



United Nations
Environment Programme



UNEP/GEF South China Sea
Project



Global Environment
Facility

***Reversing Environmental Degradation Trends
in the
South China Sea and Gulf of Thailand***

REPORT

**Fourth Meeting of the Regional Working Group for
the Land-Based Pollution Component**

Guangzhou, China, 30th March – 2nd April 2004



First published in Thailand in 2004 by the United Nations Environment Programme.

Copyright © 2004, United Nations Environment Programme

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose without prior permission in writing from the United Nations Environment Programme.

UNEP/GEF
Project Co-ordinating Unit,
United Nations Environment Programme,
UN Building, 9th Floor Block A, Rajdamnern Avenue,
Bangkok 10200, Thailand
Tel. +66 2 288 1886
Fax. +66 2 288 1094; 281 2428
<http://www.unepscs.org>

DISCLAIMER:

The contents of this report do not necessarily reflect the views and policies of UNEP or the GEF. The designations employed and the presentations do not imply the expression of any opinion whatsoever on the part of UNEP, of the GEF, or of any cooperating organisation concerning the legal status of any country, territory, city or area, of its authorities, or of the delineation of its territories or boundaries.

Cover Photo: Solid waste remains underwater, Van Phong Bay, by Dr. Vo Si Tuan.

For citation purposes this document may be cited as:

UNEP, 2004. Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. Report of the Fourth Meeting of the Regional Working Group on Land-Based Pollution. UNEP/GEF/SCS/RWG-LbP.4/3.

Table of Contents

1. OPENING OF THE MEETING.....	1
1.1 WELCOME ADDRESS	1
1.2 INTRODUCTION OF PARTICIPANTS.....	1
2. ORGANISATION OF THE MEETING	1
2.1 ELECTION OF OFFICERS	1
2.2 ADMINISTRATIVE ARRANGEMENTS.....	2
3. ADOPTION OF THE MEETING AGENDA.....	2
4. REPORTS FROM THE PROJECT CO-ORDINATING UNIT (PCU) REGARDING OVERALL PROGRESS TO DATE	2
4.1 STATUS OF THE ADMINISTRATIVE REPORTS FOR 2003: PROGRESS REPORTS; EXPENDITURE REPORTS; AUDIT REPORTS; AND MOU AMENDMENTS	2
4.2 STATUS OF PLANNED SUBSTANTIVE OUTPUTS FROM THE NATIONAL LEVEL ACTIVITIES.....	3
4.3 CONSIDERATION OF SUBSTANTIVE OUTPUTS FROM THE REGIONAL LEVEL ACTIVITIES	4
5. REVIEW AND FINALISATION OF THE PROCEDURES USED IN RANKING HOT SPOTS AND CONTAMINANTS.....	4
6. CONSIDERATION OF PROPOSALS FOR PILOT ACTIVITIES AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE (PSC)	5
7. WORLD BANK INVESTMENT FUND CONCEPT	7
8. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION 2004 - 2007	8
9. DATE AND PLACE OF THE FIFTH MEETING OF THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION.....	8
10. ANY OTHER BUSINESS	9
11. ADOPTION OF THE REPORT OF THE MEETING.....	9
12. CLOSURE OF THE MEETING.....	9

List of Annexes

ANNEX 1	List of Participants
ANNEX 2	List of Documents
ANNEX 3	Agenda
ANNEX 4	Regional Overview of Land-Based Pollution in the South China Sea Outline of Contents
ANNEX 5	Discussion and Agreement on Criteria, Indicators and Ranking Scores for Evaluating Priorities amongst Pilot Activities
ANNEX 6	Revised Work Plan and Timetable for the Regional Working Group on Land- based Pollution 2004-2007

Report of the Meeting

1. OPENING OF THE MEETING

1.1 Welcome Address

1.1.1 The Project Director, Dr. John Pernetta, welcomed participants and observers on behalf of Dr. Klaus Töpfer, the Executive Director of the United Nations Environment Programme (UNEP) and Dr. Ahmed Djoghlaif, Assistant Executive Director, and Director, Division of Global Environment Facility Co-ordination (UNEP/DGEF). The Project Director noted that this fourth meeting had been deferred twice and as a consequence it would be necessary to convene a special meeting of the Executive Committee of the Regional Scientific and Technical Committee to review the recommendations of the Regional Working Group regarding pilot activities. He noted that this has financial consequences and that the Project Steering Committee had decided that in future no regional meeting should be deferred as a result of failure to submit reports from the national level.

1.1.2 Dr. Pernetta noted that a major item of business for this meeting was to prepare recommendations to the RSTC and Project Steering Committee concerning the pilot activities to be undertaken during the operational phase of the project and expressed the hope that the meeting would be both productive and enjoyable.

1.1.3 The National Focal Point for China, Mr. Mingjiang Chen welcomed participants on behalf of the Government of China and the State Environmental Protection Administration. He noted with appreciation the great efforts from the PCU and national focal projects to finalise the national inputs including past and ongoing activities, reviews of legislation, GIS database, national and regional meta-database and the pilot activity proposals. He noted that the Government of China places great importance on the issue of pollution and has now required all cities with populations greater than 5 million people to build treatment facilities during the next 25 year plan period.

1.1.4 He noted further that coastal waters covering 142,000 square kilometres do not meet accepted water quality standards although this was less than last year. He noted that Red Tide events in Chinese coastal waters totalled 119 last year involving 15,000 sq km of coastal ocean. Land based pollution was therefore still a major problem for the Chinese Government consequently if pilot activities were selected for China the Provincial Government would provide co-financing from the fund for Urban Wastewater Management. He noted that the Guangdong Government had already agreed in principle to co-finance pilot activities in the area.

1.2 Introduction of Participants

1.2.1 Participants were invited to introduce themselves and there followed a "*tour de table*" during which individual members and observers introduced themselves by providing a brief statement regarding their involvement in the project and a brief outline of their experience, expertise, and institutional affiliation. The list of participants is contained in Annex 1 of this report.

2. ORGANISATION OF THE MEETING

2.1 Election of Officers

2.1.1 Dr. Pernetta noted that the rules of procedure state that, the regional working group shall elect, from amongst the members, a chairperson, vice-chairperson and rapporteur to serve for one year. He also noted that Mr. Han Baoxin, Mr. Vicente Diaz and Mr. Mohammad bin Jaafar had been elected Chairperson, Vice-Chairperson and Rapporteur respectively for the year 2003. He noted further that they were all therefore eligible for re-election, although Mr. Jaafar was unfortunately not able to be present.

2.1.2 Members were invited to nominate individuals as Chairperson, Vice-Chairperson and Rapporteur for 2004. Mr. Heru Waluyo Koesworo, the focal point from Indonesia proposed and the meeting agreed that Mr. Han Baoxin and Mr. Vicente Diaz continue to serve as Chair and Vice-Chair respectively for 2004.

