major advantage of obtaining information from the web is one of timeliness. One is likely to find the latest information about a particular donor. Nevertheless, one should always check the entry dates of Web text to see if the information is current .

The following are some recommended Websites that provide assistance in researching the Web:

- A Grant Seeker's Guide to the Internet: Revised by grant and Sonenberg is a very readable publication for those not familiar with using the Web to identify funding resources. This document can be accessed at <http://www.mindspring.com/~ajgrant/guide.htm>.
 - Guide to Grantseeking on the Web is a print guide to researching the web (The Foundation Center, 79 Fifth Avenue, New York, NY 10003-3076). It contains a toolkit of resources for identifying funding sources, a glossary of common terms, and a bibliography of related resources in the field. This book helps the donor prospector to develop an organized, focused approach to funding research on the Web while saving valuable research time.
- c. Web Portals for Donor Websites. The following portals provide direct linkages to grantmaker Websites for Africa.

Regional Websites of Donors for Africa

- African Development Bank – <http://www.afdb.org/>
The African Development Bank's Website provides information on how it invests in combating poverty and improving the lives of peoples on the continent of Africa.
- African Development Foundation
<http://www.sdnf.undp.org/sdnfcmr/subweb/adf.htm>
The African Development Foundation's Website describes how it supports self-help development initiatives of under-privileged people of Africa.
- Southern African Grantmakers Association
<http://www.wingsweb.org/>

Directory Information/SAGA.htm SAGA provides professional development and technical assistance to independent, voluntary and nonprofit organizations and individuals involved in fund development projects in Southern Africa.

World-wide

- Action Without Borders
<http://www.idealists.org/>
This Website contains thousands of links to the homepages of community-based NGOs, international NGOs, grassroots organizations, and international and country-specific donors in 130 countries. Using its search functions, you can identify and provide hyperlinks to the Websites of numerous donors scattered all over the world.
- British Library for Developmental Studies
<http://nt1.ods.ac.uk/eldis/>
This Website provides access to detailed information on national/government aid agencies, regional aid agencies and development banks, the World Bank group, United Nations Agencies, non-governmental organizations as donors, volunteer supplying aid agencies, and other development aid sources.
- The Council on Foundations
<http://www.cof.org>
Primary directed toward the trustees and staff of U.S.-based donor institutions, this Website provides information, ideas, analysis and commentary relevant to effective grantmaking.
- Directory of Development Organizations
<http://www.devdir.org/right.html>
This Website provides an online guide to micro-finance organizations, small enterprise development organizations, development agencies, private sector organizations, development banks, and government ministries.
- European Foundation Centre's Funders Online
<http://www.fundersonline.org/>
The EFC has incorporated a useful search mechanism for identifying potential foundation and corporate funders active in Europe and elsewhere.
- European Forum in International Cooperation:
<http://www.oneworld.org/euforic>
EUFORIC contains information on official and non-governmental donor agencies in Austria, Belgium, Denmark, France, Germany, Ireland, the Netherlands, Portugal, Spain, and the United Kingdom.
- Guidestar
<http://www.guidestar.org>
Guidestar is another gateway Website with a search engine that can be used to identify U.S.-based donors interested in specific countries. The site also includes news on the world of philanthropy. Grant seekers can also post funding requests online.

- United States Agency for International Development
<http://www.usaid.gov/>
USAID's Website provides detailed information on each of the agency's programmatic and geographical priorities and application procedures.

WINGS

- <http://www.wingsweb.org/>
This Website is maintained by the Council of Foundations and provides numerous hyperlinks to national and regional grantmaking associations, philanthropic centers, donor consortia, advisory groups, and other types of organizations providing specialized services to grantmakers in specific countries throughout the world.

The World Bank

The world bank offers some resources for environment and development. Some of these are as follows:

- a.) Managing the Environment Locally in Sub-Saharan Africa (MELLISA)

What activities does the program fund? Facilitating the acquisition, the absorption, and the dissemination of decentralized environmental management knowledge in Sub-Saharan Africa through participatory action learning, capacity building and networking: facilitating partnership for effective local environmental governance.

Who is eligible? Local organisations and decentralized structures: Urban and rural municipalities; provincial and regional departments, Community-Based Organizations, Non Governmental Organizations, cooperatives, youth groups, women organizations, farmers' groups, school development associations, health committees, research and training institutions. Request proposals submitted in partnership are strongly encouraged.

How to apply? Apply directly by sending your request proposal to: the MELISSA Program Coordinator, World Bank Office in South Africa, P.O.Box 12629, Hatfield 0028 Pretoria, South Africa. Tel. +27-12-349 2994, Fax +27-12-349 2080, E-mail: Melissa@melissa.org.

