

**INITIAL ENVIRONMENTAL EXAMINATION
OR
CATEGORICAL EXCLUSION**

PROGRAM/ACTIVITY DATA:

Program/Activity Number: 685-0012

Country/Region: Senegal/West Africa

Program/Activity Title: Strategic Objective 12: Improved Health Status of Families

Funding Begin: FY06 **Funding End:** FY10 **LOP Amount:** \$73,000,000 Child Survival and Health (CSH)

Sub-Activity Amount: \$N/A

IEE Prepared By: Mamadou Ndaw/Mary Cobb, USAID/Senegal SDO **Current Date:** 05/21/2006

IEE Amendment (Y/N): N If "yes", Number & date of original IEE:

ENVIRONMENTAL ACTION RECOMMENDED:

Categorical Exclusion: X Negative Determination: X

Positive Determination: Deferral: X

ADDITIONAL ELEMENTS:

EMEMP: CONDITIONS X PVO/NGO:

SUMMARY OF FINDINGS:

This IEE is directed at the entire Strategic Objective No. 12, which will include some or all of the illustrative activities listed below. The program includes the continuation of family planning, STI/AIDS prevention, and maternal and child health activities implemented under the previous Decentralized Health Services Strategic Objective Program (SO 685-0309) and described in its IEE dated June 19, 1998 and new interventions, principally in newborn care, post-abortion care, tuberculosis, malaria and community health. Of these, only malaria-related activities are considered to have a potential environmental effect.

1. Pursuant to 22CFR 216.2(c)(2)(i), a **Categorical Exclusion** is recommended for IRs 1 and 2 for all training, education capacity building, communication and technical assistance activities implemented under this SO as they have no effect on the environment.
2. Pursuant to 22 CFR 216.2(c)(2)(v), a **Categorical Exclusion** is recommended for IRs 1 and 2 for all documentation and information transfer activities implemented under this SO as they have no effect on the environment.
3. As per 22 CFR 216.3 (a) (2) (iii), a **Negative Determination with Conditions** is recommended for IRs 1 and 2 for all health care activities under this SO. The conditions are that sound disposal procedures for medical and health care waste established in the www.encapa.africa USAID/AFR/SD publication *Environmental Guidelines for Small-Scale Activities in Africa* will be promoted at all health care institution receiving assistance under this SO. All revised and new agreements with institutions funded under this SO will stipulate agreement to this principle.
4. Pursuant to 22 CFR 216.3 (b) (1) (l) (a-1), a **Negative Determination with Conditions** is recommended for IR 2 for insecticide treated bed nets. The conditions are that the procedures spelled out in a pesticide evaluation report and safer use action plan (PERSUAP) will be followed. The PERSUAP was developed under Program/Activity Number HRN-A-00-99-00016-00, in April 2003, to address all USAID activities in Senegal that directly or indirectly support the distribution of insecticide treated bed nets. This PERSUAP was prepared in accordance with the guidance contained in the USAID Bureau for Africa's "Programmatic Environmental Assessment (PEA) for Insecticide-Treated Materials in USAID Programs in Sub-Saharan Africa 2002". http://www.afr-sd.org/documents/iee/docs/32AFR2_ITM_PEA.doc

5. A **deferral of a threshold determination**, per 22 CFR 216.3(a)(7)(iii), is recommended for support to IRS, pending identification of the pesticides to be used. IRS support may not proceed until the IEE is amended to remove the deferral, after the appropriate environmental review has occurred.

Monitoring:

As required by ADS 204.5.4, the SO12 team and implementing partners will “actively monitor and evaluate whether the environmental features designed for the activity resulting from the 22 CFR 216 processes are being implemented effectively and whether there are new or unforeseen consequences arising during implementation that were not identified and reviewed in accordance with 22 CFR 216.” The SO Team shall also monitor the need for additional environmental review based on IEE recommendations. SO12, in collaboration with implementing partners, shall ensure that provisions of the IEE, including the conditions and monitoring set forth herein, are incorporated into all contracts, cooperative agreements, grants and sub-grants, as appropriate.