2.1.3 Dr. Pornsook Chongprasith, focal point from Thailand proposed that Ms. Carol Hoh Mui Ling, alternate for the focal point for Land-based Pollution from Malaysia serve as the Rapporteur for the meeting. This proposal was accepted by the meeting and Ms. Hoh was duly elected Rapporteur.

2.2 Administrative Arrangements

2.2.1 The Chairperson of the RWG-LbP, Dr. Han Baoxin invited the Senior Expert, Mr. Yihang Jiang, to introduce the documentation available to the meeting in both hard copy and on CD-ROM. The list of documents is contained in Annex 2 of this report.

2.2.2 Mr. Jiang briefed participants on the administrative arrangements for the conduct of the meeting, and the proposed programme of work contained in document UNEP/GEF/SCS/RWG-LbP.4/Inf.3. He noted that formal sessions of the meeting would be conducted in English and in plenary although it might prove necessary to form sessional working groups to complete the various reviews and analyses of the substantive reports and the proposals for the pilot activities.

3. ADOPTION OF THE MEETING AGENDA

3.1 The Chairperson introduced the provisional agenda prepared by the Project Co-ordinating Unit (PCU) as document UNEP/GEF/SCS/RWG-LbP.4/1, and invited members to make proposals for any amendments or additional items, prior to adopting the agenda. The agenda was adopted by the meeting without modification, and is attached as Annex 3 to this report.

4. REPORTS FROM THE PROJECT CO-ORDINATING UNIT (PCU) REGARDING OVERALL PROGRESS TO DATE

4.1 Status of the administrative reports for 2003: progress reports; expenditure reports; audit reports; and MoU amendments

4.1.1 Mr. Han invited the secretariat to introduce this agenda item and document UNEP/GEF/SCS/RWG-LbP.4/4, *"Current status of administrative reports for 2003: progress reports; expenditure reports; audit reports and MoU amendments from the Specialised Executing Agencies in the participating countries"*.

4.1.2 Mr. Jiang noted that, delays in submission of routine administrative reports continued to be a problem and that the delays in 2003, had in fact been longer than those in 2002. This was somewhat surprising since the focal points were familiar with the procedures and formats for these routine reports. He noted that reports for the second half of 2003 had still not been received from Cambodia and China and that no reports at all had been received from Malaysia. The focal points concerned assured the meeting that these reports would be forth coming in the immediate future.

4.1.3 During discussion it was noted that the SEAs were currently holding substantial balances of funds but that none had reported interest earned from these sums. It was noted that funds not transferred to the SEAs had been re-phased by the Project Steering Committee to cover costs of SEA participation during the second phase of the project.

4.1.4 Mr. Jiang noted further that many of the audit reports had been received very late and that this had resulted in delays in release of the fourth tranche of funds during the second half of 2003. Mr. Jiang drew the attention of the meeting to the fact that in the absence of the routine administrative reports, and in particular the progress reports it was not possible to calculate the in-kind government co-financing. Despite this problem and the absence of some reports calculations of in-kind co-financing presented in the document showed that total co-financing of US\$50,820 in 2002 and US\$56,280 in 2003 exceeded the annual estimates of 35,280.

4.1.5 Dr. Pham Van Ninh, focal point from Viet Nam queried whether the audit report for 2003 could be extended to cover the eighteen months ending June 30th 2004 given the extension of the Memoranda of Understanding. In response Dr. Pernetta, noted that it was always the intention that the Specialised Executing Agencies would be involved in project execution throughout the life of the project to June 2007. Consequently new memoranda would be drafted for implementation from 1st July 2004 and hence the audit report for 2004 would cover funds transferred during both the first and second halves of the year.

4.1.6 Dr. Pernetta noted further that it was a requirement of the United Nations Environment Programme that annual audit reports be produced and hence in accordance with the MoUs an audit report for 2003 was required. He further reiterated, that the financial reporting requirements for this project had been streamlined and were considerably simpler than those normally applied by UNDP and UNEP.

4.1.7 Participants were reminded of the agreement of the Project Steering Committee that routine administrative reports should be produced by the SEAs within ten days of the end of the reporting period.

4.2 Status of planned substantive outputs from the national level activities

4.2.1 The Chairperson invited the Senior Expert to introduce this agenda item and document UNEP/GEF/SCS/RWG-LbP.4/5, "*Current status of substantive reports on land-based pollution from the Specialised Executing Agencies in the Participating Countries*" containing a summary of the current status of the substantive reports received by the PCU, to date. Electronic copies of all reports and documents received from the national level were provided during the meeting on CD-ROM, together with hard copies of the proposals for the pilot activities for reference of each member during discussion under agenda item 5. Reviews of these reports from the regional experts were summarised in document UNEP/GEF/SCS/RWG-LbP.4/6.

4.2.2 The meeting was informed of the discussion and outcomes of the first meeting of the Regional Task Force on Economic Valuation (RTF-E) (Document UNEP/GEF/SCS/RTF-E.1/3); and the first meeting of the Regional Task Force on Legal Matters (RTF-L) (Document UNEP/GEF/SCS/RTF-L.1/3), regarding the reviews of national legislation and economic valuation.

4.2.3 Mr. Jiang noted that there had been substantial delays in submission of the reports anticipated from the Preparatory Phase and that it had been anticipated that these would include: reviews of national data and information; preparation of a national meta-database; reviews of past and ongoing projects; summary of existing national legislation pertaining to the management of land-based pollution; review of the criteria currently in use for national decision making; and development of a national land-based pollution action plan.

4.2.4 He noted that the consequences of delays in submitting reports by some focal points had been delays in finalising reviews by the independent reviewers and hence overall delays in final publication. He noted further that all reports should be published by the end of the preparatory phase, i.e. June 30th 2004.

4.2.5 During discussion it was noted that focal points were responsible for producing their reports in the national languages and that the PCU would take responsibility for editing and publication of the reports in English for regional distribution. Dr. Pernetta noted that all national reports should carry the logos of the GEF, UNEP and the Project and should include the standard disclaimer that was found on the inside cover of all reports produced from the project.

4.2.6 It was further noted that some reports had not been submitted in draft and hence had not yet been reviewed by an independent reviewer. Such reports would need to be submitted in draft, reviewed, revised, then edited and published. It was agreed that two deadlines were needed in such cases, a deadline for submission of the draft to the PCU for independent review, and the deadline for submission of the revised (final) draft for editing and publication.

4.2.7 Ms. Hoh indicated that the Malaysian report was near final and would be submitted in the near future. Following some discussion it was agreed that the deadline for submission of drafts of any missing reports would be 15th April and that the deadline for publication at the national level was 30th June 2004. The latter date means that the final draft for English Editing would need to be made available to the PCU by the end of May 2004.

