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OFFICE OF INSPECTOR GENERAL

AUDIT OF USAID/ZAMBIA'S PROCUREMENT AND DISTRIBUTION OF COMMODITIES FOR THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF

AUDIT REPORT NO. 9-611-08-007-P
MAY 30, 2008

WASHINGTON, DC

USAID
FROM THE AMERICAN PEOPLE

Office of Inspector General

May 30, 2008

MEMORANDUM

TO: USAID/Zambia Director, Melissa E. Williams

FROM: IG/A/PA Director, Steven H. Bernstein /s/

SUBJECT: Audit of USAID/Zambia's Procurement and Distribution of Commodities for the President's Emergency Plan for AIDS Relief (Report No. 9-611-08-007-P)

This memorandum transmits our final report on the subject audit. In finalizing the report, we considered your comments on the draft report and have included your comments in their entirety in appendix II.

This report contains four recommendations intended to strengthen certain aspects of USAID/Zambia's procurement, deployment, and warehousing of commodities procured and distributed for the President's Emergency Plan for AIDS Relief. The mission concurred with all four recommendations, described actions taken to address our concerns, and provided supporting documentation. As a result, we determined that final action has been taken on all four recommendations.

Thank you for the cooperation and courtesy extended to my staff during the audit.

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CONTENTS

Summary of Results 1

Background 3

Audit Objective 4

Audit Findings 5

More Coordination Is Needed to Improve Storage Conditions and Facility Staff Training 6

Essential Medicines Were Often Reported to Be Unavailable 14

Evaluation of Management Comments 16

Appendix I – Scope and Methodology 17

Appendix II – Management Comments 20

Appendix III – Partners Procuring Commodities 24

Appendix IV – Storage Conditions Tested 25

Appendix V – Site Visit to Nairobi Regional Distribution Center 26

SUMMARY OF RESULTS

During 2007, USAID/Zambia procured more than $26 million worth of antiretroviral drugs and HIV test kits in support of the President's Emergency Plan for AIDS Relief (PEPFAR). PEPFAR is the U.S. Government strategy to prevent, treat, and care for individuals with HIV/AIDS (page 3). For a schedule of commodities procured by USAID/Zambia's implementing partners during 2007, see appendix III.

The Office of Inspector General conducted this audit to determine whether USAID/Zambia procured, deployed, and warehoused its PEPFAR commodities to help ensure that intended results were achieved, and to determine the impact of these efforts (page 4).[1]

In general, USAID/Zambia procured, deployed, and warehoused its commodities to help ensure that intended results were achieved (page 5).[2] USAID's efforts had a substantial impact by contributing to 46,670 individuals receiving antiretroviral therapy (approximately 38 percent of the total 122,684 Zambians reported to be on therapy at September 30, 2007) exceeding targets for both 2007 and 2008. Antiretroviral therapy allows those living with HIV/AIDS to live longer, healthier lives (page 6).[3]

However, to help ensure that USAID/Zambia continues to achieve intended results, the mission needs to coordinate more closely with USAID/Washington staff responsible for administering two USAID/Washington-managed contracts to help ensure that storage conditions and health facility staff training are monitored and strengthened (page 6). In addition, "essential medicines," such as antibiotics and antifungal drugs needed to prevent and treat opportunistic infections, sexually transmitted diseases, and cancers, were frequently reported to be unavailable when needed. This shortage of essential medicines for HIV/AIDS patients, could limit the positive impact of procuring, deploying, and warehousing HIV test kits and antiretroviral drugs (page 14).

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[1] In this audit, PEPFAR commodities are defined as products purchased with PEPFAR funding for the detection and treatment of HIV/AIDS, including antiretroviral drugs, test kits, lab equipment, lab supplies, and other essential drugs and medicines used to prevent and treat HIV/AIDS-related opportunistic infections. PEPFAR commodities are referred to as "commodities" throughout this report.

[2] USAID/Zambia procures commodities on behalf of the Government of Zambia. According to mission staff, even though in-country deployment and warehousing are not USAID's direct responsibility, the mission provides technical assistance and training in these areas.

[3] USAID/Zambia reported 46,670 individuals on antiretroviral therapy as its portion of the total U.S. Government effort. This figure includes only individuals who received therapy at facilities receiving USAID support. However, the Government of Zambia distributed antiretroviral drugs, some of which USAID procured, to health and storage facilities throughout the country. According to unaudited information provided by the Partnership for Supply Chain Management's Zambia office, USAID procured approximately 67 percent of the antiretroviral drugs procured in Zambia during 2007.

This report includes the following recommendations for USAID/Zambia:

- Collaborate with Global Health Bureau personnel to incorporate into project work plans measures to fully implement the contractor's facility monitoring and evaluation plan (page 11).

- Collaborate with Global Health Bureau personnel to incorporate into project work plans measures to increase training for storage facility staff (page 11).

- Collaborate with other members of the U.S. Government country team and with the Government of Zambia to develop an action plan to improve commodity storage conditions (page 11).

- Collaborate with Global Health Bureau personnel to incorporate into project work plans measures to increase logistics management information system training for health facility staff (page 13).

This report also includes a summary of a site visit to the Partnership for Supply Chain Management's regional distribution center in Nairobi, Kenya (appendix V).

The mission concurred with all four recommendations, described actions taken to address our concerns, and provided supporting documentation. As a result, we determined that final action has been taken on all four recommendations. See page 16 for our evaluation of management comments.

BACKGROUND

In May 2003, Congress enacted legislation to fight HIV/AIDS globally through the President's Emergency Plan for AIDS Relief (PEPFAR). Although PEPFAR was originally intended to provide $15 billion over 5 years for the prevention, treatment, and care of individuals with HIV/AIDS, $18.8 billion has been committed through January 3, 2008, with 58 percent allocated to programs in 15 focus countries.[4] In addition, President Bush has requested that Congress reauthorize PEPFAR for $30 billion over 5 more years.

The Office of the Global AIDS Coordinator at the Department of State oversees accountability for the results of PEPFAR. The Coordinator manages all U.S. Government international HIV/AIDS assistance efforts and approves and coordinates the efforts of the participating agencies and departments. For example, most PEPFAR funds are appropriated to the Department of State. A portion of the funds is allocated or transferred to USAID, with USAID assigned certain aspects of implementation. The Coordinator also issues annual guidance concerning country operational plans and mandatory targets.

In September 2005, USAID contracted with the Partnership for Supply Chain Management (the Partnership) to procure commodities for the care and treatment of HIV/AIDS and related infections, and to provide related technical assistance.[5] This USAID/Washington-managed contract has a ceiling price of $7 billion. USAID/Washington's contracting officer issues task orders against the contract as needs become defined. The first task orders called for up to $652 million over 3 years to procure and distribute antiretroviral drugs and other commodities and to provide technical assistance for supply chains. Missions access the task orders by allocating mission funding to the contract.[6] The task orders have estimated completion dates of September 29, 2008.

According to information provided by the Partnership, as of September 30, 2007, departments and agencies of the U.S. Government had procured nearly $111 million in commodities through the contract with the Partnership. Almost $31 million, or 28 percent, of these commodities were procured by USAID/Zambia through the first task order described above.[7]

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[4] The 15 focus countries are Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, and Zambia.

