

# OFFICE OF INSPECTOR GENERAL

# AUDIT OF USAID/SRI LANKA'S LARGE-SCALE INFRASTRUCTURE REBUILDING ACTIVITIES UNDER ITS SRI LANKA TSUNAMI RECONSTRUCTION PROGRAM

AUDIT REPORT NO. 5-383-07-001-P November 30, 2006

MANILA, PHILIPPINES



# Office of Inspector General

November 30, 2006

### **MEMORANDUM**

TO: USAID/Sri Lanka Mission Director, Rebecca W. Cohn

FROM: Regional Inspector General/Manila, Catherine M. Trujillo /s/

SUBJECT: Audit of USAID/Sri Lanka's Large-Scale Infrastructure Rebuilding Activities

Under Its Sri Lanka Tsunami Reconstruction Program

(Audit Report No. 5-383-07-001-P)

This memorandum transmits our final report on the subject audit. In finalizing the report, we considered your comments to the draft report and included the comments (without attachments) in Appendix II.

This report contains two recommendations to improve USAID/Sri Lanka's management of its contract with CH2M Hill by executing contract modifications more timely. Based on your comments, we consider that a management decision has been reached on Recommendation No. 1. Please provide the Audit, Performance and Compliance Division of USAID's Office of the Chief Financial Officer with evidence of final action in order to close this recommendation. Regarding Recommendation No. 2, we consider that final action has been taken on the recommendation.

I want to thank you and your staff for the cooperation and courtesy extended to us during the audit.

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# SUMMARY OF RESULTS

The Regional Inspector General/Manila conducted this audit to determine whether USAID/Sri Lanka's large-scale infrastructure rebuilding activities under its Sri Lanka Tsunami Reconstruction Program (SLTRP) were achieving planned outputs and within the cost estimates. (See page 2.)

The SLTRP is a \$33.3 million project to rebuild infrastructure damaged by the December 2004 tsunami that struck Sri Lanka. USAID/Sri Lanka contracted CH2M Hill, a U.S.-based contractor to implement the SLTRP. (See page 2.) At the time of our audit, construction had not started. Consequently, our audit covered preconstruction outputs and costs. (See page 3.)

As of May 31, 2006, USAID/Sri Lanka's large-scale infrastructure rebuilding activities under the SLTRP either achieved or were achieving 43 of 54 planned preconstruction outputs and the reported costs for the activities were within cost estimates. (See page 3.)

Although the SLTRP had achieved or was achieving 43 preconstruction outputs, 29 outputs had timeliness issues. Eleven finalized outputs were not completed on time, and work was ongoing or had not started on another 14 outputs that should have been completed by May 31, 2006. Also, work had not started on four of eight outputs with target completion dates that fell after May 31, 2006. This slippage contributed to the deferral of planned start and completion dates for some construction. (See page 5.)

In a number of cases, however, the causes for the slippage were outside the control of USAID/Sri Lanka or CH2M Hill. Further, all revised planned completion dates for the construction of infrastructure were still within the contract's original end date. (See page 5.)

Even with the slippage that occurred, USAID/Sri Lanka and CH2M Hill officials believed that all of the SLTRP's large-scale infrastructure rebuilding activities would be completed by the contract end date of March 31, 2008. Both parties, however, identified two risks that could hamper progress during the construction phase: security and inflation. (See page 5.)

USAID/Sri Lanka could improve its management of the contract with CH2M Hill by executing contract modifications more timely. This report contains two recommendations on this issue. (See pages 11 and 12.) Based on our evaluation of the Mission's comments and supporting documentation, we consider that a management decision has been reached on Recommendation No. 1 and final action has been taken on Recommendation No. 2. (See page 13.) USAID/Sri Lanka's comments are included as Appendix II to this report. (See page 16).

# BACKGROUND

On December 26, 2004, a magnitude 9.0 earthquake off the west coast of Northern Sumatra, Indonesia, spawned a massive tsunami that struck several countries throughout South and Southeast Asia, as well as Somalia, Tanzania, Kenya and the Seychelles in East Africa. Whole communities, roads, and other infrastructure were obliterated. Over 150,000 people were killed and hundreds of thousands were displaced. Of the affected countries, Sri Lanka was hit second hardest, after Indonesia.