4.2.8 During discussion it became apparent that some focal points were not aware of the format for the meta-database and additional electronic copies were made available by the Secretariat during the meeting.

4.2.9 The meeting noted that the preparation of the national action plans was a requirement under the original Memoranda of Understanding but these could not be finalised before June since the process of finalisation must go hand in hand with the development of the regional Strategic Action Programme. It was noted that the original framework SAP had been approved by an intergovernmental meeting of the Co-ordinating Body on the Seas of East Asia (COBSEA) in 1998, which had also agreed that this would be revised, updated and expanded during the operational phase of the project.

4.3 Consideration of substantive outputs from the regional level activities

4.3.1 The Senior Expert noted that regional overviews had been produced for the habitat sub-components of the project in advance of the Regional Scientific Conference in order to provide potential partners with an understanding of the nature of the problems and the preparatory activities that had been completed to date. He noted that these were largely based on the content of the draft national reports and that perhaps the RWG-LbP should consider the content and form of a similar regional overview publication on land based pollution.

4.3.2 Dr. Pornsook, suggested that Mr. Jiang prepare a draft table of contents for consideration by the meeting. Mr. Jiang responded that since the national reports had focussed on only a few hot spots in each country it was difficult to prepare a regional overview of the status of land-based pollution.

4.3.3 Following discussion it was agreed that the regional experts would review the content of the national reports and prepare a draft table of contents for subsequent consideration by the meeting.

4.3.4 Dr. Gullaya Wattayakorn introduced the proposed contents of the Regional Overview of Land-based Pollution in the South China Sea, prepared by the two regional experts and Mr. Jiang. The meeting discussed the proposed contents, made minor modifications to the proposed text, and agreed the contents of the regional overview, which are attached as Annex 4 to this report.

4.3.5 The meeting further discussed the responsibilities of members for drafting each section of the regional overview, and the schedule for production of inputs and final editing of the regional overview. Dr. Gullaya was invited, and kindly agreed, to co-ordinate production of the text of the regional overview. It was agreed the draft texts should be prepared and sent to Dr. Gullaya before 30 May 2004. Participants accepted the kind offer of Ms. Hoh to edit the final text prior for publication. The final version should be completed before 30 June 2004.

5. REVIEW AND FINALISATION OF THE PROCEDURES USED IN RANKING HOT SPOTS AND CONTAMINANTS

5.1 The Chairperson invited the Senior Expert to introduce this agenda item and the document UNEP/GEF/SCS/RWG-LbP.3/3 Annex 5 containing the data assembled to date. Members of the group reviewed the data and information to be used in the characterisation and ranking of hot spots and contaminant impacts, in particular the data relating to Cadmium in sediment, Lead and Zinc in biological samples since the mid-term evaluator had raised questions concerning these values.

5.2 Members noted that the values used were based on published information and reputable analyses and agreed to accept these data for the purposes of the ranking and evaluation of the pilot activities. It was agreed that the quality of the data and analysis for these three parameters would be evaluated by the focal points on their return and they would advise the PCU of the outcome.

5.3 The meeting noted that they had reviewed these data at some length during the third meeting and that they had revised, amended and accepted the data at that time. It was agreed therefore that the existing data regarding the ranking of hotspots and contaminants would be accepted for the purpose of evaluating the pilot activity proposals.

6. CONSIDERATION OF PROPOSALS FOR PILOT ACTIVITIES AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE (PSC)

6.1 The Chairperson invited the Senior Expert to introduce the proposed process for evaluating the proposals for the pilot activities prepared by the PCU and contained in document, UNEP/GEF/SCS/RWG-LbP.4/7, *“Technical considerations for the Review and ranking of proposals for pilot activities in the land-based pollution component”*.

6.2 There followed a detailed review of the proposed ranking scores element by element. It was agreed that: the hotspot ranking score would be divided by 10 and that the contaminants with scores of 15 to 117 would be ranked on a scale of 1 to 10 respectively.

6.3 Dr. Pernetta reminded the participants of the three classes of GEF indicator that included process indicators, stress reduction indicators and environmental state indicators he expressed the view that expecting to change environmental state in a three-year project was perhaps unrealistic and there followed a discussion of alternative ways of evaluating the proposals in this regard.

6.4 It was agreed that outcomes would be evaluated on the basis of process and stress reduction indicators since it was unlikely that a three-year intervention on the scale proposed would result in a change in environmental state. Dr. Pham Van Ninh, noted that the budgets were extremely limited and that realistically the only areas that could be effectively tackled lay in the fields of improved legislation and enhanced public awareness.

6.5 The meeting agreed to amend the proposed ranking of the relationship between root causes and identified intervention by adding a zero category for those proposals, which had no root cause analysis. The proposed mechanism for ranking the relationship between the intervention and the costs was agreed in principle by the meeting, which also agreed to consider this in more detail when the individual proposals were reviewed.

6.6 Regarding the evaluation of the financial aspects of the proposals it was agreed that the commitment to co-financing would be evaluated on the basis of evidence of commitment and that the ratio of co-financing to GEF grant resources would also be used.

6.7 Following agreement of the individual scores for each set of criteria a discussion was held regarding the weighting that should be applied to the seven criteria. It was agreed that the hot spot and contaminant ranking should be weighted at 20% each; the financial criteria should each be 15%; and, the remaining three at 10% each. The finally agreed ranking and evaluation criteria and scores are presented in Table 1 of Annex 5 of this report.

6.8 Based on these agreements the Regional Working Group considered each proposal individually, discussed and agreed on the rank scores for each criterion for each proposal. The final agreed tabulation of evaluation scores is included in Table 3 of Annex 5 of this report.

6.9 There followed a detailed review of the proposals for pilot activities individually. Several general comments were applicable to all proposals namely the failure to link activities clearly with individual budget lines; a lack of proper costing of activities; over-ambitious goals and objectives; undue repetition between sections of the proposals; weak or missing risk analysis and inadequate discussion of the financial sustainability of project benefits.

6.10 A further issue was raised regarding the overall costs for the activities which in general required substantial GEF grant funding and in some instances carried no guarantee of co-financing. It was pointed out that, the GEF grant could not be used to finance buildings/offices, vehicles or boats, and that individual contracts should be detailed in terms of their purpose and the institutions to be sub-contracted by the SEA.

6.11 The proposal from China for the Pearl River, Lingdingyang catchment, was reviewed and questions were raised regarding the various tables in the budget section and their relationship to the contents of the tables in Section 13. Some concerns were expressed regarding duplication of information between the various sections and the fact that the goals were too broad and did not in fact clearly indicate the nature of the activity as a pilot for replication within the catchment. Discrepancies were noted between the costs for activities in the various tables.