[5] The Partnership for Supply Chain Management is a nonprofit organization established by JSI Research & Training Institute and Management Sciences for Health. The partnership includes nonprofit organizations, commercial private sector corporations, academic institutions, and faith-based organizations.

[6] Throughout this report, the terms "mission funding" or "mission-funded" are used to describe money appropriated to the Department of State and allocated or transferred to USAID missions for PEPFAR activities.

[7] These figures are unaudited.

USAID/Zambia procured technical assistance from John Snow, Inc.'s USAID|DELIVER project. The goal of this project is to ensure an uninterrupted supply of PEPFAR commodities, particularly antiretroviral drugs and HIV test kits, in public sector health facilities in Zambia. The project includes five key strategic interventions:

1. Strengthen the management of logistics information at the central warehouse in Lusaka in relation to antiretroviral drugs and HIV test kits.

2. Improve the supply chain for antiretroviral drugs.

3. Improve the supply chain for HIV test kits.

4. Assist with the national coordination of antiretroviral drug and HIV test kit quantification and procurement planning.

5. Assist in improving storage conditions for HIV/AIDS commodities at the central warehouse and facility levels.

Zambia received nearly $82 million in PEPFAR funding in fiscal year 2004, more than $130 million in fiscal year 2005, approximately $149 million in fiscal year 2006, and $216 million in fiscal year 2007 to support the prevention, treatment and care of HIV/AIDS.[8] According to the Joint United Nations Programme on HIV/AIDS (United Nations), the HIV prevalence rate among adults (ages 15–49) in Zambia is approximately 17 percent.[9] In 2006, the United Nations estimated that approximately 1.1 million Zambians were living with HIV. The Government of Zambia's national target is to have 200,000 individuals on therapy by December 2008.

In July 2005, the Government of Zambia began providing free antiretroviral therapy services at public health facilities for all Zambians. As a result, therapy is now available to a significantly larger proportion of Zambians needing these life-extending services. Providing these free services has increased the burden on a public health system already at its limits of providing HIV counseling and testing, the entry point to antiretroviral therapy services.

AUDIT OBJECTIVE

The Office of Inspector General conducted this audit as part of its fiscal year 2007 audit plan to answer the following question:

- Has USAID/Zambia procured, deployed, and warehoused its PEPFAR commodities to help ensure that intended results were achieved, and what has been the impact?

This audit is the first in a series of similar audits to be conducted at other missions during fiscal year 2008.

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

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[8] These figures were obtained from the PEPFAR Web site, http://www.pepfar.gov.

[9] Joint United Nations Programme on HIV/AIDS, *2007 AIDS Epidemic Update*.

AUDIT FINDINGS

In general, USAID/Zambia procured, deployed, and warehoused its President's Emergency Plan for AIDS Relief (PEPFAR) commodities to help ensure that intended results were achieved. In addition, USAID's efforts have had a substantial impact on the number of individuals on antiretroviral therapy. The following paragraphs answer the audit objective more fully and describe the impact of USAID's efforts.

Procured – USAID/Zambia procured more than 100 percent of the planned procurement of commodities reported in the 2007 country operational plan. The mission planned $24 million for antiretroviral drug and HIV test kit procurement during fiscal year 2007, and procured nearly $26.4 million worth of these commodities.[10]

Deployed – Commodities were deployed first to the central warehouse in Lusaka, Zambia and then to district storage facilities (for distribution to clinics) and hospitals.[11] The clinics and hospitals we visited used these commodities for patient care. Test kits were almost always available. At storage and health facilities visited, staff reported that antiretroviral drugs and lab supplies, for the most part, were available when needed. At health facilities visited, laboratory equipment provided by an implementing partner during 2007 was in place and was operating as intended, making HIV testing more readily available. At the five health facilities visited, the availability of HIV test kits, laboratory equipment, lab supplies, and antiretroviral drugs contributed to the following numbers of individuals on antiretroviral therapy:

Health Facility Visited	Individuals on Antiretroviral Therapy
Chipokota Mayamba Health Center	1,092
Kitwe Central Hospital	3,327
Chimwemwe Clinic	861
Mahatma Ghandi Health Center	1,810
Liteta District Hospital	896
Total	**7,986**

Warehoused – At the five health facilities and the four storage facilities visited, storage conditions generally met the standards set by Zambia's Ministry of Health. Situations in which standards were not always met or were not met are discussed beginning on page 8. See appendix IV for the storage conditions tested.

[10] The planned figure represents the amount reported in Zambia's 2007 operational plan for the Partnership for Supply Chain Management (the Partnership), the mission's primary commodity procurement partner. The procured amount was reported by the Partnership, and is unaudited. The Office of the Global AIDS Coordinator has not established targets for commodity procurement. Therefore, there are no targets for the number of items to procure.

[11] Commodities procured by USAID/Zambia, the Government of Zambia, and other donors such as the Global Fund and the Clinton Foundation, are stored at the Government of Zambia's central warehouse in Lusaka. The Zambian Ministry of Health then distributes the commodities to district storage and health facilities.

Impact – USAID's efforts in procuring, deploying, and warehousing its commodities have had a positive impact on the number of individuals on antiretroviral therapy. Antiretroviral therapy allows those living with HIV/AIDS to live longer, healthier lives. Although the Office of the Global AIDS Coordinator has not established any required indicators related to the procurement, deployment, or warehousing of commodities, a related indicator—the number of individuals on antiretroviral therapy—shows that USAID's efforts have made a substantial impact in this area. Based on draft information provided by USAID/Zambia, as of September 30, 2007, the mission's use of PEPFAR funds contributed to 46,670 individuals receiving therapy, approximately 38 percent of the total 122,684 reported for Zambia in the most recent PEPFAR annual performance report (see footnote 3 for further discussion). Based on this draft information, Zambia has already exceeded the fiscal year 2007 target of 109,050 individuals on therapy and the fiscal year 2008 target of 120,000 individuals on therapy.

However, to help ensure that the mission continues to achieve desired results, it needs to coordinate more closely with USAID/Washington staff responsible for administering two USAID/Washington-managed contracts to better ensure that storage conditions and health facility staff training are monitored and strengthened. In addition, "essential medicines," such as antibiotics and antifungal drugs needed to prevent and treat opportunistic infections, sexually transmitted diseases, and cancers, were frequently reported to be unavailable when needed. This shortage of essential medicines for HIV/AIDS patients could limit the positive impact of procuring, deploying, and warehousing HIV test kits and antiretroviral drugs. These issues are discussed below.

More Coordination Is Needed to Improve Storage Conditions and Facility Staff Training

Summary: USAID policy states that it is important for all team members to clearly understand the scope and limitations of their assigned roles and to consult with the contracting officer on potential arrangements between activity managers and cognizant technical officers. However, because the activity manager and the cognizant technical officer did not fully coordinate their efforts, there was uncertainty about the roles and authorities of the activity manager and the cognizant technical officer on a USAID/Washington-managed contract financed with mission funds. This, in part, resulted in gaps in the quality of commodity storage conditions and underscored the need to strengthen facility staff training.