On May 11, 2005, President Bush signed into law the "Emergency Supplemental Appropriations Act for Defense, the Global War on Terror and Tsunami Relief, 2005", which provided funding for a number of purposes including assisting victims of the tsunami. Of the \$656 million appropriated to USAID, USAID/Sri Lanka received \$134 million for its overall Tsunami Recovery and Reconstruction Program, and it set aside \$35 million of what it received for rebuilding large-scale infrastructure.

On September 7, 2005, USAID/Sri Lanka awarded CH2M Hill, a U.S.-based contractor, a \$32.8 million contract to implement the Mission's large-scale infrastructure rebuilding activities. The contract was subsequently increased to \$33.3 million and it had an end date of March 31, 2008. Both parties refer to the work under this contract as the Sri Lanka Tsunami Reconstruction Program (SLTRP).

The activities to be carried out by CH2M Hill under the SLTRP included the design and renovation or construction of a major bridge and access roads, vocational education facilities, fish harbors, and water and sanitation systems. In addition, the contractor was to provide construction management services and technical assistance such as vocational education training and community-based organizational development. The contract classified these large-scale infrastructure rebuilding activities under four components: program management, vocational education, participatory coastal management, and construction management.

As of May 31, 2006, the contractor had spent \$2.6 million on assessment reports, studies, surveys, master plans, designs and bid documents. As of the same date, USAID/Sri Lanka had disbursed \$2.3 million to CH2M Hill for the SLTRP. USAID/Sri Lanka's Tsunami Reconstruction Division under the Economic Growth Team is responsible for managing the large-scale infrastructure rebuilding activities under the SLTRP.

# **AUDIT OBJECTIVE**

As part of its fiscal year 2006 annual audit plan, the Regional Inspector General/Manila conducted this audit to answer the following question:

 Were USAID/Sri Lanka's large-scale infrastructure rebuilding activities achieving planned outputs and within the cost estimates?

Appendix I contains a discussion of the audit's scope and methodology.

# AUDIT FINDINGS

As of May 31, 2006, USAID/Sri Lanka's large-scale infrastructure rebuilding activities either achieved or were achieving 43 of 54 planned outputs and reported costs for the activities were within cost estimates. However, 29 outputs had timeliness issues that affected the start and completion dates for some planned construction.

As of our audit cutoff date of May 31, 2006, actual construction of infrastructure under the Sri Lanka Tsunami Reconstruction Program (SLTRP) had not begun. As shown in Table 1, \$23.4 million (70 percent of the contract budget) was allotted for construction work. Consequently, our audit covered only preconstruction outputs and costs.

For the large-scale infrastructure rebuilding activities under the SLTRP, the contract between USAID/Sri Lanka and CH2M Hill and related project implementation plans contained 54 planned preconstruction outputs that had start dates before May 31, 2006. According to the same documents, CH2M Hill should have completed 46 of the 54 outputs by May 31, 2006. Table 2 on page 4 shows that by that date, CH2M Hill had successfully completed 32 of the 46 outputs, and in 21 of these cases, it had done so on or before the target completion dates. Of the remaining 14 outputs, CH2M Hill was still working on seven, and, with the Mission's approval, it had deferred work on the other seven for justifiable reasons. Further, CH2M Hill was making progress on four of eight outputs with target completion dates that fell after May 31, 2006.

Table 1 compares costs reported by CH2M Hill as incurred for the SLTRP from September 7, 2005 through May 31, 2006, to the budget for the same period by the budget categories outlined in the SLTRP contract.

Table 1: Cost Comparison – Actual To Budget
As of May 31, 2006
(Unaudited)

Budget Category	Total Contract Budget <sup>2</sup>	Budget To Date <sup>3</sup>	Reported Costs To Date
Engineering, Construction Management, Technical Assessments & Procurement Services	\$6,932,085	\$2,556,519	\$2,512,953
Fixed Fee	905,619	95,000	97,806
Actual Construction Work	23,402,179	0	0
Equipment for Vocational Education Centers	2,100,000	0	0
Totals	\$33,339,883	\$2,651,519	\$2,610,759

<sup>&</sup>lt;sup>1</sup> Construction was not scheduled to begin until the August 2006 to February 2007 timeframe.

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<sup>&</sup>lt;sup>2</sup> The current contract budget through March 31, 2008, the contract end date.

<sup>&</sup>lt;sup>3</sup> The cumulative totals of the monthly budgets from September 2005 through May 2006; these monthly budgets were prepared by the contractor for its internal monitoring of costs.