Website: www.melissa.org

- b.) Global Environment Facility Medium-Sized Project (GEF MSP)

What activities does the program fund? Projects under \$1 million in the GEF priority areas of biological diversity, climate change, international waters, and depletion of the ozone layer.

Who is eligible? NGOs, CSOs, governments, academic institutions, private sector organizations who meet GEF criteria

How to apply? Develop and submit project concept paper for preliminary review by one of three implementing agencies (World Bank, UNDP, or UNEP). The GEF focal point in each eligible country must endorse the MSP at the time of approval. Project proposers should get

GEF focal point support for their MSP from its concept stage. Application procedures and information available on GEF website.

Website: www.worldbank.org/gef

c.) Global Environment Facility NGO Small Grants Program (GEF/SGP)

What activities does the program fund? Addressing local problems related to biodiversity loss, climate change, and degradation of international waters: community-based assessment and planning; pilot activities demonstrating innovative community-level approaches to global environmental problems; technical assistance and training focused on developing community and NGO capacities; program monitoring and analysis; dissemination networking, and policy dialogue.

Who is eligible? National and local environmental NGOs and community-based organizations. To be eligible for GEF/SGP support, projects must fit the GEF/SGP country strategy and eligibility criteria, and be consistent with the Operational Strategy and relevant Operational Programs established by the GEF.

How to apply? Contact the GEF national coordinator in your country or: Global Manager, United Nations Development Program (UNDP)- GEF Small Grants Programme, 304 East 45th Street, FF-1610, NY, NY 10017.

Website: www.undp.org/sgp and www.gefweb.org

d.) Critical Ecosystems Partnership Fund (CEPF)

What activities does the program fund? Creating strategic alliance for a comprehensive, coordinated approach to conservation challenges; managing protected areas and coordinating biodiversity corridors; training; transboundary planning; encouraging local dialogue with extractive industries; engaging in conflict resolution; priority setting and consensus building; strengthening indigenous organizations and facilitating partnerships between the private sector and protected areas.

Who is eligible? Private sector partners, NGOs, Civil Society Organisations, Community groups who work in biodiversity conservation field. Projects must be within a biodiversity hotspot in a developing country that has ratified the Convention on Biological Diversity. Hotspots include: Guinea Forests of West Africa, Mountains of Madagascar and Sundaland, Mountains and Coastal Forests of Tanzania and Kenya.

Before an application is submitted for support for projects it is important to stress that research should be conducted on the grant programme in order to learn more about application deadlines, procedures and criteria. Partnership should also be developed with related local, national and regional organisations. The organization that is requesting for funds should also include the organizations qualification and experience relevant to the programme's activities.

CONCLUSION

Effective and successful fundraising calls for the building of donor relationship, research, and categorization of donors. The application and use of the information provided in this paper

will be helpful in putting in place dynamic fund mobilization schemes for environmentally sound management (ESM) projects in Africa.

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GUIDELINES ON HOW TO DEVELOP ENVIRONMENTALLY SOUND MANAGEMENT (ESM) PROJECT DOCUMENTS FOR SUCCESSFUL GRANT SUPPORT AND IMPLEMENTATION

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INTRODUCTION

The components of environmentally sound management (ESM) of hazardous wastes in Africa includes recycling, reuse and resource recovering methods (Osibanjo, 2002). The implementation of environmentally sound management (ESM) projects require resources and funding which, in some cases are beyond the resources of public, private, and non-governmental agencies in Africa. Therefore, the needs will always arise for support for implementation of ESM projects from regional, and international funding agencies.

The focus of this paper is to present generally accepted requirements for project proposals among international, government, private, and non-governmental sector/ agencies, that are most likely to provide support for projects in environment initiative. The working document will enable participants to work on detailed project proposal format that is representative of those they will complete when submitting applications for funding of Environmentally Sound Management (ESM) projects.

1. PREPARING TO DEVELOP A PROJECT PROPOSAL

(a) Concept Development and Refinement

i.) Developing project rationale, goals, activities, outcomes and benefits

This is the first set of information that is needed to define a project. The main project concepts usually evolve over a period of time, as a result of needs identification, onsite reports, staff inputs, brainstorming.

ii.) Defining the project size and scope, objectives, costs, schedule

This is the next layer of information that is defined for a project. Once the basic concepts have been determined, it requires extensive research in order to define exactly how the project will operate, with whom, over what span of time, at what cost. (The cost/budget file will need to be set up at this stage, and information added and refined as the project proposal develops, so that information required to complete the budget for the proposal is available for that stage.

(b) Identification of prospective partners

Potential partners may be local, national or international. Email or other interaction methods could be used with potential partners to identify common areas of interest.

c.) **Identification of stakeholders/beneficiaries: local, national, international**

This may involve an analysis of potential stakeholders and a rationale for their potential interest in the project.

