



MILLENNIUM CHALLENGE ACCOUNT-VANUATU
Reducing Poverty through Improved Infrastructure

**FINAL REPORT ON THE IMPLEMENTATION OF MCA-V ACTION PLAN ON
UNDINE BAY DEVELOPMENT
May 18, 2009**

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Annex 1: Reference Documents

| Appendix No. | Subject/Activity | Date |
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| 1. | MCA response to MCC concerning action plan to implement conditions | 21 st January 2009 |
| 2. | MCA response to Developer, with reference to approach Downer EDI Works Ltd to bypass Undine Bay development | 21 st January 2009 |
| 3. | Email instruction to QCPP to bypass Undine Bay development | 22 nd January 2009 |
| 4. | Confirmation from Downer as a response to Email instruction of 22nd January 2009, including acceptance of works on realigned road. | 19th February 2009 |
| 5. | Dr. Dick Watling's Report | 2 nd December 2008 |
| 6. | Request to Downer to conduct financial assessment of the road realignment- whether or not the realignment will result in additional cost or saving | 4 th February 2009 |
| 7. | Outcome of Undine Bay Task Force Meeting | 2 nd February 2009 |
| 8. | Undine Bay Developer's Proposal | October 2005 |
| 9. | Detailed designs for foreshore works, including groynes and cross sections of channels | 15 th May 2009 |
| 10. | Construction Environmental Management and Implementation Plan for Undine Bay Marina Estate Development | 15 th May 2009 |

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| 11. | Downer/QCPP certification of conformity of the road realignment to acceptable engineering standards. | 18 th March 2009 |
| 12. | MCC Letter | 19 th December 2008 |
| 13. | Undine Bay Marine Biodiversity Assessment Report | April 2009 |
| 14. | Coastal Water Test Report | 5 th May 2009 |
| 15. | VEU Approval | 15 th May 2009 |
| 16. | Mangrove Assessment Report | 18 th May 2009 |
| 17. | Developer commitment for a safe footpath, shops operated by local community | 20 th February 2009 |

Abbreviations

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| CEMIP | Construction Environmental Management and Implementation Plan |
| EIA | Environment Impact Assessment |
| ESU | Engineer Support Unit |
| GoV | Government of Vanuatu |
| MCA | Millennium Challenge Account Vanuatu |
| MCC | Millennium Challenge Corporation |
| PWD | Department of Public Works |
| QCPP | Queensland Consulting Project Partners |
| VEU | Vanuatu Environment Unit |
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1.0 Background

A private marina and residential/commercial development has been under construction at Undine Bay on the northern side of Efate since 2006. An EIA approval from the Ministry of Lands and Natural Resources was granted for the development in 2005. The development is located adjacent to the Malatia River mouth on an old coconut plantation. The nearest community and custom owners of the land are from Siviri Village and which is located to the west with Malatia Primary School located to the east of the Development. As part of the development, the adjacent section of the Efate Ring Road that passes the development has been realigned to allow a greater portion of land area for the development of the proposed marina, residential lots and commercial precinct associated with the marina. The realigned road for Undine Bay Development is located at chainage 29,490 and is 804 meters long. The road realignment is regarded by many as having the potential to improve income-generating opportunities and some safety aspects of the road.

The developers have worked through the Government of Vanuatu and MCA-V's processes to properly formalize re-alignment of the road. They have worked with Downer EDI Works, at the developer's own expense, to construct the base course level at the required width and to the contract specifications. However, the road still remains unsealed.

MCC and MCA are considering incorporating the sealing of this realigned section of the road into the Vanuatu Transport Infrastructure Project, however, a number of conditions have to be met prior to MCC's approval for its funds to be utilized and prior to commencement of any DEW works on the section.

Because of a number of environmental and social concerns which were raised, MCA-V requested an Environment Audit report to be prepared by Dr. Dick Watling in December 2008. This report was then considered by MCA-V and MCC, with inputs from MCC's infrastructure and ESA officers. On December 19, 2008, MCC wrote to MCA-V advising of a number of conditions which would need to be addressed before approval could be considered. These conditions were outlined by MCC to MCA-V on December 19 2008, as the following:

- The recommendations in Dr. Watling's report are disseminated promptly to MCA-V, the developer, the Vanuatu Environmental Unit (VEU) and PWD, and are in the process of being pursued and implemented in full;
- Downer EDI Works (Downer) and QCPP certify, in a form acceptable to MCC, that they are fully satisfied with the materials quality, compaction standards, structure, CBR testing and any other relevant construction and engineering characteristics of the realigned road, and that this section conforms substantially to the same specifications applicable to other road segments;
- Downer and QCPP have certified the existing realigned road on the terms stated above;
- Downer accepts the same degree of responsibility and liability for the realigned road as for any other road section covered by its contract with MCA-Vanuatu; and

- The following additional measures are undertaken:
 - i. This letter is disseminated to MCA-V, the developer, VEU and PWD;
 - ii. The existing marine damage and any resulting rehabilitation needs of the affected area are properly documented through a marine study;
 - iii. Any resulting rehabilitation needs, including the removal or protection of sediment generating surfaces, are implemented;
 - iv. A detailed design of the foreshore works is prepared;
 - v. A site-specific EMP which is capable of being readily monitored and includes rehabilitation of existing foreshore works to acceptable standards is prepared;
 - vi. The developer commits to provide (a) a safe footpath along the realigned road through the development, (b) shops to be operated by the local community on the grounds of the development, (c) open access to the sea, and (d) jobs for the local community
 - vii. The local community and VEU begin work toward establishing a locally managed marine protected area; and
 - viii. The developer initiates a program of coral transplantation to affected areas, to be monitored by VEU.

MCA prepared an action plan to achieve these conditions which was sent to MCC on 21st January 2009. This report provides final documentation of achievements against the MCC conditions and MCA's action plan, and finds that all requested conditions have been met to a satisfactory level, and requests that the MCA Steering Committee and MCC approve the inclusion of the realigned road at Undine Bay under the Compact's sub-project to upgrade the Efate Ring Road.

2.0 Summary of Key Investigations and Supporting Documentation

All conditions set by MCC and all reviews have been completed. MCA apologizes for the delays in finalizing this work. The original timelines were too tight and a little unrealistic, and MCA wanted to ensure that the work was comprehensive and of a professional standard. The developer chose to use an engineering firm based in New Zealand to undertake the designs and drawings and to prepare the CEMIP. Whilst this created delays, MCA sees great benefits in their choice of a highly-regarded regional firm with good ESA credentials. Other GoV departments, such as the Department of Fisheries were also working with competing priorities, and it took considerable time to refine terms of reference and to identify the need for additional work such as the mangrove assessment.

The section below summarizes the main findings.

2.1 VEU Approval

The Vanuatu Environment Unit was the coordinating agency for the Environmental Audit of the Undine Bay Development, including the coordination of the Marine, Water, and Mangrove reviews.

The VEU assessed the Marine Biodiversity Assessment against the original EIA for the development and compared the results of the 2 reports. The VEU concluded that there were no impacts of changes that have occurred overtime during the construction phases for the marina and the subdivision development at Undine Bay. In the VEU report the review of the water sample test results show no sign of water pollution by the dredging activity of the marina inlet and removal of mangroves.

The final conclusion of the report is that *'the level of damage to the foreshore by the physical works on site including the realigned road is very low. The VEU is recommending that the MCA-V may consider this portion of the realigned road and proceed in preparation stage of Tar sealing this section of road.'*

Due to time constraints the CEIMP and detail designs received from the developer were not passed to the VEU in time for them to provide formal approve of the documents for monitoring purposes. This is being sought immediately and is expected to be provided by 22nd May 2009.

The VEU will continue to monitor the development against agreed designs and the CEMIP, often in joint visits with MCA and ESU officers.

2.2 Marine Assessment

The marine assessment undertaken by the Department of Fisheries and which covered a length of 1.5km along the coast adjacent to the site of the Undine Bay Development. The primary purpose of the assessment was to justify whether the current inland works of the development was contributing to the decrease in the quality of the marine biodiversity through surface flows and siltation.

The surveys methods deployed for the assessment included a fish survey (measuring diversity, abundance, density and stock level), an invertebrate survey (tracking signs of fishing stress, pollution and other stresses on the reef), a substrate survey (applied for monitoring purposes to capture current and past impacts and changes on the reef, status and conditions of coral reefs in the surrounding area), finally a mangrove survey was undertaken to capture the species diversity and average species composition.