As Table 1 shows, reported costs to date for the large-scale infrastructure rebuilding activities under the SLTRP were within the contractor's estimated costs as reflected in its budget to date.

SLTRP estimated costs for the entire contract period had increased since the contract was originally signed, but the increases were for new or unplanned work as opposed to additional funds to complete work already started. Through May 31, 2006, USAID/Sri Lanka had raised total estimated costs by \$527,148 to the current \$33.3 million total. New work included \$164,084 for an engineering study to downsize the design of the Arugam Bay Bridge because the original design was too costly. Another \$343,148 was added to the contract for more expatriate construction supervision services, which were needed to compensate for an unplanned local shortage in this skill category. Additionally, the Mission was in the process of adding another \$294,746 for unplanned groundwater investigations (see page 10).

Once all subcontracts for construction work have been bid, USAID/Sri Lanka will have a clearer picture of where the SLTRP stands with respect to the \$23.4 million budgeted for construction. However, other uncertainties remain. For example, construction work is susceptible to large cost increases. And, as discussed on page 5, Mission and CH2M Hill officials were concerned about security and inflation and their potential effect on the progress and cost of the construction phase of the SLTRP.

As noted in the "Background" section of this report, the contract categorized the SLTRP's large-scale infrastructure rebuilding activities into four distinct components:

- Program management.
- Vocational education.
- Participatory coastal management.
- Construction management.

Fifty-four preconstruction outputs had planned start dates before May 31, 2006. Table 2 summarizes the status of these outputs by SLTRP component as of May 31, 2006.

Table 2: Status of Planned Preconstruction Outputs (As of May 31, 2006)

	Target Completion Dates by 5/31/06		Target Completion Dates after 5/31/06			
SLTRP Component	Outputs Completed	Outputs In Progress	Outputs Deferred	Outputs In Progress	Outputs Deferred	Total Planned Outputs
Program Management	10	0	0	0	0	10
Vocational Education	3	2	1	0	0	6
Participatory Coastal Management	7	1	4	0	2	14
Construction Management	12	4	2	4	2	24
Totals	32	7	7	4	4	54

Although the SLTRP had achieved or was achieving 43 of 54 planned preconstruction outputs, 29 outputs had timeliness issues. Eleven of 32 finalized outputs were not completed on time, work continued on seven outputs that should have been completed by May 31, 2006, and work on another seven outputs that should also have been completed by May 31, 2006, had not begun by that date. Also, work had not started on four of eight outputs with target completion dates that fell after May 31, 2006. This slippage contributed to the deferral of planned start and completion dates for some construction.

In a number of cases, however, the causes for the slippage were outside the control of USAID/Sri Lanka or CH2M Hill. Further, all revised planned completion dates for the actual construction of infrastructure were still within the contract's original end date.

Even with the slippage that occurred, USAID/Sri Lanka and CH2M Hill officials believed that all of the SLTRP's large-scale infrastructure rebuilding activities would be completed by the contract end date of March 31, 2008. Both parties, however, identified two risks that could hamper progress during the construction phase: security and inflation. The parties explained that the truce between the Government of Sri Lanka and the Tamil Tigers was tenuous at best and the demand by international donors for construction firms and workers in Sri Lanka could result in higher than anticipated construction costs.

The following narrative complements Table 2 by providing more detail on the status of the SLTRP's planned preconstruction outputs by component.

**Program Management Component** — Under this component, CH2M Hill was responsible for administrative management of the overall SLTRP including budget and cost reporting, contract administration, and personnel management. Additionally, the contractor was responsible for achieving 10 planned preconstruction outputs related to personnel, performance monitoring and project management controls.

All 10 outputs were completed. Specifically, CH2M Hill had:

- Hired key personnel.
- Prepared a project implementation plan.
- Prepared updated project implementation plans.
- Established a monthly progress reporting system.
- Prepared a construction manual.
- Established a cost control reporting system.
- Established a quality control program.
- Developed a risk management plan.
- Developed a security/asset protection plan.
- Established a materials and equipment inventory system.

**Vocational Education Component** – Under this component, CH2M Hill was responsible for designing a vocational education program and vocational education school buildings, and identifying the equipment needed for the schools. The actual construction or renovation of school buildings was to occur under the construction management component.

Of six planned preconstruction outputs, three were completed, two were in progress and the start of one was deferred.