USAID policy states that an activity manager is a member of a program team selected by the team to be responsible for the day-to-day management of one or more specific activities. The activity manager may also be the cognizant technical officer, whose authority to carry out contract management functions is designated by a contracting officer. The policy also explains that an activity manager addresses management and coordination issues beyond the prescribed role of the cognizant technical officer. Additionally, the policy states that it is important for all team members to clearly

understand the scope and limitations of the roles they are assigned and to consult with the contracting officer on potential arrangements.[12]

However, uncertainty existed over the roles and authorities of the activity manager, located at USAID/Zambia, and the cognizant technical officer, located at USAID/Washington, concerning the USAID|DELIVER project implemented by John Snow, Inc. This USAID partner is responsible for conducting site visits to monitor storage conditions and health facility staff training on the logistics management information system. The contract is managed by USAID/Washington staff in the Global Health Bureau. However, activities in Zambia are funded by the mission through a mechanism called "field support." [13] USAID commonly uses these types of arrangements. Mission staff reported that they used between 18 and 20 field support mechanisms across all their programs.

The following points demonstrate the uncertainty over the roles and authorities:

- Mission staff said that they did not have the authority to provide instructions to the partner because the staff members were not fully aware of the scope of the contract or task orders. For example, they did not know whether retraining was built into the contract, or if the partner used co-training teams (i.e., teams composed of Government of Zambia employees and partner staff). They said that only the Washington-based cognizant technical officer or contracting officer had authority to instruct the partner. USAID/Washington staff said that the activity manager has the authority to instruct the in-country partner and to more closely examine the partner's monitoring and evaluation plan.

- Mission staff said that only the Washington-based cognizant technical officer or contracting officer had the authority to adjust and approve work plans. USAID/Washington staff said that although they approved the annual work plans, the plans are developed in-country and could be adjusted in-country.

Mission and USAID/Washington staff stated that the PEPFAR funding and approval process further complicated lines of responsibility. The cognizant technical officer said that because of this approval process, he did not have the control he would typically have to adjust partner work plans.

Insufficient coordination and communication between the USAID/Washington-based cognizant technical officer and the mission-based activity manager caused uncertainty over lines of responsibility. The lack of a USAID policy clearly delineating the scope and the limitations of the activity manager's role when involved in a USAID/Washington-managed (but mission-funded) contract added to the uncertainty.

This uncertainty, in part, resulted in gaps in the quality of commodity storage conditions

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[12] USAID's Automated Directives System 200, *Introduction to Managing for Results (Introduction to Programming Policy)*, section 200.6.B, and Automated Directives System 202, *Achieving*, section 202.3.4.3(b).

[13] Field support is a mechanism by which missions use their funding to access contracts awarded by USAID/Washington.

and emphasized the need to strengthen facility staff training. Mission staff did not realize that it needed to coordinate with key personnel in USAID/Washington's Global Health Bureau to incorporate certain measures into an implementing partner's work plans to improve commodity storage conditions and provide increased training to facility staff. The two subsections below discuss these issues.

Commodities Require Better Storage – Zambia's Ministry of Health developed its guidelines for commodity storage in conjunction with the USAID|DELIVER project, based on standards of the World Health Organization.

Pursuant to those guidelines, the contractor's work plan for fiscal year 2007 stated that one of its five objectives was to achieve adequate, safe, and secure commodity storage at the central warehouse and facility levels. The work plan indicates that a monitoring and evaluation strategy, which would include site visits to check monitoring of storage conditions, would be developed, but that the number of site visits would depend on staff availability. In addition, one of the tasks included in the Partnership for Supply Chain Management contract, for which John Snow, Inc., is one of the two prime partners, is that the partner will review proper management of in-country supplies to ensure that storage conditions support desired standards for quality assurance.

Most of the storage facilities visited followed many of the guidelines for proper storage of antiretroviral drugs and test kits. For example, most of the facilities appeared to be reasonably secured, antiretroviral drugs and test kits were stacked no more than 8 feet high and were at least 4 inches off the floor on pallets or shelves, most were stored away from direct sunlight, and there was no evidence of water damage or rodents. In general, products appeared to be stored according to the recommended first-to-expire, first-out system, with few problems noted with expiry dates.

However, storage guidelines were not always followed, as in the following examples:

- Antiretroviral drugs stacked against storeroom walls: Six of nine facilities visited did not ensure that antiretroviral drugs were stacked at least 1 foot away from the walls. The antiretroviral drugs at the central warehouse in Lusaka were stacked next to the wall, and the warehouse manager acknowledged that they needed to be moved. According to the storage guidelines, storing the drugs away from walls promotes air circulation and eases movement of stock, cleaning, and inspection.

- Lack of fire extinguishers: Five of nine facilities visited did not have fire extinguishers. At another facility, the fire extinguisher was not in the same area where the antiretroviral drugs were stored. We did not see any fire extinguishers in the secured area containing antiretroviral drugs or in the test kit storage area at the central warehouse in Lusaka.

- Lack of temperature control and backup generators: Many of the facilities visited were not able to store products at the proper temperature. Most did not have fans in the storerooms. Staff at one clinic stated that they put a fan in the storeroom when it was "red hot," but at the time of the site visit, the temperature in the storeroom was already approximately 82 degrees. Four of nine facilities visited either did not have air conditioners in the storerooms or had air conditioners that did not work. In addition, none of the sites had air

conditioners in the dispensary rooms where antiretroviral drugs were also stored and dispensed. Several facilities either did not have thermometers to monitor temperature or had thermometers that did not work. None had backup generators to ensure that antiretroviral drugs and test kits were stored at the proper temperature. The central warehouse manager stated that they planned to install a generator as part of a renovation project.

Photograph taken by OIG auditor on November 7, 2007, at the central warehouse in Lusaka, showing antiretroviral drugs stacked against the storeroom wall.

According to storage guidelines, extreme heat can dramatically shorten shelf life. Temperatures in storerooms should not exceed 81 degrees: most antiretroviral drugs require storage below 77 degrees, and most test kits require storage below 86 degrees. Some of the sites without working air conditioners appeared to exceed the 81-degree ceiling for antiretroviral drugs. For example, on a visit to one clinic on an overcast day, the thermometer already read 82 degrees at 12:30 p.m. At two sites with similar climatic conditions, visited during the cooler morning hours, it is likely that the temperature would exceed 81 degrees on sunny afternoons.