(2) Building Support for the Proposal

(a) Support of stakeholders/beneficiaries

This includes a description of the role of stakeholders in supporting the project. It also includes an outline of how beneficiaries are involved in the project design, delivery and evaluation.

(c) Support of prospective partners

This includes details of partnership arrangements – roles, responsibilities, accountabilities, budget share, and staffing.

(3) Identifying potential funders

This involves location and gathering of information on funding agencies. This could be accessed through libraries and/or web.

4. Planning an Approach

(a) Determining the appropriate strategy for approaching funders'

Appropriate method includes informal inquiry, formal inquiry and submission of outline.

(b) Assembly and completion of all key information in draft proposal

This involves compilation of relevant information from funders' proposal guidelines. Essential information for project proposal include – project activities, project output, sustainability, and project impact.

It should be noted that funders' requirements are quite different, hence it is necessary to ensure that a project proposal conforms with a specific funders' guidelines.

c.) Preparing a budget for draft proposal

Funders' information on expectations for financing and budgeting should be taken into account in preparing the proposed budget for the proposal.

5. Assembly and testing the proposal

This involves submitting the draft proposal for review and comments by stakeholders and partners.

6. Preparing Final Proposal

At this stage, the input for stakeholders, partners, and others should be taken into consideration to refine the proposal and produce a final version.

The final version is then submitted for consideration of the funding agency.

7. Expectations after proposal is approved

Common expectations regarding start up, implementation and evaluation include the following:

- Preparation of detailed project implementation plan, staffing, scheduling, budget,
- Reporting to funding agency
- Evaluation of project

OTHER CONSIDERATIONS

The other critical considerations in preparing a good proposal are as follows:

- Keep the written proposal short and clear.
- State at the outset what is to be accomplished, who is expected to accomplish it, how much it will cost, and how long it will take.
- Avoid broad, sweeping generalizations.
- Learn about the funder to which the request will go. Be sure, they are in fact, operating in the areas covered by the proposal

Determinant of funders' support for proposals

Grants from funders are frequently made only to organizations and to institutions, rather than to individuals. Many funders do not provide money for construction projects. Some shy away from general support, preferring specific project support. Some funders have geographical restrictions; most have a particular substantive program focus. Often funders have specific notions about the size of grants appropriate to them.

The criteria that funders use in assessing proposals vary. They include many of the following considerations:

Competence of persons involved:

- quality of references and of reference sources;
- opinions of members of the foundation's staff;
- opinions of outside proposal reviewers (professional or specialized consultants);
- quality of project staff.(Are they among the best of all possible people to undertake the venture?)

Feasibility and realism of the proposal

- Is the time right for the endeavour?
- Is the action proposed adequate to the problem addressed?
- Is the sponsoring agency or institution clearly enthusiastic about the substance of the proposal?
- Are the proposed facilities and staffing sufficient for the job?

Importance and utility of the venture to the community or to society

- Is there a demonstrable need for the project?
- Whom will the project benefit and how?
- Is it based on ethical and moral premises?
- Will there be a measurable improvement if the venture is successful? Will harm be done if it fails?

Originality and creativity of the proposed venture

- Is the project already a part of any other existing program?
- Does the project duplicate or overlap other existing or past programs?
- Is it new and innovative? Alternatively, does it help conserve beneficial programs that might otherwise atrophy or be lost?
- Could the project be carried out better elsewhere or by other persons?

Appropriateness of the project to the foundation's policy and program focus

- Is the program consonant with the foundation's current program objectives?
- If so, does it address an area that should receive priority in consideration of proposals?

Prospects for leverage and pattern-making effects

- Will the project draw in other financial support (if needed)?
- Will the project produce significant changes in a wide circle?
- Will the results be transferable to other projects and localities?

Need for foundation support

- Are public sources of funds available (Federal, State and Local Governments)
- Are other private sources more appropriate (other foundations more active in the field, other private institutions or individuals)?

Soundness of the budget

- Is it adequate for the job to be accomplished, but not so generous as to be wasteful?
- Is it evidence that the project director (or principal support staff is familiar with the administrative intricacies of conducting the proposed project – and that he has planned carefully for contingencies?

Persistence, dedication and commitment of the proposers

- Have they persevered in efforts to secure needed funds?
- Have they devoted sufficient time to planning and launching the venture?

- Is the project one of their primary interests or a major professional pre-occupation?

Provision of objective evaluation of results, where feasible:

- Will the project staff maintain adequate records to demonstrate success of the project?
- Where the project lends itself to statistical evaluation, has provision been made for recording and analyzing relevant data?
- Where necessary, has appropriate evaluation advice been sought?