The recommendations from this study are:

- 1. The recent development at Undine Bay should not be considered as a major threat to the overall surrounding environment on the Bay. Therefore the current activity impact level to the environment is considered to be of moderate level. However VEU together with the developer should consider establishing a management plan to continue monitoring the site for any adverse effect on the future if there is going to be any*
- 2. It is recommended that potential areas of coral regeneration should be considered outside the study site westwards towards Siviri Village. A comprehensive survey of the whole Undine Bay should be conducted to identify the exact potential location.*
- 3. It is recommended that the mangrove area concentrated near the mouth of the Malatau River should be protected as a small marine protected area to be managed under local rules and traditional knowledge.*

The results of the Marine Study will be forwarded to the developer for consideration. In particular that, the recommendation that the existing marine protected area proposed in the original EIA is extended to include for a marine protected area adjacent to the mouth of the Malatia River and is adopted by the developer. The results of the assessment have been retained at VEU for future monitoring should further complaints of damage to fish life and the reef be reported to VEU.

2.3 Forestry Assessment

The Government Botanists from the Department of Forestry undertook a survey of the coastal vegetation present on the site. They reported that some removal of mangroves has occurred

The protection of remaining *Rhizophora Sp.* (Mangroves) was highlighted in the assessment report. This includes the areas immediately adjacent to the Malatia Bridge to prevent wash out of the bridge and erosion of the river mouth during storm events. The developer has retained these areas as bush reserves in the approved original EIA. In addition, the assessment report has recommended the following.

Keep all the existing mangroves intact.

Replant some littoral species to fight against costal erosion especially in the areas mentioned in photo H, I, J and K of the report attached.

*The marina corridor should be reforest with mangrove species, particularly with *Avicennia marina*.*

The results of the forestry assessment will be forwarded to the developer for consideration. The protection of mangroves and foreshore vegetation is beneficial for the developer with regard to prevention of erosion and flooding of the sites. Therefore a strong recommendation to the developer to extend the bush reserves to the remaining vegetation on the foreshore to the east of the Malatia Bridge will be made.

2.4 Water Sampling

The water sampling undertaken by the Water Section of the Department of Geology Mines and Water resources included sampling at 9 different locations within the vicinity of Undine Bay and further along the coast to the east and west (including in the area adjacent to Siviri Village). The tests included Ph levels, turbidity, salinity, conductivity and temperature. The results showed the water levels were not acidic or alkaline therefore no pollution was present. The results have been retained in the VEU to be used for future monitoring should further complaints of water pollution be reported to VEU.

2.5 Undine Bay Developers CEMIP

As requested the developer has provided a CEMIP in response to the EMP prepared by MCA in February 2009. The CEMIP adequately addresses the issues raised in the EMP and applies mitigation measures recommended or alternatives for any potential impact related to the earthworks for the Undine Bay Marina Development. In addition the environmental impacts

register contained within the CEMIP addresses management of sewage disposal, litter management and fire hazards.

Normal construction site management procedures are outlined in the CEMIP such as access and working hours, defined work areas, staging of development, and approved materials which will assist in effective management of water, air and noise quality during earthworks. More specifically the CEMIP addresses the sediment control measures for the marine construction activities, describing work methods for the landward and channel excavations and construction. The management of dewatering discharge is addressed sufficiently with the use of sediment ponds with no direct discharges to the sea without approval of the site manager.

Erosion and sediment controls applied during and post construction include

- cut off drains
- windrows/bunds
- sediment fences
- grit traps
- Ongoing maintenance and monitoring of the above sediment control measures by the site manager.
- Decommissioning of sediment control structures to only occur after 80% of the upstream area of disturbance has been stabilized or revegetated.
- progressive revegetation

Waste, dust, hazardous substances management, fuel and oil storage and handling are all adequately addressed in the CEMIP. A commitment has been made to record keeping and inspections to ensure monitoring and compliance with the CEMIP by daily inspections by the foreman. Forms for monthly reports by the site manager on compliance with the CEMIP are also provided. Sufficient contingency plans are provided related to natural events and in the case of discharge of contaminants to the marine environment or groundwater.

The CEMIP has been accepted by MCA as sufficient in managing potential environmental impacts to ensure negative impacts on the environment can be mitigated. The CEMIP has been forwarded to the VEU to be used for monitoring of the project, in particular the earthworks phase and the commitments by the developer in the CEMIP to monitoring of site activities and reporting to VEU.

The developer understands and has agreed to additional regular monitoring by VEU and the MCA team including the ESU and the Engineer's International Environment Advisor.

2.6 Detail Designs

The additional designs requested from the developer were required to assess the potential impact of the development on the surrounding environment. The previous designs were concept level and showed no construction methods applied to foreshore structures, in particular the groynes at the entrance of the marina, the treatment of the sides of the marina, channel construction or depths.

