# IAIA14 – TRAINING COURSE: INTEGRATED ENVIRONMENTAL MANAGEMENT: HOW TO MAKE EA MORE EFFECTIVE

#### **BASIC INFORMATION**

Course Title	Integrated Environmental Management: How To Make EA More Effective
Level	Anyone who manages, writes or contributes to an EA.
Participant Prerequisites	Participants must have some basic knowledge of EIA and SEA processes.
Language of Delivery	English
Duration	2 days
Number of participants	Minimum 15 Maximum 35
Equipment required	Laptops would be beneficial but not essential

#### **COURSE DESCRIPTION**

#### **Summary and Purpose, Content and Learning Outcomes**

While more and more environmental assessments are being conducted, it also true to say that there are a plethora of topic-specific Environmental Assessments (EAs)<sup>1</sup> being done as well, such as social impact assessment, health impact assessment, traffic impact assessment, heritage impact assessment, and so on. This fact, together with the direct experience of the trainers and feedback from IAIA12 and IAIA13 participants, indicates that the profession is, perhaps, moving away from an integrated approach to environmental management. There may be many reasons for this, but one could be that there are many practitioners (as well as regulatory authorities) who are uncertain as to how integrated impact assessments can be conducted.

The aims of this 2-day course, therefore, are to assist anyone who manages, writes or contributes to an EA to:

- Understand the concept of Integrated Environmental Management (IEM) and motivate why it is
  essential to improve the effectiveness of EA and to deliver on sustainable development goals;
- Provide guidance on how to manage the EA process to achieve IEM;
- Provide practical tools to analyse impacts in an holistic manner.

The course will combine lectures delivered by the trainers, general discussions and group work.

#### The **learning outcomes** will include:

- Participants will be better able to assemble and manage multi-disciplinary teams of specialists to produce a product useful for decision making;
- Participants will have a better appreciation and confidence about how to present information to the client, public and decision-makers so that the direct and indirect implications of a policy, plan or project on the environment can be clearly understood;

<sup>&</sup>lt;sup>11</sup> The term EA is used here to cover Environmental Impact Assessment or Environmental and Social Impact Assessment or Integrated Impact Assessment and assumes a broad definition of environment (including social, health, cultural heritage and the like).

- Participants will be provided with tools to conduct integrated analyses;
- Participants will be made aware of common pitfalls and how to deal with them.

## **Description of the Course Structure and Content**

The course outline, showing topics, times and presenters, is as follows:

	DAY 1	
Time	Topic	Presenter
08h30-	Course registration	All
09h00		
09h00-	Session 1: Welcome and introduction of all participants	All
09h30	<ul> <li>Names organisations and country</li> </ul>	
	Expectations	
	House Rules	
09h30-	Aims and objectives of the course	B Walmsley
09h45	ŕ	
09h45-	Session 2: Introduction to Integrated Environmental	C Bingham
10h30	Management	and B
	Definition of IEM	Walmsley
	<ul> <li>Origins and evolution of EA</li> </ul>	
	Theory of integration	
	Current state of practice	
	Discussion	
10h30-	TEA/COFFEE BREAK	
11h00		
11h00-	Session 3: Integrate before you start and keep on doing	C Bingham
<b>1</b> 2h30	it!	
	Before you start	
	<ul> <li>ToRs and RfPs</li> </ul>	
	Context of the EA	
	<ul> <li>Defining the scope of work</li> </ul>	
	<ul> <li>Choosing the EA manager</li> </ul>	
	<ul> <li>Identifying specialists</li> </ul>	
	Keep on integrating	
	<ul> <li>Build a team and facilitate communication</li> </ul>	
	Manage specialists	
	Key times for collaboration	
12h30-	LUNCH	
13h30		
13h30-	Session 4: Introduction to IEM tools:	B Walmsley
15h00	Cumulative impacts	C Bingham
	Causal chain analysis	
	Interaction matrices	
	Geographic Information Systems	
	Cost-benefit analysis	
	Consideration of alternatives	