As a practical demonstration of the guidelines on how to develop ESM project documents for successful funding and implementation, let us consider a case study which is an extract from the document of the Department for International Development (DFID) Civil Society Challenge Fund.

CASE STUDY

DFID Civil Society Challenge Fund Guidelines

The Format for Full Proposals

The following format should be used for full proposals for consideration for DFID Civil Society Challenge Fund . The questions posed in each section illustrate the kind of questions which will be asked when a proposal is assessed. Not all questions will be relevant to all proposals, and the applicant should use them as a guide only. However, all proposals must set out the background to the initiative and its rationale, the approach which it will adopt, the management and monitoring arrangements, and the key risks.

Section I: Basic Data Sheet/Summary

- Name and address of applicant. Please include the name of the principal contact for this application:
- Name of project:
- Country(ies) and the region(s)/district(s) in which the initiative will take place:
- Name of local partner(s):
- Project Summary: a brief statement of project objectives, expected results and main activities; the main intended beneficiaries etc.:
- Project cost: include total budget; amount of contribution sought from DFID; what has been sought from other donors and what is the status of your applications:
- Project duration: length of project and anticipated start and end dates.

Section II: Project Rationale

- What problem will the project address? How does the problem relate to the objectives of the CSCF? Who identified the problem and how?
- What experience do you and your partners have of working on these issues or in the country/area?
- What lessons have you drawn on – from your own or others' past experience – in proposing this project? In what ways is the project intending to develop new approaches to tackling the problem?
- How relevant is the proposal to meeting DFID's Country Strategy objectives?

Section III: Project Approach

- What are the goal, purpose, outputs and main activities of the project?
- Who are the direct beneficiaries (primary stakeholders) and others (secondary stakeholders) who will be affected by or involved in the project? How were they identified?
- Were beneficiaries (primary stakeholders) and others (secondary stakeholders) involved in the design of the project? If so, how? Will they be involved in project implementation? If so, how?
- How has the project identified the needs of women and men and how have these been reflected in the project's design and implementation?
- What is the coverage of the project (e.g. the area to be covered; the numbers of people served out of the total population etc?)
- In what alternative ways could the project objectives be achieved? Why is the current design considered to be the most cost-effective way of achieving these objectives?
- What are the prospects for the benefits of the project being sustained after the funding stops.

Section IV: Project Management and Implementation

- What are the project implementation and management arrangements? (Attach an organisational chart if appropriate). What human resources (number, type, skills/background, gender, nationality of staff etc) and the material inputs (equipment, etc) are required for the project?

- What other agencies are involved in the area where this initiative will take place, including the Government, and how will you work with these organisations?
- What is the overall time-frame for the project? (Include a bar or Gantt chart summarising the main activities and timing if appropriate).

Section V: Project Monitoring, Learning and Dissemination

- How do you intend to monitor and review the implementation of the project and assess its impact? What arrangements have been/will be made to involve beneficiaries and other stakeholders in monitoring and evaluation?
- How do you intend reporting on the progress of the project to DFID? Please set out the type of reports DFID can expect to receive and the frequency.
- How do you intend to share the experience of this initiative for you and your partner(s), internally and externally, during the project and at its end. What publications/communications/media will you use?

Section VI: Risks

- What are the main risks that could affect the project's success?
- How likely are these to happen and how serious the consequence to the project if they occur?
- What measures have been/will be taken to minimise or mitigate potential risks?

Section VII: Project Budget

CAPITAL EXPENDITURE

- Office Equipment (fax machine, computers, etc.)
- Vehicles/Project Equipment Note: DFID will only provide funding for vehicles/equipment as part of project costs if you can show that they are: essential for project implementation; will be used for project activities only; properly maintained and insured.

RECURRING EXPENDITURE

Communications (e.g. post, fax and telephone)
In country travel
Stationery
Transport running costs (e.g. maintenance, fuel and local taxes)
Staff development (e.g. training)
Staff costs (e.g. salaries and pension fund contributions)
Office Accommodation (rent)
Utilities (e.g. electricity and water)

- Project Activities (these must be broken down in to appropriate categories)

- Information Dissemination Costs/ Raising Public Awareness.
- Monitoring and Evaluation: (e.g. travel, consultancy fees and production of report)

Please note all projects will require evaluation. You should allow up to a maximum of 5% of the total project cost for this in your budget).

Unacceptable Expenditure

- CONTINGENCIES: Unforeseen costs arising during the project implementation will be considered on a case by case basis so must not be included in the budget;
- DEPRECIATION;
- CORE COSTS: administration and other costs which are not directly related to the project application;
- DEBT REPAYMENT;
- EXTRAVAGANT EXPENDITURE: Budgets should reflect value for money;

NB: This list is not exhaustive. There will be other budget lines that DFID cannot accept.