Outputs	Status
Target Completion Dates By May 31, 2006	
Establish a vocational education advisory council	Completed
Conduct the first advisory council meeting	Completed
Deliver a vocational education assessment report	Completed
Conduct a study tour to India	In Progress
Deliver a program of spaces and curriculum development	In Progress
Conduct a study tour to U.S.	Deferred

Under the program of spaces and curriculum development, CH2M Hill was to design a vocational education curriculum to address skill gaps in areas such as English, information and communication technology, and micro-enterprise development. Additionally, CH2M Hill was to complete space descriptions and specifications to be used in designing 10 vocational education schools, and it was to select the sites for the schools.

CH2M Hill experienced delays in delivering a program of spaces and curriculum development. According to USAID/Sri Lanka and CH2M Hill officials, this output was not completed on time primarily because of host government delays in approving the sites selected for the 10 schools. Other contributing factors were the turnover of host government officials involved in vocational education and USAID/Sri Lanka concerns about the political insecurity of some sites, and the ethnic composition of the students who would attend the schools. The Mission subsequently informed us that all 10 sites were approved in early July 2006.



OIG photograph of an old police station in Koggala, Sri Lanka, which will be razed and a new vocational school building constructed in its place. A variety of trades such as apparel-making will be taught here. (June 2006)

The two study tours—to introduce Sri Lankan vocational education officials to the vocational education methods and facilities of other countries—that had not been completed had no impact on the overall SLTRP. CH2M Hill, however, had to push back by about seven months the targeted start and end dates for the actual construction or renovation of vocational education schools because of the delays in site selections. Although the new targeted completion date for the construction phase is still within the original contract end date, CH2M Hill will have less leeway to make adjustments should delays occur during that phase. At the time of our audit, there was insufficient information to determine whether the site selection delays would have a discernable cost impact on the construction phase.

Participatory Coastal Management Component – The activities under this component had several objectives; including strengthening community participation in coastal development, strengthening the host government's capacity to address environmental and natural resource management related to tourism and fisheries, and promoting sound coastal development. Additionally, this component contained 14 planned preconstruction outputs related to the infrastructure rebuilding work that would be done at three fish harbors and Arugam Bay.

Of the 14 outputs, seven were completed, one was in progress and the start of six had been deferred.

Outputs	Status
Target Completion Dates By May 31, 2006	
Community consultation and participation	Completed
Fisheries assessment report	Completed
Harbor master plan – Hikkaduwa Fish Harbor	Completed
Harbor master plan – Mirissa Fish Harbor	Completed
Harbor master plan – Puranawella FishHarbor	Completed
Stakeholder assessment and gender analysis report	Completed
Solid waste management plans	Completed
Hazard vulnerability assessment report	In Progress
Integrated water resource plan for the Arugam Bay watershed	Deferred
Sustainable tourism management plans	Deferred
Public education/outreach strategy and plans	Deferred
Lessons learned and best practices report	Deferred
Target Completion Dates After May 31, 2006	
Financial management plans (three harbors and Arugam Bay)	Deferred
Coastal development plans	Deferred

CH2M Hill deferred the start of four outputs that had completion dates before May 31, 2006. It deferred the start of work on the integrated water resource plan for the Arugam Bay watershed pending the results of the groundwater investigations discussed on page 10. It also deferred the start of work on developing the financial management plans, sustainable tourism management plans, and public education/outreach plans to prioritize the completion of other outputs critical to getting the construction phase started on time, such as the fish harbor master plans and the environmental assessments for each of the three harbors and the Arugam Bay Bridge. (The environmental assessments are discussed on pages 8 and 9.)

CH2M Hill did not prepare separate documents for two outputs: the lessons learned and best practices report and the coastal development plans. Every six months, the contractor was to submit to USAID/Sri Lanka a lessons learned and best practices report documenting experiences gained while implementing the activities under this component. The contractor was also required to submit coastal development plans providing recommendations for coastal development activities at each site where such activities were to occur. In lieu of these two documents, the Mission accepted a document entitled "Participatory Coastal Management (PCM) Action Plan, Lessons Learned and Work Plan for Sri Lanka Tsunami Reconstruction Program (SLTRP) PCM Component".

However, we questioned whether the document satisfied contract requirements for these two outputs because (1) with the exception of the words "Lessons Learned" in the title, it did not discuss lessons learned during the first six months of work under this component, and (2) it indicated that CH2M Hill itself would not deliver coastal development plans.