Further detail from the developer including cross sections of the channels and groynes have now been received by MCA and show ground levels and armouring and treatment of the groynes. The work method proposed in the CEMIP for the groynes is sufficient to reduce siltation to the surrounding environment. The detailed designs submitted to MCA and then to VEU for ongoing

monitoring purposes have been accepted by MCA as sufficient in providing another mechanism of managing the environmental impacts of the development. These designs have also been forwarded to the Engineer and ESU for their reference during the monitoring process.

3.0 Report on the Implementation of the MCA-V Action Plan Re Undine Bay Development

| Action | Responsibility | Outcome |
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| Instruction to Downer and QCPP to bypass the existing and realigned roads at Undine Bay until conditions are met | Tony Sewen | An email instruction of 22 nd January 09 was sent to Downer and QCPP to bypass the existing and realigned road. A copy of the instruction is attached. On a correspondence of 19 February 09, Downer confirmed that they have bypassed the section of the road, for both existing and realigned road. This embargo remains in place until further notice. |
| Request financial assessment including timeline implications of bypassing | Tony to request assessment from Downer / QCPP | The same email instruction of Thursday, January 22 09 requested Downer and QCPP to conduct a financial assessment. A response was received from QCPP regarding the execution of the request. Please refer to correspondences of 4 February 09 from QCPP. The costs of the various options have been considered as part of the recent Lump Sum agreements. |
| Environmental Audit Report received from Dr Dick Watling. | SC to establish Undine Bay task force, comprising MCA, PWD, VEU, QCPP nominees. Task-force to work closely with developer to implement recommendations. | <p>A Task Force was established on February 2nd 2009 with the main objective to progress in implementing the MCA-V Action Plan Re Undine Bay Development, including the recommendations as set forth in the particular Action Plan. Members of the task force consisted of the following:</p> <ul style="list-style-type: none"> • Chris Cookson- MCC-V • Mandy Fitchett – ESA Consultant for MCA • Paul-Cox Martin – QCPP • Jerry Sampson – Physical Planning, Dept. of Provincial Affairs • Trinison Tari - VEU • Catherine Malosu-MCA-V <p>MCA-V has continued to facilitate a “whole of Government” approach to ensuring that the Undine Bay development and proposed road realignment complies with GoV requirements and MCC guidelines and conditions.</p> |

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| Dissemination of Dr. Watling's Report to the developer, VEU, and PWD | Catherine Malosu with QCPP | Copies of Dr. Watling's Report have already been disseminated and to the developer, VEU, PWD and Physical Planning Unit of Department of Provincial Affairs. The latter is responsible for facilitating the issuance of Foreshore Development Consents. |
| Implementation of Recommendations of Environmental Audit | Status | Detail of Actions Taken |
| 1. Dissemination of developer proposals | Completed | <p><u>-Dissemination of developer proposal</u></p> <p>The EIA report was the first information set to be accessed by MCA and MCC and which introduced the developer's proposal. Prior to the convening of the Task force, the Developer submitted copies of the following:</p> <ul style="list-style-type: none"> • An artist's impression of the development; • Elevations and a ground floor plan of buildings; • Two subdivision plans, both relating to Phase 1 of the development • A CEMIP completed by a NZ engineering firm that includes an environmental effects register and work methods for earthworks and foreshore works. • Designs of the channels, marina and cross sections of the groynes. |
| 2. Dissemination of written VEU and other monitoring visits and meetings | Completed | <p><u>- Dissemination of written VEU and other monitoring visits and meetings</u></p> <p>The Environment Unit, Department of Fisheries and Department of Provincial Affairs undertook a site visit to the development site as part of monitoring against the requirements highlighted in the Environment Impact Assessment report, produced by Robert Jimmy.</p> |
| 3. Mini RAP and documented public consultations | <p>Mini RAP – Considered not required.</p> <p>Documented Consultations –Efate EMP, RAP, and VEU reports, and ongoing monitoring consultations by Engineer, ESU and Chief Mor mor.</p> | <p><u>- Mini RAP</u></p> <p>MCA-V has already documented the consent of the custom owners and the leaseholder to the road realignment. The developer-initiated road works was supported by local villagers and no resettlement issues or entitlements were required. The finishing and sealing of the road has no new RAP implications. The developer is working with PWD and the Department of Lands to amend the right of way and the land leases.</p> |
| 4. Protection of foreshore | Completed | <u>- Protection of Foreshore earthworks</u> |