Logical Framework

You must submit a full logical framework with your Proposal.

Why use a Logical Framework?

1. The Logical Framework is useful in the design and planning, implementation, and monitoring of a project. It also makes it easier to report on a project, highlight changes and to adapt the project accordingly.
2. DFID recommends the use of the Log Frame because:
 - it brings together in one place a clear, concise and accessible statement of all of the key components of a project;
 - it clarifies how the project is expected to work and what it is going to achieve, and helps to ensure that inputs, activities, outputs and purpose are not confused with each other;
 - it identifies the main factors related to the success of the project;
 - it clarifies how project success (qualitative and quantitative) will be judged/measured and provides a basis for monitoring and evaluation.

The structure of a Logical Framework

3. The matrix on the following page shows what a Logical Framework looks like and the information it contains. It consists of concise statements laid out in a horizontal and vertical matrix. In preparing a Log Frame it is normal, having identified the problem the project will address, to work down the levels – so that the inputs required to achieve the project are considered last. However having done this it is necessary to then consider whether the resources required are likely to be available and appropriate to the situation and modify the framework accordingly, i.e. plan downwards, think upwards.

How is a Logical Framework prepared?

4. Because DFID promotes a participatory approach to development, in which beneficiaries (primary stakeholders) and project partners (secondary stakeholders) are involved in all stages of a project, it encourages their involvement in the formulation of the Logical Framework.
5. A Logical Framework will be required for every application. But it only needs to be partially completed (the first column) when accompanying Concept Notes.
6. It is important to note that the logical framework is a tool for project management. The framework should develop and change as the project develops.

Logical Framework Matrix

Project Summary	Measurable Indicators	Means of verification	Important assumptions
GOAL: Overall goal which this project will help to achieve	The evidence (quantitative/ qualitative) which will be used to measure/judge the achievement of goal	Sources of information/data which will be used to assess the indicator(s)	(Goal to supergoal) Main external factors necessary to sustain objectives in the long run
PURPOSE: Immediate impact on the project area or target group ie, the change or benefit to be achieved by the project	The evidence (quantitative/ qualitative) which will be used to measure/judge the achievement of the purpose	Sources of information/data which will be used to assess the indicator(s)	(Purpose to goal) Main external factors necessary if project purpose is to contribute to reaching project goal
OUTPUTS: The specific, deliverable results expected from the project to attain the purpose	The evidence (quantitative/ qualitative) which will be used to measure/judge the achievement of the outputs	Sources of information/data which will be used to assess the indicator(s)	(Outputs to purpose) Main external factors necessary for outputs to achieve project purpose
ACTIVITIES: These are the tasks to be done to produce the outputs	INPUTS: This is a summary of the project budget and other key inputs	Sources of information/data which will be used to assess the indicator(s)	(Activity to output) Main external factors necessary for activities to achieve project outputs

Reporting

Annual Reporting - Requirements

Length: Maximum 4 pages

When: Within 3 months of the end of the reporting year

Format

1. Basic Information

- Project name
 - Agency name
 - CSCF number
 - Country
 - Name of local partner(s)
 - Reporting Period
 - Date Report Produced
 - Name of person who compiled the report
-
- **Significant changes:** Details of any significant changes made during the period of the report or changes intended to make in the future. It is also important to state whether these constitute a major change in approach.

 - **Progress:** In reporting progress each year, DFID therefore requires organisations to produce the following details. An assessment of the likely achievement of the project's output and purpose, using the table at rating scale for annual reports. In the initial stages of the project DFID accepts that an assessment at output level only is probably more appropriate (if the assessment is at this level this should be specified). DFID does, however, require that from at least year 3 onwards the assessment of the applicant does focus on likely achievement of project purpose. This rationale for these judgements should be explained in a short paragraph within the table.

 - **Risk/Opportunity Assessment:** Risk assessment is part of DFID's project assessment. The risks described in the project proposal will be assessed. There will also be an assessment made of opportunities which the project may bring. DFID therefore requires an indication as to whether there has been a significant change in the risk and opportunities within the project.

Project Completion Reports (PCR)

Project Completion Reports (PCRs) contribute to good project management, providing a useful record of what has been achieved by your project (i.e. extend to which planned outputs have been achieved). They also enable a conclusion to be drawn and lessons learned from implementation - useful for sharing with others, and which may be very valuable when designing projects with similar characteristics. It also provides an "initial"

opportunity to assess the likely impact (in the short and longer term) of the project, although the primary tool for assessing impact should always be through evaluations.