Based on our concerns, both the Mission cognizant technical officer (CTO) and CH2M Hill took action to meet the contract's requirements for these two outputs. The CTO requested a separate, concise, and meaningful lessons learned and best practices report; the contractor agreed to develop and deliver the coastal development plans by February 2007. Based on these actions, we classified these two outputs as deferred.

**Construction Management Component** – It is under this component that the actual construction of infrastructure was to be tracked. The infrastructure to be constructed included the Arugam Bay Bridge, three fish harbors, three water and sanitation facilities, and 10 vocational schools. This component had 24 planned preconstruction outputs related to the infrastructure. These outputs were in addition to the outputs described under the vocational education and participatory coastal management components.

Of the 24 outputs, 12 were completed, eight were in progress and the start of four had been deferred. These outputs are discussed below by the planned construction activities with which they were associated.

**Arugam Bay Bridge** - Five planned preconstruction outputs were associated with building a new bridge at Arugam Bay and related access roads. CH2M Hill planned to award a subcontract so that construction could begin in August 2006.

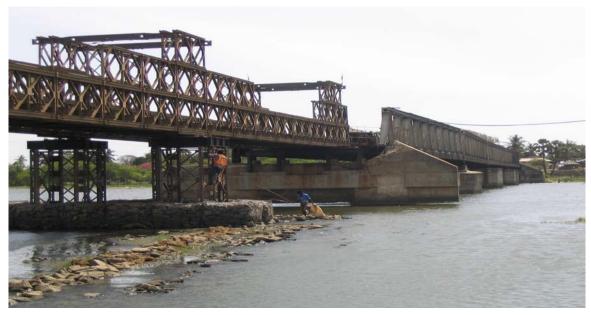
Four outputs were completed and one was in progress.

Outputs	Status
Target Completion Dates By May 31, 2006	
Environmental assessment report	Completed
Preliminary assessment report	Completed
Field investigations report	Completed
Subcontractor prequalification	Completed
Target Completion Date After May 31, 2006	
Design and tender documents	In Progress

<sup>&</sup>lt;sup>4</sup> The three water and sanitation facilities consisted of two water treatment plants at the communities of Pottuvil and Panama (discussed on page 10) and one waste-water treatment facility at Pottuvil (discussed on page 11).

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Completed outputs included the environmental assessment report, the preliminary assessment report, and subcontractor prequalification—all needed to be completed before a construction subcontract could be awarded. Furthermore, CH2M Hill delivered draft design/tender documents to prospective bidders and held a pre-tender conference shortly after our audit cutoff date of May 31, 2006. Consequently, these activities were on schedule to begin construction of the Arugam Bay Bridge—the signature project estimated to cost \$8.5 million—in August 2006, as originally planned.



OIG photograph showing the half of the original steel-truss Arugam Bay Bridge that survived the tsunami connected to a temporary bailey bridge. A new bridge will be built adjacent to this one. (Arugam Bay, southeastern coast of Sri Lanka, June 2006)

Fish harbors and water and sanitation facilities – Thirteen planned preconstruction outputs were associated with the planned construction work on three fish harbors and three water and sanitation facilities.

Seven outputs were completed, four were in progress and the start of two had been deferred.

Outputs	Status
Target Completion Dates By May 31, 2006	
Environmental assessment reports – fish harbors	Completed
Preliminary assessment reports – fish harbors	Completed
Field investigations report – fish harbors	Completed
Design and draft tender documents – fish harbors minor works	Completed
Subcontractor prequalification – fish harbors major works	Completed
Final tender documents & contract award – fish harbors minor works	Completed
Preliminary assessment report – water treatment plants, phase 1	Completed
Arugam Bay planning studies	In Progress
Field investigations report – water treatment plants	Deferred

Outputs	Status
Target Completion Dates After May 31, 2006	
Design and tender documents – fish harbors major works	In Progress
Tender & contract award – fish harbors major works	In Progress
Preliminary assessment report – water treatment plants, phase 2	In Progress
Water and sanitation design and tender documents	Deferred

USAID/Sri Lanka took steps to begin construction work on the fish harbors sooner than originally planned. In December 2005, a CH2M Hill consultant recommended fast tracking minor construction activities. Following CH2M Hill's consultations with the fishing community and the Ceylon Fisheries Harbors Commission, the Mission requested the construction work to be split into two activities: minor works for on-shore rehabilitation tasks, and major works for off-shore dredging and breakwater repairs. The Mission approved the design and tender documents for the minor works in April 2006, and CH2M Hill awarded a \$211,700 subcontract for this work on June 13, 2006, about two weeks after our audit cutoff date. The award of a subcontract for major works had been moved up from the original date of October 6, 2006, to August 31, 2006.