- Expired and unexpired drugs were not always separated: In several instances, expired products were improperly handled. At one clinic, for example, a test kit due to expire on November 11, 2007, was stored at the bottom of a stack of test kits that would not expire until 2008. This facility also had boxes of antiretroviral drugs thrown into a box in the dispensary mixed with other types of antiretroviral drugs. At a hospital with seven HIV testing centers, one testing center had 89 test kits, 83 of which had expired. This was at least partially due to the center storing individual test kits in old test kit packages; the lot numbers of the individual test kits did not match the lot number of the package containing them. We noted similar problems at some other facilities. At a district storage facility, for example, several boxes of recently expired antiretroviral drugs had not been separated from the unexpired drugs.[14]

The poor storage conditions were caused by a delay in fully implementing the partner's monitoring and evaluation plan and by the need for additional training for storage facility staff. Although the partner had developed a monitoring and evaluation system, the partner, in conjunction with Ministry of Health district staff, visited only four health facilities, all during the last quarter of fiscal year 2007.[15] According to the partner, implementation was delayed due to "training overload" because of high levels of attrition among health facility personnel. Staff burnout, availability of better and higher paying jobs outside the public sector and in neighboring countries, and deaths due to HIV/AIDS created these high attrition rates. Additionally, according to the partner, a higher-than-expected number of antiretroviral therapy and testing sites came on board during 2007, increasing the need to train and retrain staff at these sites.[16] According to mission staff, implementing partners, district health officers, and health facility staff, the human resource shortage in Zambia has resulted in a situation in which four people must be trained to have one trained person on staff.

Mission and USAID/Washington staff said that it may be difficult to improve commodity storage conditions in the short term. Mission staff reported that they did not have the authority to instruct the partner to fully implement the monitoring and evaluation plan or provide additional storage facility staff training because the USAID|DELIVER project and the Partnership for Supply Chain Management contract are managed by USAID/Washington's Global Health Bureau. Mission staff said that only the Washington-based cognizant technical officer had that authority, as well as the authority to adjust work plans. USAID/Washington staff said that they manage the contracts on a macro level and that the activity manager in Zambia knows what needs to be done on a day-to-day basis. Obviously, improved communication is needed between the activity manager and the Washington-based cognizant technical officer and contracting officer. This issue is discussed on page 6.

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[14] There was no evidence that expired products were being used.

[15] According to the partner's July–September 2007 quarterly report, the partner made monitoring and evaluation visits to three health centers and one district hospital. The visits focused on accurate and timely reporting and ordering, logistics management information system recordkeeping, and proper antiretroviral drug storage.

[16] The implementing partner reported, in the 2007 draft annual performance report for PEPFAR, that although it was originally estimated that there would be 450 testing sites nationwide, there were actually more than 1,200 testing sites, and more were coming on board each month.

Inadequate storage conditions could result in reduced quality, efficacy, and shelf life for the $26.4 million in antiretroviral drugs and test kits procured during 2007 and the $26 million in planned 2008 procurements. Therefore, we are making the following recommendations.

Recommendation No. 1: We recommend that USAID/Zambia, in collaboration with key personnel in the Global Health Bureau, incorporate into project work plans measures to fully implement the contractor's facility monitoring and evaluation plan.

Recommendation No. 2: We recommend that USAID/Zambia, in collaboration with key personnel in the Global Health Bureau, incorporate into project work plans measures to increase training for storage facility staff.

Mission staff reported that procuring fans, fire extinguishers, generators, and other equipment to improve storage conditions would require significant PEPFAR resources. To obtain additional PEPFAR resources the mission needed to coordinate with other members of the U.S. Government's country team in Zambia and with the Government of Zambia.[17] The mission had not yet collaborated with these groups to develop an action plan to improve storage conditions. Therefore, we are making the following recommendation.

Recommendation No. 3: We recommend that USAID/Zambia, in collaboration with other members of the U.S. Government country team and with the Government of Zambia, develop an action plan to improve commodity storage conditions.

Health Facility Staff Need Additional Training – Zambia's Ministry of Health's standard operating procedures provide detailed guidance regarding the national logistics management information system and procedures for completing monthly inventory reporting and ordering forms. The Ministry developed these guidelines in conjunction with the USAID|DELIVER project. According to the guidelines, the purpose of an inventory control system is to inform personnel when and how much of a commodity to order and to maintain appropriate stock levels to meet client needs. A well-designed and well-operated inventory control system helps prevent shortages, oversupply, and expiry of products.

Each month, health facilities manually complete report and requisition forms to order antiretroviral drugs and test kits.[18] Clinics submit these forms to district health offices for consolidation; district health offices then submit consolidated reports to the central warehouse. Hospitals submit their forms directly to the central warehouse. The logistics

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[17] The U.S. Government's county team includes representatives from the Departments of State and Defense, the Centers for Disease Control and Prevention, Peace Corps, and USAID. The team works closely with the PEPFAR coordinator in Zambia to ensure that country program decisions adhere to PEPFAR policy.

[18] At the time of this audit, the implementing partner was conducting test kit pilot programs in two provinces in an effort to get the test kit logistics system to duplicate the antiretroviral drug system. At most of the clinics visited, only the pharmacy dispensing tool was computerized.

management information system at the central warehouse processes the reports and calculates the quantity of drugs and test kits to be shipped. The system automatically generates "adjustments" on the reports when data input by the clinic staff do not agree to certain information from the prior month's report. For example, an adjustment is generated when the beginning inventory balance in the current month does not match the previous month's ending balance.

The report and requisition forms were not always completed accurately, as in the following examples:[19]

- At one clinic, where storage space was limited and shelving was inadequate, staff counted the inventory at the clinic but did not include the inventory stored for them at the district health center, creating a significant adjustment and uncertainty about available drugs. In several cases, the adjustments represented more than 100 percent of the amount of drugs dispensed for that month. A staff member said that carbon copies of the report and requisition forms are sometimes illegible, and that the district health office completes the last three columns of the report that is submitted to the central warehouse. Staff members at the clinic said that they do not receive copies of the computer-generated report; receiving a copy could help clinic officials identify problems.

- Staff members at one clinic were unable to explain the computer adjustments on their reports. The implementing partner said that perhaps the clinic staff did not count items in the dispensary when taking the physical inventory count or did not record receipt of a shipment.

- The pharmacy dispenser at one hospital stated that a human error in the monthly report caused a stock-out of one drug during April. He was able to keep patients on the drug by borrowing from another hospital and a nearby clinic. However, the implementing partner said that, according to its records, the hospital had at least 2 months stock on hand and that a stock-out should not have occurred. The partner could not explain the discrepancy between the stock-out reported by the dispenser and the information in the logistics management information system at the central warehouse.

- At another hospital, the pharmacy dispenser said that adjustments on the September report were due to incorrectly entering either the beginning balance or physical count figures at the end of the month. He said that owing to staffing shortages, he often had to assign an untrained staff member to conduct the physical counts and complete the reports.

These challenges in understanding and accurately completing the monthly reports were caused by a need for additional health facility staff training on the logistics management information system. The lack of training was due to high health facility staff turnover and the higher-than-expected number of antiretroviral therapy centers coming on board each month. An official at one of the district health offices stated that most of the medical

[19] Audit work did not reveal instances of missing inventory or inaccurate perpetual inventory records; all test counts conducted were materially correct. Rather, the inaccurate reports affected commodity ordering, potentially leading to either shortages or overstocks of commodities.

professionals at the district's clinics and hospitals had not been trained to use the logistics system. Interviews with health facility staff revealed that most adjustments were caused by the lack of training or understanding of staff assigned to conduct physical inventory counts and complete the monthly forms. As discussed on page 10, the human resource shortage in Zambia has created a situation in which four people must be trained to have one trained person on staff, causing "training overload." The lack of training may also be at least partly attributed to the delay in the implementing partner's facility monitoring and evaluation plan, by which the partner would check facilities for accurate reporting and would monitor storage conditions (see page 10).