PCR Requirements

Length: maximum 10 pages

When: Within 4 months of the end of the project

Content: Should provide a summary of the implementation, management and results of the entire project, including lessons learnt. Given the focus of the CSCF, we are particularly interested in how partnerships have worked, (in management as well as implementation), and in developmental value. The logical framework and financial report (for the duration of the project) should be included as annexes.

Format

1. Basic Information

- Project name
- Agency name
- CSCF number
- Country
- Name of local partner(s)
- Reporting period
- Date Report produced
- Name of person who compiled the report

2. Executive Summary (1 page maximum)

Divided into three sections:

- Project description
- Partnership
- Developmental Value and Effectiveness of Project Strategy

3. Changes to Project

- Changes which may have arisen since the original proposal, including details of why these were necessary and how these changes were made

4. Partnership, Management and Implementation

Role and contribution of overseas partners in project implementation and management

5. Performance Assessment

There should be a summary of the achievement of the project at all levels; goal, purpose and outputs. There should also be some assessment made on inputs and activities undertaken, in terms of quality, quantity and timeliness. A table, similar to the one provided below should be used for this purpose, utilising the scale provided for PCRs. In assessing achievement of the project, there should be a focus on the following issues of relevance to the objectives of the CSCF:

- Equity, social inclusion and the strengthening of the social capital; participation of the poor; enhancement of the rights of the poor; influence and advocacy
- How the project adds value to current knowledge and practice (e.g. through innovative techniques);
- How the project is contributing to a reduction in poverty;
- How the project has contributed to DFID's country and target strategies

6. Monitoring, evaluation and learning

- To include arrangements and responsibilities, and processes in place for ensuring new knowledge and best practice arising from the project are incorporated into future projects

7. Information, Dissemination and Networking

- To include mechanisms for dissemination outside project stakeholders

8. Logical framework

Final logical framework to be included as an Annex

9. Financial Report

Details of actual spend against agreed budget for period of project

Achievement Rating Scale

Achievement Rating Scale (annual reports)

1 = likely to be completely achieved

2 = likely to be largely achieved

3 = likely to be partially achieved

4 = only likely to be achieved to a very limited extent

5 = unlikely to be realised

x = too early to judge the extent of achievement at purpose level (only available to use during first 2 years)

Rating Scale (Project Completion Reports (PCR))

1 = fully achieved, very few or no shortcomings

2 = largely achieved, despite a few shortcomings

3 = only partially achieved, benefits and shortcomings finely balanced

4 = very limited achievement, extensive shortcomings

5 = not achieved

6 = too soon to give an adequately reliable rating (Goal and Sustainability levels only)

	<u>Achievement Rating</u>	<u>Comments</u>
Goal (state below, then provide a rating with comments to justify)		
Purpose (state below, then rate and comment)		
Sustainability Assessment (rating and comment) – for PCR only		
Outputs (list the <u>main</u> outputs below, rate		

against each , then give an overall rating

- 1.
 - 2.
 - 3.
- etc

Rating of overall assessment of output delivery:-

<p>Inputs/Activities</p> <p>a) Appropriateness (quality):</p> <p>b) Sufficiency (quantity):</p> <p>c) Efficiency (timeliness):</p> <p>Overall Assessment:</p>		
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Lessons Learned

Please summarise below any lessons arising from this project that may be of use for future work:

- i) Project level lessons
- ii) Sector level or Thematic lessons
- iii) General development lessons

Project Evaluation

What projects:

All CSCF projects with total expenditure of £100,000 or more require an evaluation. Evaluation costs of up to 5% of the project's total budget will be allowed for this purpose. We strongly recommend that for smaller projects there are also build in evaluation plans, although this is not mandatory.

Length of report: Maximum of 30 pages

When required: Evaluations should be completed within 6 months of the completion on the project

Who should be involved:

- The primary responsibility for ensuring that projects are evaluated rests with the recipient organisation
- Majority of evaluation team should be external to organisation to allow for an independent assessment
- CSD staff, in some instances, although extent of involvement will vary
- Peer participation to facilitate cross learning

Content: Evaluations should determine the general relevance, equity, effectiveness, efficiency, impact and sustainability of the initiative. Lesson learning and accountability should be integral to the evaluation process. Terms of Reference produced for the evaluation must be realistic about what judgements and conclusions the evaluation team will be able to substantiate with "hard evidence", particularly in respect of development impact.

Format

1. Basic Information (1 page)

- Project name
- Agency name
- CSCF number

- Country
- Name of local partner(s)
- Name of person who compiled the evaluation report, including summary of role/contribution of others in the team
- Period evaluation undertaken

2. Executive Summary (1 page maximum)

3. Evaluation team

Brief details of the evaluation team, their experience and role played in the evaluation process

4. Issues to cover include:

Relevance: Details of the project's significance with respect to specific needs

Equity: Discussion on the equity of what was provided

Efficiency and Effectiveness: Assessment of performance in relation to targets set in the original logical framework/plan and the rate and cost at which inputs result in outputs.