CH2M Hill deferred plans to design and build two water treatment plants for the communities of Pottuvil and Panama. This was done, in part, because of host government concerns that diverting water from the Rota Tank reservoir—the intended source of drinking water for the communities—might deprive farmers of water for their crops and animals. Additionally, USAID/Sri Lanka officials felt that groundwater wells might be a better, lower-cost alternative to water treatment plants. In March 2006, the Mission tasked the contractor to conduct groundwater investigations and deliver an assessment report on the best source of drinking water for Pottuvil and Panama. At the time of our audit in June 2006, drilling was ongoing at these two locations, but the Mission had not modified its contract with CH2M Hill to formally add these activities to the contractor's scope of work. (This issue is discussed further on page 11.)



OIG photograph of drilling operations to determine the feasibility of using groundwater instead of surface water as the water source for the communities of Pottuvil and Panama, which are located along the eastern coast of Sri Lanka. (June 2006)

The deferral of outputs related to the two water treatment plants pushed back the planned start of construction for water and sanitation facilities from October 2006 to February 2007. At the time of our audit, there was insufficient information to determine whether the deferrals would have a discernable cost impact on the construction phase.

**Vocational education schools** – Six planned preconstruction outputs were associated with the planned construction or renovation of 10 vocational education schools.

One output was completed, three were in progress and the start of two had been deferred.

Outputs	Status
Target Completion Dates By May 31, 2006	
Environmental assessment report	Deferred
Preliminary assessment report	Completed
Field investigations report	In Progress
Design and tender documents	In Progress
Subcontractor prequalification	In Progress
Target Completion Date After May 31, 2006	
Tender and contract award	Deferred

CH2M Hill was behind schedule in submitting a number of the deliverable outputs. As discussed earlier, delays in reaching agreement on where schools would be located affected the achievement of planned outputs under the Vocational Education component. Those delays have similarly affected the achievement of planned outputs under this component. For example, the environmental assessment report, design work and the field investigations report could not be delivered until the relevant parties reached agreement on all school locations. Furthermore, CH2M Hill, as we noted earlier, had to push back by about seven months the targeted start and end dates for the actual construction or renovation of vocational education schools because of the delays in site selections.

As discussed below, our audit of the SLTRP found that USAID/Sri Lanka could improve its management of the contract with CH2M Hill.

# **Contract Modifications Could be More Timely**

Federal Acquisition Regulation 52.243-2 requires a contracting officer to modify a cost reimbursement contract if changes are made to the general scope of a contract. However, in two cases USAID/Sri Lanka had not modified its contract with CH2M Hill to reflect decisions made to change the contract's scope of work.

In December 2005, USAID/Sri Lanka and CH2M Hill agreed to remove from the contract the requirement for a waste-water treatment facility at Pottuvil because the community did not have a waste-water collection system. As of June 22, 2006, however, the Mission had not modified the contract to delete this requirement from the contract.

On March 22, 2006, USAID/Sri Lanka prepared a Modified Acquisition and Assistance Request Document (MAARD) to initiate a change to the CH2M Hill contract.<sup>5</sup> The Mission wanted to add groundwater investigations to the scope of work and provide \$294,746 for those investigations. As of June 22, 2006, however, its contracting office had not modified the contract to execute the changes proposed in the MAARD.

USAID/Sri Lanka's temporary contracting officer felt that it was not necessary to promptly execute all modifications. Regarding the waste-water treatment facility, the contracting officer stated that there was no harm in waiting to execute a modification. Regarding the MAARD, a Mission official stated that the Mission and contractor had agreed to wait until the groundwater investigations were completed so that the modification could incorporate all scope of work changes needed as a result of the investigations.

However, untimely contract modifications could lead to contractual disputes. Modifications document the agreement reached between the involved parties on the exact changes they want made to a contract. Without a modification in place, a mission is vulnerable to disputes over such issues as what work was specifically authorized and when the work should have been completed.