Information about the kinds and quantities of drugs on hand is critical for managing an uninterrupted supply of drugs. Errors in monthly reporting and ordering forms could result in either overstocking or stock-outs of antiretroviral drugs and test kits. These commodities are expensive and most have relatively short shelf lives. Overstocking can lead to higher levels of expired products, waste, and inefficient use of scarce resources. Stock-outs of antiretroviral drugs could cause patients on antiretroviral therapy to miss their scheduled treatment regimen and develop resistance to the drugs.[20] Stock-outs of test kits reduce the number of new patients who can begin antiretroviral therapy and interrupt the testing of patients currently on therapy. Patients on therapy must be tested periodically to determine whether the treatment is effective or whether the drug regimen should be modified.

Recommendation 1 relates to coordinating with personnel in the Global Health Bureau to fully realize the implementing partner's facility monitoring and evaluation plan; therefore, no further recommendation in that area is necessary. However, to provide additional training in logistics management to health facility staff, we are making the following recommendation.

> *Recommendation No. 4: We recommend that USAID/Zambia, in collaboration with key personnel in the Global Health Bureau, incorporate into project work plans measures to increase logistics management information system training for health facility staff.*

We are not making a recommendation regarding the need for a USAID policy clearly delineating the scope and the limitations of the activity manager's role when involved in a USAID/Washington-managed contract to which the mission allocates field support. This issue is beyond the scope of this audit. The Office of Inspector General will explore this issue in the report summarizing the series of similar audits being conducted during fiscal year 2008, should the issue be noted as a concern in the other audits.

[20] Most therapy regimens are a combination of drugs and must be available for the rest of a patient's life.

Essential Medicines Were Often Reported to Be Unavailable

Summary: The original PEPFAR legislation recognized the importance of procuring and distributing medicines to treat opportunistic infections. However, these medicines often were not available at the health offices, clinics, and hospitals we visited. According to mission staff, procuring essential medicines was outside PEPFAR's original mandate in Zambia and systems have not been developed to procure and deploy these medicines. The lack of essential medicines may limit the positive impact of providing HIV test kits and antiretroviral drugs.

In the original PEPFAR legislation, Congress recognized the importance of procuring and distributing medicines to treat opportunistic infections. The legislation states that appropriate treatment can reduce the need for costly hospitalization for treatment of opportunistic infections caused by HIV. People living with advanced HIV infection are vulnerable to bacterial, viral, and fungal infections and cancers, called "opportunistic infections" because these infections take advantage of the opportunity offered by a weakened immune system. HIV does not kill directly; instead, it weakens the body's ability to fight disease. Infections rarely seen in those with normal immune systems are deadly to those with HIV.

Although an individual may be on antiretroviral therapy, an opportunistic infection may be fatal if it is not prevented or treated. Consequently, antiretroviral drugs alone are not sufficient to prevent deaths from HIV/AIDS. A supply of essential medicines needs to be available to treat those living with HIV/AIDS and to complement antiretroviral therapy.

Essential medicines are a broad group of drugs that include antibiotics and antifungal drugs needed to prevent and treat opportunistic infections and sexually transmitted diseases. Although availability of essential medicines is necessary to complement antiretroviral therapy, these medicines were often reported not to be available at the health offices, clinics, and hospitals we visited.

Although district health officials and clinic and hospital staff indicated that they had adequate supplies of antiretroviral drugs, lab supplies, and, for the most part, HIV test kits, nearly all staff interviewed (including mission staff) mentioned the lack of essential medicines. For example:

- A pharmacist at a district health office explained that the district experienced shortages of medicines to treat fungal infections and herpes.

- A clinic director stated that the clinic needed medicines to treat fungal infections and vitamin B6 to boost the immune system.

- Hospital staff members, provincial health officers, and district health office staff reported shortages of antibiotics and other essential drugs.

Photograph taken by OIG auditor on November 8, 2007, at a clinic where staff reported a shortage of essential medicines needed to prevent and treat opportunistic infections.

In addition, according to information in the September 30, 2007, draft annual performance report (the U.S. Government/Zambia's annual progress report), the lack of essential drugs has hindered the scale up of sexually transmitted disease services.

According to mission staff, procuring essential medicines was outside PEPFAR's original mandate in Zambia. Mission staff explained that, based on the level of resources in PEPFAR's first years, the U.S. Government's country team in Zambia decided to focus resources on (1) getting antiretroviral drugs to health facilities to save lives, (2) developing a national antiretroviral drug logistics system, and (3) ensuring that personnel were trained to provide antiretroviral therapy services. Additionally, mission staff stated that PEPFAR budgetary requirements made it difficult to program funding for the prevention and treatment of opportunistic infections and sexually transmitted diseases. Mission staff also indicated that significant resources are necessary to address essential drug system requirements related to HIV/AIDS.

As a result of the shortage of essential medicines for HIV/AIDS patients, the positive impact of procuring, deploying, and warehousing other commodities may be limited. If essential medicines are not made more readily available, persons who have tested positive for HIV or those who are on antiretroviral therapy remain at risk of prolonged illness and death from HIV/AIDS-related opportunistic infections.

Prior to our audit in Zambia, the mission was working with the U.S. Government's country team to increase funding to improve the availability and distribution of essential medicines as part of the overall treatment of HIV/AIDS patients. The Office of the Global AIDS Coordinator approved the increased funding on February 28, 2008. Therefore, we are not making a recommendation related to improving the availability of essential medicines for persons living with HIV/AIDS.

EVALUATION OF MANAGEMENT COMMENTS

In its response to the draft report, the mission concurred with all four recommendations, described actions taken to address our concerns, and provided supporting documentation. As a result, we determined that final action has been taken on all four recommendations.

To address recommendation 1, the implementing partner's 2008 work plan incorporates a monitoring and evaluation plan, which includes monthly monitoring and evaluation site visits. The partner has also appointed a senior technical advisor to oversee monitoring and evaluation activities. In addition, the partner will report quarterly on the status of the monitoring and evaluation implementation plan to the mission's activity manager and to the USAID/Washington-based cognizant technical officer. Therefore, final action has been taken on recommendation 1.

To address recommendation 2, the implementing partner's 2008 work plan incorporates increased training in proper storage conditions for antiretroviral drugs and HIV test kits, as part of its monitoring and evaluation site visits. In addition, the newly-appointed senior technical advisor, who oversees monitoring and evaluation activities, will focus on improving the abilities of the Ministry of Health and other partners to provide training in improving storage conditions. Therefore, final action has been taken on recommendation 2.

To address recommendation 3, the mission developed an action plan to improve commodity storage conditions. The plan includes, in coordination with the Ministry of Health and the implementing partner, holding a donor coordination meeting, conducting a formal assessment of facility storage conditions, prioritizing recommended storage improvements, developing a storage improvement plan, mobilizing resources at a stakeholders' meeting, and implementing the improvement plan. Therefore, final action has been taken on recommendation 3.