Impact: Details of the broader economic, social, and political consequences of the project and how it has contributed to the overall objectives of the CSCF

Sustainability: Potential for the continuation of the impact achieved and of the delivery mechanisms following the withdrawal of external support

Replicability: How replicable is the process that introduced the changes/had impact

Lessons Learnt: Key lessons learnt throughout the period of the project which can be utilised to guide future strategies

5. Recommendations

Recommendations for improvements based on observations during the evaluation process

6. Terms of Reference for Evaluation

Terms of reference for the evaluation should be included as an Annex.

Possible opportunities

Proposals will be scored on the basis of the following:

- Innovative proposals that raise the question, 'why has nobody done this before?'
- Proposals that will a) have a broad and sustained impact (not discrete projects with a limited impact), and b) raise standards or create critical mass to raise standards.
- Rights approaches and practices promoted/ implemented across more than one sector, especially in government.

- Proposals seeking to co-ordinate best practice – building synergies.
- Proposals seeking to mainstream successful pro-poor rights policies and approaches.
- Proposals complementing and adding value to existing or planned DFID initiatives in country.
- Proposals addressing the needs and rights of the 'hidden' poor, e.g. the mentally disabled.

Proposals engaging with the economic process that affect the poor, for example trade.

- Organisations with a respected track record of working with, and influencing, government in country.
- Proposals addressing issues which are currently a high priority within DFID

Opportunity scores

Scoring process will be used to decide which projects stand the chances of being funded.

CONCLUSION

A prerequisite for successful funding and implementation of Environmentally Sound Management (ESM) project is the development of project documents that will attract and justify the confidence of funding agencies. In this paper, some of the main salient issues and factors that need to be taken into account in preparing acceptable documents have been discussed. These are recommended for our use whenever we are confronted with assignments of this nature.

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BOSKEL

BOSKEL NIGERIA LTD.

- ✦ THERMAL PROCESS ENGINEERING
- ✦ ENVIRONMENTAL MANAGEMENT

BOSKEL



BOSKEL'S PORT HARCOURT FACILITY

BOSKEL

Mission Statement

- ✦ TO PROVIDE SOLUTIONS TO PROCESS INDUSTRY PROBLEMS THAT OCCUR IN NIGERIA.
- ✦ INCORPORATED IN AUGUST 1989.
- ✦ FULLY NIGERIAN.

BOSKEL

Business Concept

- ✦ CREATE SOLUTIONS TO PROCESS INDUSTRY PROBLEMS IN NIGERIA.
- ✦ ACT LOCALLY BUT MAINTAIN INTERNATIONAL STANDARDS.
- ✦ OPERATE WITH 100% NIGERIAN STAFF FOR ALL PROJECTS WITHIN OUR COMPETENCE
- ✦ TRAIN TECHNICAL STAFF ABROAD IN RELEVANT AREAS.
- ✦ SEEK FOREIGN JV IN AREAS OUTSIDE OUR COMPETENCE.

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Products and Services

- ✦ SMOKELESS FLARES FOR THE OIL AND GAS INDUSTRY: 1992 to present.
- ✦ SMOKELESS OIL SLOP BURNERS FOR EPCL: 1998 to present.
- ✦ INCINERATORS FOR WASTE MANAGEMENT: 1998 to present
- ✦ WASTE MANAGEMENT FOR OIL AND GAS: 2000 to present.
- ✦ CLIENTS: SPDC, AGIP, SNEPCO, HALIBUTON, TSE, SCHLUMBERGER etc

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Products and Services.

- ✦ Smokeless flares for the Oil and Gas Industry: 1992 - Present



TYPICAL OIL FIELD SMOKY FLARE

BOSKEL'S SMOKELESS FLARE IN OPERATION



BOSKEL Products and Services.

- ✦ BOSKEL'S SMOKELESS FLARE TIP AND PILOT BURNER.



BOSKEL Products and Services.

- ✦ Smokeless Oil Slop burners for EPCL: 1998 - Present



BOSKEL Products and Services.

- ✦ Smokeless flares for the Oil and Gas Industry: 1992 - Present



BOSKEL Products and Services.

- ✦ Boskel's Incinerators for Wastes Management: 1998 - Present.



BOSKEL Products and Services.