Significant changes to projects, particularly construction projects, are common. It is in the best interests of transparency and financial management control if such changes are promptly executed through contract amendments or modifications. Therefore, we are recommending that the Mission modify its contract with CH2M Hill with respect to the waste-water treatment facility and groundwater investigations discussed above. We are also recommending that the Mission ensure that all future significant changes to the contract—especially those with cost impact—are executed through contract amendments or modifications close to the dates the changes are determined to be necessary.

Recommendation No. 1: We recommend that USAID/Sri Lanka modify its contract with CH2M Hill to delete the waste-water treatment facility at Pottuvil, Sri Lanka, and add the work and funds related to the groundwater investigations.

Recommendation No. 2: We recommend that USAID/Sri Lanka develop written procedures with timeframes for specific tasks to execute modifications for all future significant changes to the CH2M Hill contract's scope of work as close as possible to the point the Mission determines that the significant changes are needed.

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<sup>&</sup>lt;sup>5</sup> A MAARD is an internal USAID document that provides a contracting officer with the information needed to execute or modify an award, e.g., a contract.

# EVALUATION OF MANAGEMENT COMMENTS

In response to the draft report, USAID/Sri Lanka provided written comments that are included (without attachments) in Appendix II to this report.

For Recommendation No. 1, USAID/Sri Lanka provided evidence that the Regional Contracting Officer (RCO) had amended the contract to add the work and funds related to the groundwater investigations. In addition, USAID/Sri Lanka stated that it had requested the RCO, on November 20, 2006, to delete the requirement for the construction of the waste-water treatment facility from the contract. Based on our review of the actions taken by the Mission, we consider that a management decision has been reached on this recommendation.

For Recommendation No. 2, USAID/Sri Lanka agreed with the recommendation, and it stated that it will ensure that the Mission Procurement Plan is updated to include procurement actions for the Sri Lanka Tsunami Reconstruction Program as they are identified. Furthermore, USAID/Sri Lanka submitted a copy of its fiscal year 2006 updated procurement plan that included pending contract modifications for the CH2M Hill contract with milestone completion dates for when the modifications should be finalized. Based on our assessment of the Mission's response and review of the supporting documentation, we consider that final action has been taken on this recommendation.

USAID/Sri Lanka will need to coordinate final action on Recommendation No. 1 with the Audit, Performance and Compliance Division of USAID's Office of the Chief Financial Officer.

USAID/Sri Lanka commented that our report incorrectly referred to its regional contracting officer instead of a contracting officer from Washington D.C., who was working temporarily at the Mission. Although our report referred only to a contracting officer, we revised it to reflect we were referring to the temporary contracting officer.

# SCOPE AND METHODOLOGY

# Scope

The Regional Inspector General/Manila audited USAID/Sri Lanka's large-scale infrastructure rebuilding activities under its Sri Lanka Tsunami Reconstruction Program (SLTRP) in accordance with generally accepted government auditing standards. The purpose of the audit was to determine whether the large-scale infrastructure rebuilding activities were achieving planned outputs and within the cost estimates.

The audit covered the large-scale infrastructure rebuilding activities implemented for USAID/Sri Lanka by CH2M Hill—the primary contractor—during the period from September 7, 2005 through May 31, 2006. CH2M Hill was carrying out these activities under a \$33.3 million contract that began on September 7, 2005, and ends on March 31, 2008. At May 31, 2006, USAID/Sri Lanka had disbursed \$2.3 million to CH2M Hill. Fieldwork was performed June 5-22, 2006, at USAID/Sri Lanka and the offices of CH2M Hill, both in Colombo, Sri Lanka. In addition, site visits were made to eight proposed construction sites in East and South Sri Lanka.

The audit focused on determining whether the large-scale infrastructure rebuilding activities under the SLTRP were achieving planned outputs and within cost estimates, as of the audit cutoff date of May 31, 2006. The audit covered all planned outputs with start dates before the audit cutoff date. This excluded planned construction activities because as of the cutoff date, actual construction of infrastructure—which accounted for \$23.4 million of the \$33.3 million budget—had not yet begun.

As part of the audit, we assessed the significant internal controls used by USAID/Sri Lanka to monitor the large-scale infrastructure rebuilding activities. The assessment included controls related to whether the Mission (1) conducted and documented site visits to evaluate progress and monitor quality, (2) required and approved an implementation plan, (3) reviewed progress reports submitted by CH2M Hill, and (4) compared CH2M Hill's reported progress to planned progress and the Mission's own evaluations of progress. We also reviewed the Mission's Federal Managers' Financial Integrity Act report for fiscal year 2005 for any issues affecting the audited activities. Finally, we reviewed any relevant prior audit reports.