6.12 The Project Director noted that, the monitoring activities unless they were specifically focussed on assessment of the effectiveness of the intervention should be paid for from the co-financing budget since a GEF policy decision taken by the GEF Council specifically ruled ineligible, monitoring activities unless they were necessary to achieve successful implementation of project activities or were implemented for GEF programmatic purposes. He noted that in this instance monitoring the effectiveness of the intervention was a legitimate cost to the GEF but the monitoring of estuarine and coastal waters on a broader scale was not. He noted that the monitoring proposals and GIS based decision-making system were not well linked with the key intervention of constructing a wetland sewage treatment system.

6.13 It was agreed that the Senior Expert would work during the evening with Dr. Han to try and clarify the various budgetary issues for later consideration by the group.

6.14 Dr. Pornsook introduced the proposal for construction of pilot scale wastewater treatment systems to be developed on the basis of a study of carrying capacity of Ko Chang Island in Trat Province, Thailand. Some concerns were expressed regarding the budget which requests a total of US\$709,000 from the GEF but total co-financing of only 307,000 in cash and in-kind. It was noted that except for exceptional cases, co-financing should reach at least a ratio of 1:1 in order for the activity to be eligible. Dr. Pornsook noted that cash co-financing for years 2 and 3 had not been included in the draft budget since such financing could not be guaranteed at this time.

6.15 Apparent duplications between different sections of the budget were noted and some items were noted as being located in inappropriate sections of the itemised budget. It was noted however, that the budget clearly conformed more closely to the required format than did that of the Chinese proposal previously reviewed.

6.16 The Project Director pointed out that in his view the proposal was weak because it clearly did not address the primary or root cause of water quality decline in the area, as it focussed on the small resident population of around 3,500 people rather than the increasing numbers of tourists who were visiting the island. Numbers that were anticipated to rise under the Government's development plan for the island. He noted that the *per capita* value for water consumption on the part of the resident population was extremely high and Mr. Boonyong Lohwongwatana further noted that water consumption was not uniform but rather peaked during the weekends reflecting the high numbers of local visitors during the weekend period.

6.17 Mr. Koesworo introduced the proposed activity from Indonesia for pilot activities in Batam indicating that there were a large number of water quality problems in the area, of which nutrient enrichment was clearly a major problem. The proposal notes that a major requirement for the area was the introduction of some form of integrated coastal zone management that strengthened the capacity of local stakeholders to take action in addressing environmental issues and problems, and that a major issue was heavy metal pollution resulting from the rapid industrialisation of the area.

6.18 The Project Director noted that the causal chain analysis needed improvement since some confusion was apparent in the arrangement of the immediate, intermediate and root causes. He noted further the need to improve the budget, which lacked detail and was not in the correct format. Dr. Gullaya noted that Section 13 listed three components but the budget table contained four components and noted also discrepancies between the contents of Tables 1 and 2 and the Implementation Plan. It was suggested that Section 13 should contain a clear statement regarding the individual components and their activities that should be replicated in the budget tables and the implementation plan.

6.19 Mr. Pak Sokharavuth, focal point for Land-based Pollution in Cambodia introduced the proposal for Sihanoukville and the meeting noted the considerable overlap and replication between this proposal and that for Koh Kong. The stated goals are to prevent and reduce pollution but the activities focus on capacity building and monitoring activities with some strengthening of enforcement.

6.20 During discussion some overlap in content between sections was noted, as was the inappropriate location of some information (objectives listed under activities for example). The Project Director noted considerable problems with the budget, which was presented in an inappropriate manner and not according to the format and guidance previously provided. He noted that the activities section contained seven objectives (components?) each of which had a subsidiary list of individual activities yet

the budget contained only four components with lists of activities that did not correspond to those contained in section 13.

6.21 The Project Director further noted that the proposal was difficult to support in its present form since no co-financing was listed in the budget despite the fact that Sihanoukville had been selected as a PEMSEA demonstration site and was further in receipt of financial support for coastal zone management through a project financed by DANIDA. The proposal made no mention of these initiatives nor, the linkage between the present proposal and these on-going efforts. He noted that had these been adequately described in the proposal document, and efforts made to link the present activity with those that were on going, then clearly additional co-financing would have been identified.

6.22 There followed a discussion regarding whether or not the late submissions should be ranked according to the agreed ranking scheme. Dr. Pham Van Ninh, indicated to the meeting that he had not been informed in writing of the agreement on the final date for submission of the end of February and that he did not wish the meeting to consider the two Vietnamese proposals, which would likely receive funding through other sources.

6.23 Dr. Pernetta expressed regret and indicated that in his view ranking the proposals in the manner agreed would provide evidence to potential donors of the regional significance of the issues addressed by a proposal, thereby strengthening the case for support of the proposal. He further noted that no proposals could be further developed or submitted to potential donors by the PCU unless they had been considered and reviewed by the Regional Working Group on Land-based Pollution, and the Regional Scientific and Technical Committee.

6.24 He further noted that the Regional Working Groups on the habitat sub-components had ranked large numbers of sites and developed numerous proposals in the expectation that additional funding would be raised to support additional demonstration sites. These proposals had been presented to the partnership workshop during the Regional Scientific Conference and the GEF Secretariat representative had indicated that the GEF would provide additional financial support for up to seven additional demonstration sites. He indicated that if the PCU were not in receipt of additional, sound proposals that had been reviewed and ranked by the Regional Working Group then the PCU would not be in a position to approach donors to raise additional financial support.

6.25 Mr. Han requested, and the group agreed to rank the proposal for pilot activities in Beihai and the outcome is included in Table 2 of Annex 5.

6.26 There followed a consideration of which proposals should be recommended to the RSTC and PSC for financial support from the project budget. It was agreed that the proposals for the Pearl River, Tha Chin, and Batam would be recommended to the RSTC for support. It was further noted that the total budgets for these three proposals greatly exceeded the total available financial resources. The RWG-LbP agreed that the remaining proposals should not be recommended in their present form.

6.27 The Project Director indicated that he intended to convene the meeting of the Executive Committee of the RSTC before the end of April and therefore urged the responsible SEAs to proceed with a revision of the documents as rapidly as possible.

7. WORLD BANK INVESTMENT FUND CONCEPT

7.1 The Senior Expert introduced a concept prepared by the World Bank entitled: *Strategic Partnership for a Land-based Pollution Reduction Investment Fund for the LMEs of East Asia –Phase 1 International Water*. (Document UNEP/GEF/SCS/RWG-LbP.4/Inf. 4). He noted that this was modelled on the GEF Fund for nutrient reduction in the Black Sea and that the Bank proposal included 40-45 million US\$ to be used for co-financing a series of large-scale World Bank land based pollution reduction projects or programmes together with a 30-35 million US\$ pool of World Bank administered GEF resources that would finance either a regional "revolving fund" and/or several sub-regional revolving funds.