To address recommendation 4 the implementing partner's 2008 work plan incorporates increased training for health facility staff in the logistics management information system. In addition, the newly-appointed senior technical advisor will focus on improving the abilities of the Ministry of Health and other partners to provide training in the logistics management information system. Therefore, final action has been taken on recommendation 4.

Comments by management are included in their entirety (without attachments) in appendix II.

SCOPE AND METHODOLOGY

Scope

The Office of Inspector General's Performance Audits Division conducted this audit in accordance with generally accepted Government auditing standards. The audit was designed to answer the following question:

- Has USAID/Zambia procured, deployed, and warehoused its PEPFAR commodities to help ensure that intended results were achieved, and what has been the impact?

This report summarizes the results of audit work conducted at USAID/Zambia and partner offices in Lusaka and at storage and health facilities in the city of Lusaka, and Copperbelt and Central provinces, from October 30 to November 21, 2007. We also performed fieldwork at the Partnership for Supply Chain Management's (the Partnership) regional distribution center in Nairobi, Kenya on November 26 and 27, 2007, and conducted followup fieldwork at USAID/Washington from December 13, 2007, to March 11, 2008.

The scope of the audit was limited to testing commodities procured through the Partnership, USAID/Zambia's primary partner for the President's Emergency Plan for AIDS Relief (PEPFAR) commodity procurement (see page 19 for the definition of PEPFAR commodities.) The Partnership was selected for audit because, according to the mission, the Partnership was responsible for procuring more than 83 percent of the commodities procured by the mission during 2007 (see appendix III).

Additionally, the scope included verifying the number of individuals receiving antiretroviral therapy on September 30, 2007, a required PEPFAR target related to the procurement of antiretroviral drugs. The scope also included observing the presence and working condition of laboratory equipment supplied by Family Health International during fiscal year 2007, through its Zambia Prevention, Care, and Treatment program, to the five health facilities selected for site visits. The Zambia Prevention, Care, and Treatment program was selected because it was responsible for reporting the number of individuals on antiretroviral therapy to the mission, and it procured a significant amount of laboratory equipment and supplies (see appendix III).

In planning and performing the audit, we assessed the effectiveness of management controls related to the procurement, storage, and distribution of commodities. These included controls over reporting the number of individuals on antiretroviral therapy and controls over antiretroviral drug and HIV test kit storage conditions.

No prior audit findings directly affected the areas included in the scope of this audit.

We used the following criteria to answer the audit objective:

- Public Law 108-25
- USAID's Automated Directives System 200, *Introduction to Managing for Results (Introduction to Programming Policy),* and 202, *Achieving*
- *The President's Emergency Plan for AIDS Relief Fiscal Year 2007 Country Operational Plan Guidance*
- *The President's Emergency Plan for AIDS Relief Indicators Reference Guide* (July 2007)
- Republic of Zambia, *Ministry of Health's Standard Operating Procedures Manual for the Management of the National Antiretroviral Drug Logistics System* (September 2006)
- Republic of Zambia, *Ministry of Health's Standard Operating Procedures Manual for the Management of the National Test Kits Logistics System* (September 2006)

Methodology

To answer the audit objective, we conducted interviews with USAID officials in the Global Heath Bureau's Office of HIV/AIDS, mission officials, and selected implementing partners in Lusaka. We also met with PEPFAR and Centers for Disease Control and Prevention staff in Lusaka, and with Zambia's Ministry of Health officials. We reviewed and analyzed Zambia's 2007 country operational plan, the draft 2007 PEPFAR annual performance report, selected partners' work plans and quarterly progress reports, and mission and partner trip reports.

We conducted site visits to the Ministry of Health's central warehouse, three district health office storage facilities, and five health facilities. At the warehouse and the district storage facilities, we observed storage conditions, conducted test counts of selected antiretroviral drugs and test kits, interviewed responsible staff, and inquired as to availability of essential medicines and laboratory supplies. At the health facilities, we observed storage conditions in the storerooms, dispensaries, and laboratories; conducted test counts of selected antiretroviral drugs and test kits; observed the existence and working condition of laboratory equipment purchased by Family Health International during fiscal year 2007, through its Zambia Prevention, Care, and Treatment program; inquired as to the availability of essential medicines and laboratory supplies; tested the accuracy of the number of individuals on antiretroviral therapy; reviewed monthly commodity ordering reports; and interviewed facility staff members.

The Zambia Prevention, Care, and Treatment program provided laboratory and other support to health facilities in five of Zambia's nine provinces and supported approximately 60 health facilities accredited to provide antiretroviral therapy in these five provinces. We judgmentally selected five health facilities for site visits within two of those five provinces; we also conducted site visits at four related storage facilities. We did not visit any health facilities receiving support from the Centers for Disease Control and Prevention in the remaining four provinces.

At the five health facilities visited, we reviewed support for the number of individuals on antiretroviral therapy reported to the mission as of September 30, 2007. Our review accounted for 7,986 persons on antiretroviral therapy, representing 19.5 percent of the total reported to the mission by the Zambia Prevention, Care, and Treatment program.

We used the following definitions and materiality thresholds to answer the audit objective:

- PEPFAR commodities are products purchased with PEPFAR funding for the detection and treatment of HIV/AIDS, including antiretroviral drugs, test kits, lab equipment, lab supplies, and essential drugs and medicines used to prevent and treat HIV/AIDS-related opportunistic infections.

- Commodities were considered to have been procured if at least 90 percent of the procurement funding reported in the 2007 country operational plan was used to procure PEPFAR commodities during 2007. We used a 90 percent materiality threshold because this procurement target is not a PEPFAR mandated target.

- Commodities were considered to have been deployed if products procured were distributed to storage and/or health facilities and to patients on antiretroviral therapy.

- Commodities were considered to have been warehoused if storage conditions at storage facilities visited met the Zambian Ministry of Health standards, as described in the Ministry's September 2006 standard operating procedure manuals. Storage conditions were considered "met" if most facilities visited met Ministry standards; storage conditions were considered "not always met" if most facilities visited met Ministry standards, but with qualifications or exceptions; and storage conditions were considered "not met" if most facilities visited did not meet Ministry standards. See appendix IV for the storage conditions tested.

- The Office of the Global AIDS Coordinator has not established any required targets or indicators for measuring commodity procurement results. Therefore, for purposes of this audit, we defined intended results as the procuring, storing, and distribution of commodities planned in the 2007 country operational plan, and achievement of the required 2007 PEPFAR target, "the number of individuals on antiretroviral therapy."

In addition, as part of the multicountry audit effort, we performed procedures at the regional distribution center in Nairobi, Kenya, as described in appendix V. Our visit to the regional distribution center and the results of procedures conducted there did not influence our answer to the audit objective; the discussion of our visit is included in this report for informational purposes.