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| earthworks | | <p>The developer was instructed to mitigate immediate on-site environmental impacts, particularly concerning on-going silt run-off to the foreshore from the current inland works. This was done. Further work was halted until final mitigation recommendations were received.</p> <p>Detailed designs of the foreshore works in particular the groynes and cross sections of the channels was received on the 15th of May from the Developer. The CEMIP details work method for the construction of groynes and channels to minimize impact on water quality and surrounding marine environment.</p> |
| 5. Regular monitoring, Site-specific EMP prepared and monitored | Completed | <p>To facilitate regular monitoring a draft EMP was prepared by Mandy Fitchett and made available to the developer to base the CEMIP on for the works.</p> <p>The monitoring system included in the CEMIP by the developer includes daily inspections by the site foreman for compliance to the CEMIP and monthly reporting by the Project Manager.</p> <p>The VEU will undertake its normal EIA monitoring role of the development.</p> |
| 6. Consultations included in future EIAs | Ongoing strengthening of VEU | <p><u>- Consultations included in future EIA reports</u></p> <p>The Terms of Reference to undertake an EIA for the proposed Undine Bay development did require consultations with stakeholders and was conducted accordingly. However, from the experience of the MCA program, the Task Force agreed that the consultation component for future EIAs need to be strengthened to include wider stakeholder participation as well as documentation of the consultations. For the life of the Compact, MCA and the ESU are providing opportunities for the VEU and other GoV departments to join their site visits and consultations to minimize costs for these agencies.</p> |
| 7. Downer and QCPP certification of conformity to specifications of realigned road OR Developer-funded upgrading to specifications | Completed | <p>QCPP and Downer have jointly written to certify that the realigned road conforms to the required specifications. See attached letter for certification of conformity to specifications on 18th March 09.</p> |
| 8. Downer acceptance of responsibility and liability for | Completed | <p>Downer have undertake the following tests to provide assurance on the realignment:</p> |

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| realigned road | | <ul style="list-style-type: none"> • Pavement quality testing • Pavement width and shape inspection • Pavement depth audit • Compaction measurements of existing and future construction <p>The tests found the realigned road to be sufficient and DEW accepted responsibility and liability on 18th March 2009.</p> |
| 9. Dissemination of MCC letter | Completed | A copy of the MCC letter of 19 th December 08 has been disseminated. |
| 10. Documented marine study | Completed by Department of Fisheries | The marine study commenced in March 30 2009 and report received at the VEU 13 th May 2009. The recommendations of the marine biodiversity assessment are detailed below. In addition, it was agreed by the task force that water tests and a review of mangroves be undertaken. |
| 11. Marine study rehabilitation needs implemented | Completed | There were no rehabilitation measures recommended by the Fisheries Department or VEU as a result of the marine study, water sampling or Mangrove assessment completed by Forestry. However an additional area of protection of mangroves was included in the assessment by the Forestry Department. This is in addition to the bush reserves outlined in the Developer's original concept design. |
| 12. Water Section tests | Completed | The Department of Geology and Mine and Water Resources undertook a sampling and testing exercise at Undine Bay and adjacent to Undine Bay, including in front of Siviri Village. This enabled the team to assess the earlier complaints from this village that the marina development may have negatively affected their marine environment. The test results showed that there was no pollution present and that the earthworks have not had any impact on the quality of water in the area. |
| 13. Mangrove Assessment | Completed | The Department of Forestry undertook an assessment of the Mangroves and coastal vegetation on the site. The assessment recommended the following: <ul style="list-style-type: none"> - Keep all the existing mangroves intact. - Replant some littoral species to fight against costal erosion especially in the areas mentioned above in photo H, I, J and K. - The marina corridor should be reforest with mangrove species, particularly with <i>Avicennia marina</i>. |
| 14. Developer commitment for a | Completed | The developer confirmed in correspondence to |

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| safe footpath, shops operated by local community, open access to sea, and jobs for local community | | MCA of 20 February 2009 that commitment will made for commitment for a safe footpath, shops operated by local community, open access to sea, and jobs for local community. The developer has since confirmed that construction of footpath has commenced. |
| 15. Local community and VEU work towards establishing a locally managed marine protected area | Planning commenced as part of original EIA. | A locally marine protected area was not included in the recommendations of the Marine Assessment, however the original EIA provided for a marine protected area and plans are afoot for this to proceed and to be monitored by VEU in accordance with EIA process. |
| 16. Developer to initiate a coral transportation program to affected areas, monitored by VEU | Marine Study found not required. | The Marine study did not identify this in the recommendations as it was found the development was not impacting on the biodiversity of the reef. |

4.0 Consultation Process

MCA has in place a Consultation Plan for Efate Ring Road and Santo East Coast Road. This plan forms the basis to guide all levels of consultation and extends to provide guidance to conduct consultation with affected people concerning the current Undine Bay development.