7.2 Members requested clarification as to why this proposal had been provided to the group, and what relationship it bore to the two proposals considered during a previous meeting. The Project Director explained that the Livestock Waste Reduction proposal had been approved by the GEF as an

independent project that was now under appraisal and that the Pearl River Pollution Reduction proposal that had been previously considered had led to the development of this concept. He noted that the investment Fund concept focussed on large-scale interventions in the urban environment and that the GEF funds were to be used in conjunction with several, large-scale (250 million plus) loans. He noted further that the World Bank/GEF Guangdong/Pearl River Delta Urban Environment Project had recently entered the GEF pipeline and that the proposal for the Lindyinggang catchment considered by this meeting, complemented this initiative in focussing on smaller population centres.

7.3 Dr. Pernetta further noted that the reason for presenting this proposal to the meeting was to alert members to the initiative in order that they could brief their Ministers of Environment and ensure connectivity at the national level between activities that might be developed under this concept and the activities planned in the framework of the present project. He noted further that proposals developed by members that included high quality business plans could be submitted to the revolving fund once established and that therefore members should seriously consider possible proposals for development and consideration under this fund.

7.4 During discussion it was noted that the GEF Secretariat representative had made reference to the Pearl River project during his address to the Regional Scientific Conference as being an outcome of the Transboundary Diagnostic Analysis conducted during the PDF-B phase of the South China Sea project.

8. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION 2004 - 2007

8.1 The Chairperson invited the Senior Expert to introduce the document UNEP/GEF/SCS/RWG-LbP.4/10 *"Proposals for a revised work plan and timetable for the Regional Working Group on Land-based Pollution"*. Mr. Jiang informed the meeting that the draft work plan for the Regional Working Group 2004-2007 was prepared by the PCU, and presented in the document UNEP/GEF/SCS/RWG-LbP.4/9. He reminded the meeting of the deadlines agreed under previous agenda items and the fact that all anticipated outputs from the preparatory phase must be produced prior to June 30th. He then presented the draft work plan, and the meeting schedule for 2004.

8.2 The meeting took note of the draft Memorandum of Understanding tabled by the Project Director, that had been presented to and approved by the RSTC and PSC to cover the regional level activities anticipated to be executed during the operational phase of the project. The RWG noted further the invitation of the Project Director to propose any amendments or modifications as required. It was further noted that this draft did not encompass the pilot activities, and once these were approved the details of the SEA actions in implementing pilot activities would be included in the individual memoranda as appropriate.

8.3 The meeting discussed the proposed work plan and meeting schedule and agreed the work plan as presented in Annex 6 of this report.

9. DATE AND PLACE OF THE FIFTH MEETING OF THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION

9.1 The Regional Working Group noted the overall schedule of meetings as approved by the fourth meeting of the Regional Scientific and Technical Committee (UNEP/GEF/SCS/RSTC.4/3), and third meeting of the Project Steering Committee (UNEP/GEF/SCS/PSC.3/3). Participants further noted the decision of the Project Steering Committee, that future meetings of the Regional Working Groups should be convened at one of the demonstration sites or pilot activities.

9.2 The RWG changed the dates of the next meeting to 22-25 November 2004 due to difficulties raised by one member. The RWG further confirmed that the meeting dates should not be changed due to delays in receiving national inputs to the project.

9.3 Regarding the venue of the next meeting the RWG noted that since decisions had not been taken regarding the pilot activities it was difficult for the meeting to agree on a location and agreed to defer this decision pending the decisions of the RSTC and Project Steering Committee on the pilot activities.

10. ANY OTHER BUSINESS

10.1 The Chairperson invited members to raise any further items of business. No additional items were raised under this agenda item.

11. ADOPTION OF THE REPORT OF THE MEETING

11.1 The Rapporteur Ms. Hoh presented the draft report of the meeting prepared by the PCU, which was considered, amended and adopted as it appears in this document.

12. CLOSURE OF THE MEETING

12.1 The Chairperson thanked the members of the working group for their hard work in completing the business on the agenda and in particular in completing the review and ranking of proposals for consideration by the RSTC and PSC.

12.2 Dr Pornsook thanked the Officers of the Committee and in particular the Chairperson for the conduct of the meeting and for the administrative arrangements.

12.3 The Chairperson closed the meeting at 14:30 on 2nd April 2004.

ANNEX 1**List of Participants****Focal Points****Cambodia**

Mr. Pak Sokharavuth, Deputy Director
Department of Pollution Control
Ministry of Environment
48 Samdech Preah Sihanouk
Sangkat Tonle Bassac, Khan Chamkarmon
Phnom Penh, Cambodia

Tel: (855 23) 222 439; 855 12962103
Fax: (855 23) 987 880
E-mail: sokharavuth@online.com.kh

Indonesia

Mr. Heru Waluyo Koesworo
Assistant the Deputy Minister of Environment
On Marine and Coastal Ecosystem Affairs
Ministry of Environment
JL D.I. Panjaitan Kav 24, Gd A
Jakarta 13410, Indonesia

Tel: (62 21) 8590 5638; 0812 9261652
Fax: (62 21) 8590 4929
E-mail: heruw_k@menlh.go.id;
heruw_k@yahoo.com

Philippines

Mr. Vicente R. Diaz
Section Chief, Pollution Research Section
Research and Development Division
Environmental Management Bureau
(EMB), DENR Compound Visayas Avenue
Dilman, Quezon City
Philippines

Tel: (632) 426 4332; 426 4337
Fax: (632) 426 4340
E-mail: vr_diaz@hotmail.com;
vdzv@icqmail.com

Viet Nam

Dr. Pham Van Ninh, Director
Center for Marine Environment Survey
Research and Consultation
Institute of Mechanics, NCST
264 Dai Can Street
Hanoi, Viet Nam

Tel: (844) 832 6136; 832 6195
Fax: (844) 832 7903
E-mail: pvninh@im01.ac.vn

People's Republic of China

Mr. Han Baoxin, Deputy Director
South China Institute of Environmental Sciences,
SEPA
7 West Street, Yuancun
Guangzhou, 510655
Guangdong Province, China

Tel: (86 20) 8552 5658; 86 13902408273
Fax: (86 20) 8552 5658; 8553 8243
E-mail: hbx@scies.com.cn; bxhan@21cn.com

Malaysia

Ms. Carol Hoh Mui Ling
Department of Environment
Level 3-7, Block C4, Parcel C
Federal Government Administrative Centre
62662 Putrajaya, Malaysia