- ✦ BOSKEL'S INCINERATOR
EFFICIENTLY HANDLES VARIOUS WASTE STREAMS



BOSKEL INCINERATION SYSTEM PROCESS FLOW DIAGRAM



BOSKEL



INSIDE VIEW OF INCINERATOR BED AT WORK
TEMPERATURES IN THIS REGION ARE IN EXCESS OF 1000°C

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FATE OF EFFLUENTS FROM THE SYSTEM

- ✦ FLUE GAS – SCRUBBED (WET).
- ✦ SCRUBBER WATER – EVAPORATED (WET).
- ✦ SOLID RESIDUE – FIXED/SLAGGED.
- ✦ EVAPORATION RESIDUE – FIXED.

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ADVANTAGES OF MOBILE TDU

- ✦ ON SITE EX-SITU TREATMENT.
- ✦ COST EFFECTIVENESS.
- ✦ CLIENT CONTROL/VERIFICATION
- ✦ HIGH AVAILABILITY.
- ✦ ELIMINATION OF THIRD PARTY LITIGATIONS.

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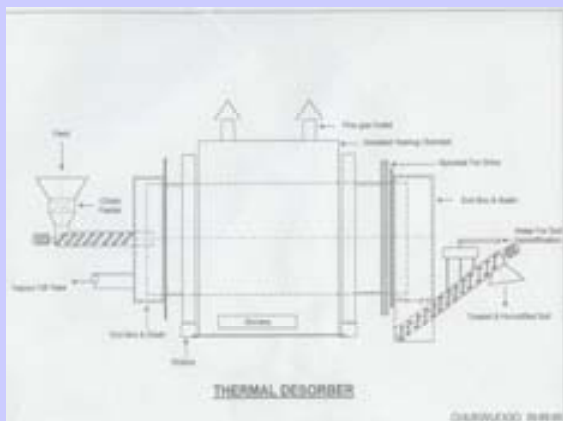
Products and Services.

- ✦ BOSKEL'S THERMAL DESORPTION UNIT SYSTEM IS HEATED EXTERNALLY BY DIRECT FIRING



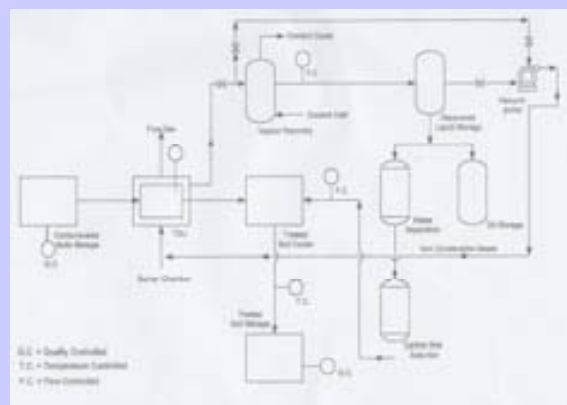
BOSKEL

SCHEMATIC OF BOSKEL'S TDU.



BOSKEL

THERMAL DESORPTION UNIT PROCESS FLOW DIAGRAM



BOSKEL

ADVANTAGES OF MOBILE TDU

- ✦ ON SITE EX-SITU TREATMENT.
- ✦ COST EFFECTIVENESS.
- ✦ CLIENT CONTROL/VERIFICATION
- ✦ HIGH AVAILABILITY.
- ✦ ELIMINATION OF THIRD PARTY LITIGATIONS.

BOSKEL

Characteristics of the Mobile System

- ✦ ALL TERRAIN MOBILITY.
- ✦ ALL SYSTEMS ON BOARD.
- ✦ SYSTEMS DEVELOPED IN NIGERIA.
- ✦ RECOVERY OF HYDROCARBON LIQUIDS.
- ✦ ENERGY INDEPENDENCE FOR TDU.
- ✦ APPROPRIATE TECHNOLOGY.
- ✦ BATNEEC

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Products and Services.

- ✦Wastes Management for Oil and Gas Industry:2000 – Present.



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Clients.

- ✦ SPDC
- ✦ DEL
- ✦ SNEPCO (STAR-AP)
- ✦ HALLIBURTON
- ✦ TSF
- ✦ SCHLUMBERGER
- ✦ ETC.

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DOCUMENTATION.

CARGO MANIFESTS: To be endorsed by both parties and original collected from client.

WASTES RECEIPT FORM: To be issued to client and file copy retained.

CERTIFICATE OF DISPOSAL (COD): To be issued to client on completion of disposal campaign.

Monthly progress report submitted to clients would include:

- Details of reception of wastes
- Details of wastes processed.
- Details of analysis carried out
- Commercial details.
- Summary.

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Future Developments.

- ✦ TTAA APPROACH.
- ✦ POWER GENERATION.
- ✦ WASTE OIL REFINING.
- ✦ MOBILE INCINERATORS.

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Products and Services.

- ✦ **BOSKEL'S INCINERATOR**
EFFICIENTLY HANDLES VARIOUS WASTE STREAMS



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