As part of the Marine Assessment, the Department of Fisheries met with the Development Manager Justin Smith, Chief Peter Masongomapula of Siviri Village and Assistant Chief Atavi Kali Steel of Siviri Village. This consultation was in direct response to the concerns raised by the people of Siviri Village about the impacts of the development on their reef. Reports of siltation from the community are documented from previous consultations with the community undertaken by MCA in August 2008. The findings, described in an earlier section, indicate that there is no basis to their environmental concerns. MCA is aware that the primary grievance is a matter between the village and the Developer and focuses on payments under the lease. This matter is the responsibility of the Ministry of Lands. MCA will continue to monitor.

In addition, the systems for ongoing consultation with communities and potentially affected people have been further strengthened by MCA over the past year. These systems include the ongoing involvement of Chief Mor mor in the consultation process at village level and with the Chiefs, and Uravo from the ESU in consultations as part of updating and monitoring the RAP and inventory of losses. Under MCA's oversight, Uravo from the ESU and Chief Mormor also respond to and document grievances from communities. The communities including chiefs have been made aware of MCA's consultation and grievance systems and know the people to go and see about issues. Recently, MCA has executed an Implementing Entity Agreement with the SHEFA Province so that their field staff can also support these processes. These systems have been effective in identifying issues, reaching community information needs and resolving issues to date and MCA is confident that the previously identified issues around the Undine Bay development and the realigned road have been addressed and that the systems in place will readily identify and address any new issues arising from the Undine Bay Development. Documentation of all these consultations is collated and maintained by MCA's ESA officer, as part of her ongoing duties.

5.0 Conclusions and Recommendation

Conclusion:

MCA has been actively engaged in facilitating and expediting implementation of the Action Plan and has worked closely with the developer and the task force comprising all relevant GoV departments. There have been delays in finalizing this report but all the conditions set by MCC have been met.

Delays in the submission of this final report are resulting from the tight timeframes given to the Developer to submit Detail Designs and the CEMIP, as these have been prepared by an international engineering firm based in New Zealand. The Department of Fisheries report was also delayed in its submission to MCA. Due to lack of clarification of the need for a mangrove assessment by MCA the submission from the Forestry Department was also delayed. All information has now been submitted or addressed in accordance with the Environmental Audit undertaken by Dr Dick Watling in December 2008, except for the documentation of previous consultations with the Siviri Community, chiefs and developer, which is currently being compiled.

As a result of the information received and in conclusion of the above findings it is considered that the environmental impacts of the proposed development at Undine Bay will be managed by the developer to ensure that negative effects on the environment are managed, mitigated and negligible. The ongoing monitoring of the CEMIP by the VEU is necessary to ensure that this level of impact is maintained throughout the construction of the Marina, residential and commercial lots. The commitment to monitoring of the compliance of the CEMIP by the developer and reporting to VEU is also crucial to ensuring effective environmental effects management. This monitoring will be further underpinned by MCA's environmental and social monitoring through the ESU and the Engineer (including Dr. Dick Watling), under the oversight of MCA's ESI Officer. The Engineer will be requested to ensure that monitoring reports on Undine Bay are included in the Engineer's monthly reports as required.

The whole-of-government approach that was applied to satisfy the conditions of the environmental audit was a new approach for some of officers involved. The environmental input required assessments from different sections within the Ministry of Lands and Natural Resources with the coordination role by the VEU. The lessons learnt by Government Departments from this process can be applied to future national projects and development activities. An overall benefit of this process has been the increased capacity of the Environment Unit in the EIA process, particularly property enforcing the monitoring requirements of the domestic EIA legislation.

By requiring standards of information and environmental protection above that currently expected by the VEU for large scale developments, in particular for foreshore developments it is considered the value of this process extends beyond the Undine Bay Development and the MCA-Vanuatu Compact.

Recommendations:

- That the section of road associated with the realignment at Undine Bay be included as part of the overall Vanuatu Transport Infrastructure Project to be constructed by the Contractor.
- That MCA continues to monitor works on the development through the ESU and Engineer, and in liaison with the VEU.