Tel: (603) 8885 8262
Fax: (603) 8888 4070
E-mail: chml@jas.sains.my

Thailand

Dr. Pornsook Chongprasith, Director
Marine Environment Division
Water Quality Management Bureau
Pollution Control Department
Ministry of Natural Resources and Environment
92 Soi Pahonyothin 7, Samsen Nai, Phaya Thai
Bangkok 10400, Thailand

Tel: (66 2) 298 2239
Fax: (66 2) 298 2240
E-mail: marinepollution_pcd@yahoo.com
Pornsook_chongprasith@yahoo.com

Expert Members

Dr. Gullaya Wattayakorn
Marine Science Department
Chulalongkorn University
Phayathai Road
Bangkok 10330, Thailand

Tel: (66 2) 218 5407; 218 5409
Fax: (66 2) 255 0780
E-mail: gullaya@chula.ac.th

Mr. Boonyong Lohwongwatana
Assistant Professor, Head of Department
Department of Environmental Engineering
Faculty of Engineering, Chulalongkorn University
Bangkok 10330, Thailand

Tel: (66 2) 218 6665; 218 6667
Fax: (66 2) 218 6666
E-mail: fenblw@kankrow.eng.chula.ac.th

Project Co-ordinating Unit Member

Mr. Yihang Jiang, Senior Expert
UNEP/GEF Project Co-ordinating Unit
United Nations Environment Programme
9th Floor, Block A, United Nations Building
Rajdamnern Avenue
Bangkok 10200, Thailand

Tel: (66 2) 288 2084
Fax: (66 2) 288 1094; 281 2428
E-mail: jiang.unescap@un.org

Observers

Mr. Ekachai Praekulvanich
Environmental Scientist
Marine Environment Division
Water Quality Management Bureau
Pollution Control Department
Ministry of Natural Resources and Environment
92 Soi Pahon Yothin 7, Pahon Yothin Rd.
Sam Sen Nai, Phaya Thai
Bangkok 10400, Thailand

Tel: (662) 298 2246
Fax: (662) 298 2240
E-mail: marinepollution_pcd@yahoo.com

Ms. Peng Haijun
South China Institute of Environmental Sciences,
SEPA
7 West Street, Yuancun
Guangzhou, 510655
Guangdong Province, China

Tel: (86 20) 8553 8220
Fax: (86 20) 8552 4439
E-mail: hjpeng@scies.com.cn

Ms. Yang Jing
South China Institute of Environmental Sciences,
SEPA, 7 West Street, Yuancun
Guangzhou, 510655
Guangdong Province, China

Tel: (86 20) 8555 7930
Fax: (86 20) 8552 5658; 8553 8243
E-mail: yangjing@scies.com.cn

Mr. Xu Lianfeng
South China Institute of Environmental Sciences,
SEPA, 7 West Street, Yuancun
Guangzhou, 510655
Guangdong Province, China

Tel: (86 20) 8555 7930
Fax: (86 20) 8552 5658; 8553 8243
E-mail: lfxu@scies.com.cn

Ms. Guo Hao
South China Institute of Environmental Sciences,
SEPA
7 West Street, Yuancun
Guangzhou, 510655
Guangdong Province, China

Tel: (86 20) 8553 8222
Fax: (86 20) 8552 4439
E-mail: haoguo@scies.com.cn

Project Co-ordinating Unit

Dr. John Pernetta, Project Director
UNEP/GEF Project Co-ordinating Unit
United Nations Environment Programme
9th Floor, Block A, United Nations Building
Rajdamnern Avenue
Bangkok 10200, Thailand

Tel: (66 2) 288 1886
Fax: (66 2) 288 1094; 281 2428
E-mail: pernetta@un.org

Mr. Mingqing Liu, Intern
UNEP/GEF Project Co-ordinating Unit
United Nations Environment Programme
9th Floor, Block A, United Nations Building
Rajdamnern Avenue
Bangkok 10200, Thailand

Tel: (66 2) 288 2607
Fax: (66 2) 288 1094; 281 2428
E-mail: lium@un.org

Ms. Unchalee Kattachan, Programme Assistant
UNEP/GEF Project Co-ordinating Unit
United Nations Environment Programme
9th Floor, Block A, United Nations Building
Rajdamnern Avenue
Bangkok 10200, Thailand

Tel: (66 2) 288 1670
Fax: (66 2) 288 1094; 281 2428
E-mail: kattachan.unescap@un.org

ANNEX 2

List of Documents

Discussion Working Documents

UNEP/GEF/SCS/RWG-LbP.4/1	Provisional agenda
UNEP/GEF/SCS/RWG-LbP.4/2	Provisional annotated agenda
UNEP/GEF/SCS/RWG-LbP.4/3	Report of the meeting
UNEP/GEF/SCS/RWG-LbP.4/4	Current status of administrative reports 2003 from the Specialised Executing Agencies in the participating countries: progress reports; expenditure reports; audit reports; and MOU amendments.
UNEP/GEF/SCS/RWG-LbP.4/5	Current status of substantive reports on Land-based Pollution from the Specialised Executing Agencies in the Participating Countries.
UNEP/GEF/SCS/RWG-LbP.4/6	Reviews from regional expert, and the PCU of the drafts of the substantive reports produced by the Specialised Executing Agencies in the participating countries.
UNEP/GEF/SCS/RWG-LbP.4/7	Technical considerations for the reviewing proposals of pilot activities for Land-based Pollution component.
UNEP/GEF/SCS/RWG-LbP.4/8	Proposals of Pilot Activities for the Land-based Pollution component from the participating countries.
UNEP/GEF/SCS/RWG-LbP.4/9	Proposed Work plan and timetable for the Regional Working Group on Land-based Pollution 2004 – 2007.

Information Documents

UNEP/GEF/SCS/RWG-LbP.4/Inf.1	Provisional list of participants
UNEP/GEF/SCS/RWG-LbP.4/Inf.2	Provisional list of documents
UNEP/GEF/SCS/RWG-LbP.4/Inf.3	Draft programme
UNEP/GEF/SCS/RWG-LbP.4/Inf.4	World Bank/GEF concept paper entitled: <i>Strategic Partnership for a Land-based Pollution Reduction Investment Fund for the LMEs of East Asia–Phase 1 International Water</i> .
UNEP/GEF/SCS/RSTC.4/5 Annex 2	Status of the Memoranda of Understanding between UNEP and the Specialised Executing Agencies as of January 2004.

The following documents are supplied on CD-ROM and in published form.

UNEP/GEF/SCS/PSC.3/3	Third Meeting of the Project Steering Committee for the UNEP/GEF Project “ <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ”. Report of the meeting. Manila, Philippines, 25 th – 27 th February 2004 UNEP/GEF/SCS/PSC.3/3.
UNEP/GEF/SCS/RSTC.4/3	Fourth Meeting of the Regional Scientific and Technical Committee for the UNEP/GEF Project “ <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ”. Report of the meeting. Pattaya, Thailand, 15 th - 17 th February 2004 UNEP/GEF/SCS/RSTC.4/3.