	Linkage diagrams	
	<ul> <li>Introduction to group work</li> </ul>	
15h00-	TEA/COFFEE BREAK	
15h30		
15h30-	Session 5 Group work – construct linkage diagrams for a	B Walmsley
17h00	hypothetical project to demonstrate how to integrate	
	Feedback and discussion begins at 16:30 (five minutes per	
	group)	
17h00	Close of DAY 1	_

DAY 2			
Time	Topic	Presenter	
09h00- 10h30	Session 6: Group work - Integration in Action! Introduction to the case study and rules of the game Role play game of a hypothetical multi-disciplinary EIA team at work facing challenges presented by the client and the situation on the ground – how to prioritize, make trade-offs and maintain integrity	B Walmsley C Bingham	
10h30- 11h00	TEA/COFFEE BREAK – continue group work		
11h00- 12h30	Group work continued	All	
12h30- 13h30	LUNCH		
13h30- 14h30	Feedback and discussion (10 minute presentation per group)		
14h30- 15h00	<ul> <li>Session 7: Preparing an integrated EA report</li> <li>What an Integrated EA Report Is not/Is</li> <li>Resources, Challenges and Worries</li> <li>Managing Consultants in the Process</li> <li>Writing to the Outline: Pitfalls and Complexities</li> <li>Judging Significance</li> <li>Integrated EMP</li> <li>Uncertainties, Conflicts and Trade offs</li> <li>Discussion</li> </ul>	C Bingham	
15h00- 15h30	TEA/COFFEE BREAK		
15h30- 16h30	Session 7: Preparing an integrated EA report (contd)	B Walmsley	
16h30- 17h00	<ul> <li>Course closure</li> <li>Concluding remarks and discussion</li> <li>Complete course evaluation forms</li> <li>Hand out of certificates</li> </ul>	B Walmsley C Bingham	

1. **Premises:** an EA is not a collection of specialized studies. An EA should be an integrated document that is internally coherent and consistent. An EA should provide sufficient information to inform decision-makers (regulatory authorities, client and the public) about the

implications and impacts of the project. This includes, whether the project fits with the prevailing policy and planning context, whether there will be any unintended consequences of the development through secondary and knock-on effects and where interventions (mitigation measures) can be most effectively directed. Indirect impact analysis always requires that one specialist be aware of the impacts of the other disciplines - you cannot do air quality impacts of a highway without knowing a lot about traffic impacts first, or the effects of changes in water quality on the health of downstream populations, etc. An EA has to be managed – it does not come together by magic. An EA is based on science, but the art is in making a coherent EA.

- 2. Integrate before you start! Responding to or preparing TORs: which specialists should be included, what are the spatial and temporal scales of their work, how can they best be managed to ensure integration, what are the points of integration, how will the EA be integrated into the project development lifecycle show the integrating points and processes in the work plan? These are questions that need to be answered at the outset, so that budgets, timeframes and approaches can be established and agreed.
- 3. Plan to integrate the work by developing procedures that will facilitate communication. Integrate the specialists through various workshops; use some of the tools available in these workshops to establish linkages within and between disciplines and the project. Conduct the alternatives analysis with the team, using various tools to weigh and assess the impact of the options. Hold joint reviews of linked disciplines; have an overall team leader or manager whose role is to integrate the work as it goes along. Liaise with the project design engineers and client. Ensure the footprint is known. Liaise with other companies who may be doing related work e.g., resettlement studies.
- 4. Build a team attitude. Serendipitous impacts and unintended consequences one did not think of initially will appear as the work progresses. There will be changes in the footprint and design, but if we agree fundamental development outcomes (limits of acceptable change, thresholds, sustainability targets and design criteria to meet legislated standards), we can test these changes against these criteria.
- **5. Use tools wisely.** Scoping is vital. Linkages among impacts are critical. Sharing of information and any changes in assumptions is too easily overlooked, but leads to disaster.
- **6. Managers need to listen, but also decide.** Managers have the final responsibility for ensuring coherence, consistence and quality. They need to listen to the specialists, and they need to require adjustments. There may be conflicts between the recommendations made by the specialists, so how do we address conflicts and trade-offs?
- 7. Integrating client or public comments into a Final EA. Comments by different groups and even by one client will contradict each other. How to classify and organize comments so that the range of comments are considered by topic and not responded to one by one.