# Methodology

To answer the audit objective, we interviewed officials and staff from USAID/Sri Lanka and CH2M Hill. We also reviewed and analyzed documents at both the Mission and CH2M Hill that were relevant to determining whether the large-scale infrastructure rebuilding activities were achieving planned outputs and within cost estimates, as of the cutoff date of May 31, 2006. This documentation included the CH2M Hill contract and its modifications, the original project implementation plan and its revisions, site visit and other monitoring reports, progress reports, and financial records.

According to the CH2M Hill contract and related project implementation plans, the largescale infrastructure rebuilding activities had 54 planned preconstruction outputs with start dates before the audit cutoff date of May 31, 2006. We analyzed the progress of all 54 outputs.

We did not establish materiality thresholds for the audit objective.

# MANAGEMENT COMMENTS



November 21, 2006

### **MEMORANDUM**

**TO:** Regional Inspector General/Manila, Catherine M. Trujillo

FROM: USAID/Sri Lanka Mission Director, Rebecca W. Cohn /s/

SUBJECT: Mission Response to Audit of USAID/Sri Lanka's Large-Scale

Infrastructure Rebuilding Activities under its Sri Lanka Tsunami

Reconstruction Program (draft Audit Report no. 5-383-07-00X-P)

Thank you for the opportunity to respond to this draft Audit Report which highlights progress to-date on the Large-Scale Infrastructure program being implemented through USAID/Sri Lanka's partner, CH2MHill.

We understand that the audit necessarily focused on "outputs" given that no construction had started by the time of the Audit. These outputs are primarily reports and activities that were defined in the Project Implementation Plan (PIP) initially produced in October 2005. As per the contract, this PIP is updated quarterly as well as through schedules provided in the CH2M Hill Monthly Progress Reports. The Auditors chose not to consider the updated PIP during their Audit but rather used the original *expected* completion dates from the October 2005 PIP.

We agree with the opinion expressed in the Audit Report that all the work is expected to be completed within the contract's original end date. We wish to comment on your statement, "In many cases, however, the causes for the slippage [of individual outputs] were outside the control of USAID/Sri Lanka or CH2M Hill". While this is true for *some* outputs, many other outputs were purposely rescheduled based on changing program circumstances and priorities.

We would like to convey to you one factual correction to the Audit Report. The report refers to the Regional Contracting Officer (RCO) in several instances. In fact, from the February 18 to July 4, 2006, the Mission was utilizing the services of a temporary duty contracting officer from USAID in Washington DC, under the general supervision of the RCO in New Delhi.

With regard to two audit recommendations, we are pleased to respond with the following:

Recommendation No. 1: We recommend that USAID/Sri Lanka modify its contract with CH2M Hill to delete the waste-water treatment facility at Pottuvil, Sri Lanka, and add the work and funds related to the groundwater investigations.

Mission response: The RCO has amended the contract to add the work and funds related to the groundwater investigations. Supporting documentation (Attachment 1) is attached. The amendment to delete the waste-water treatment facility in Pottuvil could not be done until after the Preliminary Assessment Report (PAR) for water supply was submitted by CH2M Hill on October 23, 2006. Under our contract with CH2M Hill, they are tasked with assessing needs and recommending the construction of specific facilities. This is a deliberate process and the PAR is the document used to officially transmit this information to USAID. Although it was expected that CH2M Hill would recommend deletion of the waste-water treatment in the PAR, there was no justification to unilaterally delete it from their contract prior to receiving the water supply PAR. Now that the PAR for water supply has been issued by CH2M Hill, and approved by the CTO on October 24, 2006, a request was made on November 20, 2006, to the RCO to accordingly amend the contract to delete the waste-water treatment plant, as recommended in the PAR.

Recommendation No. 2: We recommend that USAID/Sri Lanka develop written procedures with timeframes for specific tasks to execute modifications for all future significant changes to the CH2M Hill contract's scope of work as close as possible to the point the Mission determines that the significant changes are needed.

<u>Mission response</u>: The Mission agrees with the Audit Recommendation that specific contracting actions for the SLTRP need to be planned and monitored. The Mission will ensure that the Mission Procurement Plan is updated with the inclusion of SLTRP actions as they are identified (see Attachment 2). We do not believe it is practical to start using separate plans for different contracts.

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