UNEP/GEF/SCS/RWG-W.4/3	Fourth Meeting of the Regional Working Group on the Wetlands Sub-component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Kuala Lumpur, Malaysia, 15 th – 18 th December 2003 UNEP/GEF/SCS/RWG-W.4/3.
UNEP/GEF/SCS/RWG-SG.4/3	Fourth Meeting of the Regional Working Group on the Seagrass Sub-component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Guangzhou, China, 29 th November – 2 nd December 2003 UNEP/GEF/SCS/RWG-SG.4/3.
UNEP/GEF/SCS/RWG-CR.4/3	Fourth Meeting of the Regional Working Group on the Coral Reefs Sub-component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Guangzhou, China, 27 th – 30 th November 2003 UNEP/GEF/SCS/RWG-CR.4/3.
UNEP/GEF/SCS/RWG-M.4/3	Fourth Meeting of the Regional Working Group on the Mangroves Sub-component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Beihai, China, 14 th – 17 th October 2003 UNEP/GEF/SCS/RWG-M.4/3.
UNEP/GEF/SCS/RTF-L.1/3	First Meeting of the Regional Task Force on Legal Matters for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Phuket, Thailand, 15 th – 17 th September 2003 UNEP/GEF/SCS/RTF-L.1/3.
UNEP/GEF/SCS/RTF-E.1/3	First Meeting of the Regional Task Force on Economic Valuation for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Phuket, Thailand, 11 th – 13 th September 2003 UNEP/GEF/SCS/RTF-E.1/3.
UNEP/GEF/SCS/RWG-LbP.3/3	Third Meeting of the Regional Working Group on the Land-based Pollution Component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting. Phuket, Thailand, 7 th - 10 th July 2003 UNEP/GEF/SCS/RWG-LbP.3/3.
UNEP/GEF/SCS/RWG-F.3/3	Third Meeting of the Regional Working Group on the Fisheries Component for the UNEP/GEF Project <i>"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"</i> . Report of the meeting Siem Reap, Cambodia, 29 th April – 2 nd May 2003 UNEP/GEF/SCS/RWG-F.3/3.

ANNEX 3

Agenda

- 1. OPENING OF THE MEETING**
 - 1.1 Welcome Address**
 - 1.2 Introduction of Participants**
- 2. ORGANISATION OF THE MEETING**
 - 2.1 Election of Officers**
 - 2.2 Administrative Arrangements**
- 3. ADOPTION OF THE MEETING AGENDA**
- 4. REPORTS FROM THE PROJECT CO-ORDINATING UNIT (PCU) REGARDING OVERALL PROGRESS TO DATE**
 - 4.1 Status of the administrative reports for 2003: progress reports; expenditure reports; audit reports; and MoU amendments**
 - 4.2 Status of planned substantive outputs from the national level activities**
 - 4.3 Consideration of substantive outputs from the regional level activities**
- 5. REVIEW AND FINALISATION OF THE PROCEDURES USED IN RANKING HOT SPOTS AND CONTAMINANTS**
- 6. CONSIDERATION OF PROPOSALS FOR PILOT ACTIVITIES AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE (PSC)**
- 7. WORLD BANK INVESTMENT FUND CONCEPT**
- 8. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION 2004 - 2007**
- 9. DATE AND PLACE OF THE FIFTH MEETING OF THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION**
- 10. ANY OTHER BUSINESS**
- 11. ADOPTION OF THE REPORT OF THE MEETING**
- 12. CLOSURE OF THE MEETING**

ANNEX 4

Regional Overview of Land-Based Pollution in the South China Sea Outline of Contents

1. **General Information on Land-Based Pollution in the South China Sea (*Dr. Pham Van Ninh*)**
 - Geographic setting;
 - Pollution source: domestic, agriculture, industry; definition (impact of the LbP of what this project is concerned).
2. **Regional Problems of Land-Based Pollution and Priorities (*Dr. Pornsook Chongprasith + Mr. Pak Sokharavuth*)**
 - Pollution problems and priorities identified by TDA;
 - National reviews on data and information.
3. **Efforts in addressing the Problems and Priorities (Existing Gaps) (*Mr. Han Baoxin + Mr. Heru Waluyo Koesworo*)**
 - Reviews of past and ongoing projects (including other programmes and projects in the region);
 - Synthesize the experience and gaps.
4. **Regional Actions required (*Mr. Vicente Diaz*)**
 - Legal (Including Regional Criteria and Standard) (Reviews of National Legislation);
 - Economic valuation;
 - Monitoring;
 - Public awareness;
 - Alternative solutions;
 - Regional co-operation.
5. **Roles of the South China Sea Project (*Mr. Jiang Yihang + Dr. Gullaya Wattayakorn*)**
 - Regional and national network;
 - Regional Information network (GIS database, meta database);
 - Hot spot characterisation and priority ranking;
 - Pilot activities (procedure for selection, and result);
 - Expected outcomes from the pilot activities.
6. **Potential Benefits (*Mr. Boonyong Lohwongwatana*)**
 - Water quality;
 - Marine habitats (coral reefs, seagrass, mangroves, etc.);
 - Coastal fishery resource;
 - Human health.

Co-ordinator of the overview: *Dr. Gullaya Wattayakorn*

English Editor: *Ms. Carol Hoh Mui Ling*

Working schedule:

Draft: 30 May 2004

Final: end June 2004

Send to: Dr. Gullaya by email: gullaya@chula.ac.th

ANNEX 5

Discussion and Agreement on Criteria, Indicators and Ranking Scores for Evaluating Priorities amongst Pilot Activities

BACKGROUND

During the third meeting of the Regional Working Group on Land-based Pollution (RWG-LbP), the Regional Working Group agreed on the “*Results of Characterisation and Ranking of Hot Spots and Contaminant Impacts*” (Annex 5 of the document UNEP/GEF/SCS/RWG-LbP.3/3). The process resulted in two major outcomes: (i) scores of significance of hot spots, as shown in Fig. 1; and (ii) scores of contaminants ranking, as shown in Fig. 2.

Figure 1 Scores of significance of hot spots.

Human Health	-	-	-	-	5	-	-	-	-	-	-	-	-	5
- Food safety (including bacteria contaminant) (satisfied:0; not satisfied:1)	0													
- Sickness/disease (cases/year)		-	-	-	1	-	-	-	-	-	-	-	-	1
Future Threats	1	-	3	-	-	1	2	-	-	-	1	-	3	-
- Socio-economic and culture development (yes:1 no:0)	1					1					1			
- Population growth (next 5 and 10 years)			1	-	-		1	-	-	-			1	-
	20	20	18	12	10	13	12	15	8	-	17	6	21	-
TOTAL														

Hot spot rank score

Figure 2 Scores of contaminants ranking.