#### **Description of Participant Materials**

The course participants will receive a hard copy of the course slides, as well as a CD containing the slides, as well as other reference documents and relevant papers, such as:

- SAIEA (2009). CBBIA Guidance document on integrating biodiversity issues into decision-making;
- SAIEA Good News case Studies;
- UNDP/SAIEA (2012). Guidelines on integrating HIV and gender-related issues into EA processes;
- MCC Gender Integration Guidelines;
- Baines, J and Morgan, B (2009). The challenge of integrated impact assessment: one set of guiding principles – many methods. Australasian Journal of Environmental management, Vol 16, 2009.

- IFC Performance Standards (2012).
- Canadian Federal Environmental Assessment Review Office (1994). Determining whether a
  project is likely to cause significant adverse environmental effects.
- Barnes, J.L. et al (undated). Significance determination in energy project EIA in Canada.

#### Provisions for Pre-conference and Post-conference Communication

Both trainers are seasoned EIA practitioners with a strong commitment to training and mentoring younger professionals. Both will be available at the IAIA 2014 conference and will be available before and after the conference via email as needed.

Prior to the training, the trainers will ask the participants to fill out a short questionnaire related to their experience (or not) with IEM, issues or challenges they have confronted, and/ or tools they have found helpful to achieve an integrated EA.

#### **QUALIFICATIONS OF THE TRAINERS**

### **Charlotte Bingham**

Charlotte has more than 35 years experience in EA, starting in the US in 1977. For 18 years she prepared EAs for US and international infrastructure projects as part of a multi-disciplinary team and managed these teams for an A&E consulting firm. In the past 17 years, she administered EA processes and conducted EA review with USAID (Senior Regional Advisor at regional office in Nairobi), the World Bank (Africa Safeguards Coordinator and Lead Environmental Specialist) and the Millennium Challenge Corporation (MCC Senior Director and Practice Leader). She is currently a consultant advising on Involuntary Resettlement as well as EA and has served on expert panels. She served as a trainer for the short courses of the Centre for Environmental Management and Planning ( 1989-1994, Aberdeen, Scotland), developed 18 USAID EA training courses and taught over 600 professionals in 11 African countries, developed and conducted safeguards training for the World Bank, conducted short trainings for MCC and throughout her career has mentored counterparts in EA.

### **Bryony Walmsley**

Bryony has more than 30 years experience in environmental consulting, starting in Canada in 1980. She has lived and worked in southern Africa since 1983. After 24 years as an EA consultant, she now manages the South African office of the Southern African Institute for Environmental Assessment. She has extensive experience in all aspects of EIA practice, including participating and managing large EIAs for infrastructure and mining projects throughout southern Africa. More recently, she has participated in multi-disciplinary teams for several Strategic Environmental Assessments on a diverse range of policies, programmes, sector and regional developments. She has developed and conducted many training courses for a wide variety of clients, including the World Bank, UNDP, the governments of Lesotho, Botswana, Swaziland and Nigeria, IAIA (CBBIA project) and other private clients. She developed and presented a course on Managing the EA Process at IAIAO8 and co-presented a course on Quality Assurance in EA at IAIA11 and IAIA12.

Both trainers are paid up members of IAIA and have signed the Code of Conduct.

Dr. Richard Fuggle, a primary contributor to the IEM Guidelines in South Africa has kindly agreed to participate in Day 2 of this course and to provide his insights and expertise on how to conduct IEM.