USAID | ZAMBIA
FROM THE AMERICAN PEOPLE

Date: **May 2, 2008**

To: **Steven H. Bernstein, IG/A/PA Director**

From: **Melissa Williams, Mission Director, USAID/Zambia /s/**

Subject: **Management comments on the Audit of USAID/Zambia's Procurement and Distribution of Commodities for the President's Emergency Plan for AIDS Relief (Draft Audit Report No. 9-611-08-00X-P)**

USAID/Zambia appreciates the IG conducting the audit on the PEPFAR commodities procurement and distribution program. The above subject Audit Report and recommendations will improve the quality of the program and will ensure that the people of Zambia receive the services and products needed to curb the expansion and impact of HIV/AIDS.

The Mission has reviewed and is in agreement with all four recommendations. The following represents the Mission Management's comments and decisions on actions already taken, and actions planned to be taken, in order to properly address the recommendations contained in the report.

Recommendation 1: We recommend that USAID/Zambia, in collaboration with key personnel in Global Health Bureau, incorporate into project work plans measures to fully implement the Contractor's facility monitoring and evaluation plan.

Actions taken:

1. The approved DELIVER PROJECT work plan for FY 2008 (Attachment 1) incorporates a monitoring and evaluation (M&E) component which includes monthly M&E field visits to facilities. In FY 2008, 120 site visits are projected, averaging 10 facilities per month. This compares to 30 sites across 4 provinces in 2007.

2. Effective March 1, 2008, the project redefined staff responsibilities and has identified one person, the Senior Technical Advisor, to manage overall M&E activities of staff, including scheduling, reporting and tracking of follow up actions. The position description for the Senior Technical Advisor and the DELIVER PROJECT organizational chart is attached (Attachment 2).

3. All M&E visits now utilize a Logistics Data Quality and Inventory Management (LDQIM) Monitoring Tool packet (Attachment 3) which includes: LDQIM User's Guide; ARV Drug Logistics System checklist; HIV Test Kit Logistics System checklist; and the Logistics Supply Chain Quarterly Feedback report.

4. Documented recommendations from these visits are shared with the Ministry of Health (MOH) and non-governmental organization (NGO) partners for system

improvement. The project team and district partners develop action plans to address the problems encountered. Results/recommendations of each M&E site visit are tracked through a database to help ensure proper follow-up.

5. The LDQIM Tool packet, includes a Logistics Supply Chain Quarterly Feedback report (Attachment 3), that will feed into the monitoring and evaluation plan. Using this central information system, sites having anomalies that require further investigation by partner staff, such as repeated stock outs, errors in data collection and non-reporting are identified and prioritized for enhanced monitoring and evaluation and training.

6. The USAID/Washington CTO will require the DELIVER PROJECT to report quarterly to the Mission Activity Manager and CTO on the status of implementation of the facility monitoring and evaluation plan. (Attachment 4).

Planned Actions:

1. The Mission's Activity Manager will continue to meet weekly with DELIVER PROJECT staff to monitor full implementation of the contractor's facility monitoring and evaluation plan and activities. Further, the Activity Manager and Controller's Office staff will conduct joint site visits to selected facilities at least once every six months to ensure that the contractor's facility monitoring and evaluation plan is implemented and operational. The Activity Manager has outlined these meetings and visits in a Memorandum to the Chief of Party/DELIVER PROJECT (Attachment 5).

The above constitutes measures taken to ensure that Recommendation 1 is addressed. Therefore, Mission Management recommends that Recommendation 1 be closed.

Recommendation 2: We recommend that USAID/Zambia, in collaboration with key personnel in the Global Health Bureau, incorporate into project work plans measures to increase training for storage facility staff.

Actions taken:

1. Proper storage procedures have been included in USAID/DELIVER PROJECT'S routine logistics training. Logistics training scheduled for 2008 includes one ARV training per month and six HIV test kits trainings per month, as per approved work plan for FY 2008.

    - Each ARV training session includes up to 20 participants from approximately 15 sites. Therefore, the project expects to train 240 participants.[1] In 2007, 154 participants were trained.

    - Each HIV test kit training session includes up to 20 participants and approximately 10 sites, leading to a total expected training figure of 1,440 participants.[2] This compares to 501 participants trained in 2007.

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[1] USAID | DELIVER PROJECT workplan, FY07-08, Intervention 2.1.1
[2] USAID | DELIVER PROJECT workplan, FY07-08, Intervention 3.1.1

2. The approved DELIVER PROJECT work plan for fiscal year 2008 incorporates both formal training as well as on-the-job training (OJT). As a component of the regular M&E field visits to the health facilities, OJT is provided in proper storage of ARVs and HIV test kits. This will ensure that staff knowledge is up to date and that they are appropriately applying best practices.

3. The DELIVER PROJECT has recently hired the Senior Training Advisor. This advisor will focus on improving the abilities of the MOH and partners to train on improving storage conditions nationwide and the use of LMIS. For the LMIS specifically, the project utilizes the central database to flag reporting data irregularities and alerts both M&E and training staff for appropriate follow-up. The position description for the Senior Training Advisor and the DELIVER PROJECT organization chart is attached (Attachment 2).

The above constitutes the decisions and measures taken to ensure that Recommendation 2 is addressed. Therefore, Mission Management recommends that Recommendation 2 be closed.

Recommendation 3: We recommend that USAID/Zambia, in collaboration with other members of the United States Government country team and with the Government of Zambia, develop an action plan to improve commodity storage conditions.

Actions taken/planned and target completion date:

1. The DELIVER PROJECT FY 2007-2008 work plan presently includes development of an action plan to address storage constraints.[3] The first stage, a country-wide facility assessment plan, is scheduled to begin in July 2008 and completed by March 2009. During the assessments, the HIV Test kit and ARV Drug Logistics System checklist (Attachment 3) will be used to determine the functionality of storage conditions at the facility levels.

2. An action plan for storage facility improvement activities and work plan has been developed; copies are attached (Attachment 6).

   As part of the plan, USAID and project staff will continue to work closely with the Ministry of Health's Manager of the Drug Supply Budget Line to investigate potential funding within the MOH to address storage facility improvements. While the GRZ recognizes that addition resources will be needed, they do not have sufficient resources to address all improvements to facilities. However, under the auspices of the MOH, a team will be tasked to secure resources from external sources such as the broader donor community. The USAID/Zambia Activity Manager will monitor status of implementation of the action plan during routine weekly meetings.

   The above constitutes the measures taken and planned to ensure that Recommendation 3 is addressed. Therefore, Mission Management recommends that Recommendation 3 be closed.

[3] USAID | DELIVER PROJECT workplan, FY07-08, Intervention 5.1.2.

Recommendation 4: We recommend that USAID/Zambia, in collaboration with key personnel in the Global Health Bureau, incorporate into project work plans measures to increase logistics management information system training for health facility staff.

Actions taken:

1. The approved USAID | DELIVER PROJECT work plan for fiscal year 2008 incorporates training in the logistics management information system (LMIS). In addition, OJT in the LMIS is incorporated in the monitoring and evaluation field visits, as per attached USAID/Deliver Zambia project work plan and LDQIM (Attachments 1 and 3).

2. The LMIS training scheduled for 2008 includes one ARV training per month and six HIV test kits training per month, as per attached approved work plan for FY 2008.