CRITERIA	Lingayen Gulf					Manila Bay					Total
	1	2	3	4	5	1	2	3	4	5	
Impact on the Marine Environment	4	-	3	-	10	7	6	12	-	20	486
- Ambient water quality	4	-	3	-	10	5	-	3	-	10	261
- Nutrient (Nitrate, Nitrite, Phosphate and Ammonia)	3	-	-	-	-	3	-	-	-	-	117
- Fecal Coli	-	-	-	-	-	-	-	-	-	-	21
- Heavy Metals (Cr, Cu, Pb, Cd, Zn, As, Hg), phenol	1	-	1	-	2	1	-	1	-	2	112
- DO	-	-	-	-	-	1	-	-	-	-	11
- Sediment Quality	-	-	-	-	-	2	2	6	-	5	80
- Cr	-	-	-	-	-	-	-	1	-	-	5

Contaminant rank score

OUTCOME OF DISCUSSIONS DURING THE FOURTH MEETING OF THE REGIONAL WORKING GROUP ON LAND-BASED POLLUTION

In order to prioritise the pilot activities amongst the proposals received, the Regional Working Group discussed and agreed on the criteria, indicators and rank scores, as shown in Table 1. The major considerations and agreements were:

- (i) **Hot Spot ranking in the proposed pilot activities.** On the basis of the results in Figure 1, the Regional Working Group agreed that the scores of significance of the hot spots should be divided by 10 to give a final ranking score;
- (ii) **Contaminant ranking in the proposed pilot activities.** The final ranking score of each contaminant was aligned along a ten point arithmetic scale as indicated in Table 1.

Table 1 Agreed criteria, indicators and rank scores for evaluating priorities amongst pilot activity proposals.

			Weighting
Hot spot ranking scores		Rank Score	x20%
Scores of significance (S) previously determined		(S)/10	
Contaminant ranking in the proposed pilot activities (previously determined)	Scores agreed	Ranking points	x20%
Nutrient (in sea water)	117	10	
Heavy metals (in sea water)	112	9	
Heavy metal (Cd in Sediment)	25	6	
Heavy metal (Pb in biological samples)	24	5	
Faecal Coli (in sea water)	21	4	
Heavy metal (Zn in biological samples)	19	3	
Heavy metal (Cd in biological samples)	17	2	
Heavy metal (Pb in Sediment)	15	1	
Outcome evaluation			
Process Indicators			
Public awareness	increased	2	
Local stakeholders/government involvement	leading roles	2	
Legislation/enforcement	in place/better	2	
Stress reduction indicators			
Reduction in contaminant input	reduced	4	
Relationship between root cause and identified intervention		Rank Points	10%
Very good		10	
Good		7	
Need improve		3	
none		0	
Relationship between intervention and Activity cost		Ranking Points	10%
	2.5y	2	
	2y	4	
	1.5y	6	
	1y	8	
	0.5y	10	
Government/other sources, Level of co-financing commitment		Rank Score	15%
Guaranteed		10	
Highly Likely		7	
Proposed		3	
Ratio of GEF grant funds to co-financing		Rank Score	15%
> 1:2		10	
1:1.01 to 1:2		7	
1:1		5	
<1:1		3	
1:0		0	

- (iii) **Outcome evaluation.** It was agreed by the Regional Working Group that the Evaluation of outcomes should be considered in two parts: **Process Indicators** and **Stress Reduction Indicators**. It was further agreed that for the Process Indicators, the evaluation of the proposals should focus on whether the proposals included activities directed towards public awareness, local stakeholder/government involvement, and legislation/ enforcement. Two ranking points were assigned to each of these sets of activities for a possible total of 6 points.
- (iv) **Relationship between root cause and identified intervention.** The Regional Working Group recognised that the proposed interventions in managing and controlling contaminants should address the root cause(s) identified in the causal chain analysis, and agreed on rank scores that reflected the quality of the analysis.
- (v) **Relationship between intervention and activity cost.** Considering the limited budget available for the pilot activities within the project, and the cost efficiency of the proposed actions, the Regional Working Group agreed to evaluate the relationship between the proposed interventions and activity costs. It was further agreed that the evaluation should focus on the cost per unit of COD removal in the proposals.

With regard to evaluation of the relationship between the proposed intervention and activity cost, the meeting agreed to use *cost-per-unit* for removing COD in the proposals, and the calculation is show in the Table 2.

- The values in columns (1) and (2) were obtained from the pilot activity proposals prepared by the focal points;
- Column (3), cost per unit, was calculated as Column (2) divided by (1);
- Column (4) indicated the levels of unit for ranking points; and
- Column (5) indicated the ranking points from Column (4) according to the agreed criteria shown in Table 1.

	COD removed (ton/year) (1)	BUDGET (2)	cost per unit (3)	(y=1000 t/y) (4)	RANKING POINTS (5)
Koh Kong	n/a				
Sihanoukville	n/a				
Pearl River	620.5	1,066,000	1,717.97	1.7	6
Batum	23	697,820	30,340.00	30	2
Ko Chang	82.4	1,015,717	12,326.66	12.3	2
Tha Chin R.	1,236	742,083	600.39	0.6	10
Red tide, GoT	n/a				
Beihai	1,456	683,000	469.09	0.5	10

Following the agreements regarding criteria, indicators and ranking scores, the Regional Working Group evaluated in detail the proposals prepared by the focal points for land-based pollution from the participating countries, and final results of the evaluation and ranking are presented in Table 3.

[illegible]

Revised Work Plan and Timetable for the Regional Working Group on Land-based Pollution 2004-2007

Table 1

[illegible]

Table 2 Schedule of meetings for 2004. (RWG = Regional Working Group; -M = Mangroves; -C = Coral reefs; -S = Seagrass; -W = Wetlands; -F = Fisheries; LbP = Land-based Pollution; RTF-E = Regional Task Force on Economic Valuation; RTF-L = Regional Task Force on Legal Matters.) (H = United Nations holidays)

	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M							
January					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
					H																				Chinese NY												
February							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
								H									Regional Science Conference			RSTC-4										PSC-3							
March		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
						H											Ad hoc													RWG-LbP-4							
April					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
					LbP-4						H					Thai NY													RWG-F-4								
May							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
									RTF-L-2															ExComm													
June			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
		RTF-E-2																																			
July					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
August	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
												H												RWG- S-5													
September				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
																RWG-C-5													RWG-M-5								
October					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
									RWG-W-5					RWG- F-5						Ramadan																	
November		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
									Ramadan						H									RWG-LbP-5													
December				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
								H				RSTC-5				PSC-4													Xmas		H						