   - Each ARV training session includes up to 20 participants from approximately 15 sites. Therefore, the project expects to train 240 participants.[4] In 2007, 154 participants were trained.

   - Each HIV test kit training session includes up to 20 participants and approximately 10 sites, leading to a total expected training figure of 1,440 participants.[5] This compares to 501 participants trained in 2007.

3. USAID/Deliver has developed a Logistics Supply Chain Quarterly Feedback report (Attachment 2) which will feed into the monitoring and evaluation plan. In addition, the report will identify facilities with a low reporting rate which will be targeted for immediate action for improvement, such as increased logistics training.

4. USAID's logistics project has recently hired a senior training advisor. This advisor will focus on improving the abilities of the MOH and partners to train on improving storage conditions nationwide and LMIS use. For the LMIS specifically, the project utilizes the central database to flag reporting data irregularities and alerts both M&E and training staff for appropriate follow-up. The position description for the senior Training Advisor and organization chart is attached (Attachment 2).

The above constitutes the measures taken to ensure that Recommendation 4 is addressed. Therefore, Mission Management recommends that Recommendation 4 be closed.

The above constitutes USAID/Zambia'a management decisions with regard to Recommendations 1, 2, 3 and 4. Therefore, in accordance with ADS 595.3 this memo constitutes the management decisions and measures taken/planned to address the recommendations in Audit Report No. 9-611-08-00X-P.

Attachment: a/s

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[4] USAID | DELIVER PROJECT workplan, FY07-08, Intervention 2.1.1

[5] USAID | DELIVER PROJECT workplan, FY07-08, Intervention 3.1.1

PARTNERS PROCURING COMMODITIES

IMPLEMENTING PARTNER	DESCRIPTION	COST (unaudited)
Abt Associates	Training materials	$ 90,500
Academy for Educational Development	Training materials	5,122
American Institutes for Research	Training materials	94,075
Catholic Relief Services	Test kits, lab equipment and supplies, training materials, blankets, nutritional supplements, medical supplies	141,174
Chemonics International	Training materials, medical supplies	183,680
Children's AIDS Fund	Training materials	6,976
Christian Aid	Blankets, training materials, motorcycles, computer equipment	190,982
Development Alternatives, Inc.	Training materials	86,185
Education Development Center	Training materials	9,000
Family Health Care International	Lab equipment and supplies, motorcycles, medical equipment, medical supplies, computer equipment	1,763,688
Hope Worldwide	Training materials, vehicles	46,431
International Executive Service Corp	Vehicles	25,500
International Youth Foundation	Training materials, vehicles	59,938
Johns Hopkins University/Center for Communication Programs	Training materials	154,216
John Snow, Inc.	Lab equipment, training materials	136,475
Kara Counseling	Training materials	1,000
Parents and Children Together	Training materials	2,116
Partnership for Supply Chain Management	Antiretroviral drugs, test kits, lab equipment and supplies	31,528,884
Population Services International	Male and female condoms, training materials, vehicles	1,408,609
Project Concern International	Training materials, vehicles	142,373
Research Triangle Institute	Sexually transmitted infection drugs, lab equipment and supplies, vehicles, motorcycles, computer equipment	305,294
World Concern	Nutritional supplements, training materials, blankets, medical supplies	73,173
World Vision International	Insecticide-treated nets, nutritional supplements, training materials	1,483,587
Total		**$ 37,938,978**

STORAGE CONDITIONS TESTED[1]

TEST	STORAGE CONDITION TESTED	RESULTS OF TESTS
1	Storage area is secured with a lock and key, but is accessible during normal working hours; access is limited to authorized personnel.	Met
2	Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.	Met
3	Items are stored according to instructions on carton, including arrows pointing up.	Met
4	Products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO) counting and general management.	Met
5	Storeroom is maintained in good condition (clean; all trash removed; sturdy shelves; organized boxes; no insecticides, chemicals, or old files; etc.).	Met
6	Current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for foreseeable future).	Met
7	Cartons and products are in good condition and are not crushed due to mishandling. If cartons are open, determine if products are wet or cracked.	Met
8	Damaged and/or expired products are separated from usable products.	Not Always Met
9	Products are protected from direct sunlight.	Met
10	Cartons and products are protected from water and humidity (i.e., there is no evidence of water damage).	Met
11	Storage area is visually free from harmful insects, rodents, termites, etc.	Met
12	Products are stored at the appropriate temperature, according to product temperature specifications. Does the air conditioner work? Are there power outages? Is there a backup generator?	Not Met
13	Roof is in good condition, to avoid sunlight and water penetration. Is there any evidence of leakage?	Met
14	Products are stacked at least 4 inches off the floor.	Met
15	Products are stacked at least 1 foot away from the walls and other stacks.	Not Met
16	Products are stacked no more than 8 feet high.	Met
17	Is fire safety equipment available and accessible, such as fire extinguishers and sand or soil in a bucket?	Not Met
18	Package and product integrity – check for damage to packaging (tears, perforations, water or oil) and products (broken or crumbled tablets, broken bottles).	Met
19	Labeling – products are labeled with the date of manufacture or expiration, lot number, and manufacturer's name.	Met

[1] The storage conditions tested were based on Zambia's Ministry of Health standard operating procedures and on the USAID|DELIVER project's facility monitoring tool.

SITE VISIT TO THE NAIROBI REGIONAL DISTRIBUTION CENTER

The regional distribution center in Nairobi, Kenya is a warehouse operated by Fuel Africa, a member of the Partnership for Supply Chain Management consortium (the Partnership).[2] Fuel Africa has a contract with the Partnership to provide warehousing and logistics support to ensure that commodities are delivered to countries participating in the Partnership's system. Fuel Africa's role is to receive commodities that the Partnership has ordered from various manufacturers, properly store and secure the commodities, and arrange shipment of the commodities to their final destination, upon specific order by the Partnership. Fuel Africa bills the Partnership on a pallet per month basis and also bills the Partnership for activities involved in receiving, packaging, and shipping the commodities.

Although the distribution center was originally designed to provide commodities primarily to Ethiopia, Rwanda, Tanzania, and Uganda, it ships commodities on an as-needed basis as directed by the Partnership. For example, we observed shipments of antiretroviral drugs to Zambia and Zimbabwe. We also observed warehouse conditions, conducted test counts of selected antiretroviral drugs and HIV test kits, reviewed dispatch records of shipments to Zambia, reviewed documentation for a sample of commodities received from manufacturers, and interviewed distribution center staff. The warehouse was clean and well organized, commodities were properly and securely stored, and all procedures were performed without material exception.

Photograph taken by OIG auditor on November 26, 2007, at the Nairobi regional distribution center, showing a clean, well-organized warehouse.

[2] At the end of the audit fieldwork, the Partnership had three regional distribution centers, located in Kenya, Ghana, and South Africa. The centers in Ghana and South Africa will be visited and reported on by audit teams conducting similar multicountry audits during fiscal year 2008. Our visit to the regional distribution center in Kenya did not influence the answer to our audit objective. This appendix is included for informational purposes only.

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