APPROVAL OF ENVIRONMENTAL ACTION RECOMMENDED:

Senegal SO12: Improved Health Status of Families

Director, USAID/Senegal: _____ Date _____
Olivier Carduner

CONCURRENCE:

Bureau Environmental Officer: _____ Cleared _____ Date 06/07/06 _____

Brian Hirsch

Approved 06/07/06

Disapproved _____

File No.

ADDITIONAL CLEARANCES:

Mission Environmental Officer _____ Date _____
Aminata Badiane

Cognizant Technical Officer _____ Date _____
Mary Cobb

Team Leader _____ Date _____
Jennifer Adams

Deputy Director _____ Date _____
Erin Soto

OPTIONAL CLEARANCE:

AFR/General Counsel _____ Date _____
John Niemeyer

Regional Environmental Officer _____ Date 06/01/06 _____
Cleared
Robert Clausen

INITIAL ENVIRONMENTAL EXAMINATION

PROGRAM/ACTIVITY DATA

Program/Activity Number: 685-0012

Country/Region: Senegal/Africa

Program/Activity Title: **Strategic Objective 12:** Improved Health Status of Families

1.0 BACKGROUND AND PROJECT DESCRIPTION

Although substantial improvements have been made in the health sector over the previous decade, including reducing maternal mortality from 50 out of 10,000 mothers giving birth, to 43, Senegal's human development indicators remain unacceptably low. (It is ranked 157 out of 177 on the UNDP Human Development Index). Population growth is straining the ability of the government to provide adequate social services for its rapidly growing population. The high maternal mortality rate (43 per 10,000 births) and infant death are attributable to inadequate services and poor nutritional status. Over 40% of the population is urban, with a high rural to urban migration rate. Fertility has slowly decreased, but remains high, at 5.3 children per woman. The contraceptive prevalence rate is low, with only about 10.3% of married women of reproductive age using modern methods of contraception. Given the young age structure of the population, early age of marriage (national average of about 18.5) and widespread polygamy, prospects for a significant reduction in population growth are bleak, unless a major effort is undertaken to improve reproductive health activities as well as women's and girls education.

Senegal's current health policy is outlined in Senegal's Poverty Reduction Strategy Paper (PRSP) as well as in the National Health Development Plan, 1998-2007, which was endorsed by donors and other stakeholders. A recent evaluation of the Health Plan's first phase indicates mixed results. On the positive side, substantial progress was reported in the areas of health services delivery (with the increased availability of cost effective interventions and essential drugs at the health posts) and of health systems administration particularly with respect to hospital management. The government also demonstrated its financial commitment to the health sector by increasing its share of budget to 10% in 2005 and by raising the non-wage portion of the recurrent budget.

In response to these changes currently underway in both the national health system and among international donors, USAID is restructuring its support for health care in Senegal and modifying the focus and the methodology of its interventions. Within this new context, USAID/Senegal will support four essential and mutually dependent program components beginning in FY 2006: (1) Health Care Financing and Policy; (2) Maternal and Child Health, and Family Planning; (3) HIV/AIDS, and TB Prevention and Control; and (4) Community Health.

USAID addresses health issues in Senegal at the national, regional and district levels. Under the SO 12 program, USAID will continue to work in Thies, Louga, Kaolack and Ziguinchor - where support for service delivery at both the clinical and community levels was concentrated in the past. As these Health Districts and Regions are now able to provide relatively adequate routine clinical services to their populations, the focus of the new strategy in these regions will be to concentrate on new interventions to further reduce child and maternal mortality, particularly by offering more services at the community level.

1.1 Purpose and Scope of IEE

This IEE is directed at the entire Strategic Objective No. 12: Improved Health Status of Families. The SO will be achieved through the accomplishment of two Intermediate Results (IRs) outlined in this section. Four general program areas have been identified, each of which will contribute to the achievement of both IRs.

Based on the nature and extent of potential environmental impacts, this IEE will recommend a threshold decision(s) to the Bureau Environmental Officer (BEO) as to whether an environmental assessment (EA) will be required.

1.2 Description of Activities

Strategic Objective 12 will be implemented through one or more contracts, cooperative agreements and/or grants under two key intermediate results. SO 12 is comprised of the following two intermediate results:

- Intermediate Result One (IR 1): Improved Quality of Health Services, Products, and information;
- Intermediate Result Two (IR 2): Increased Use of Appropriate Health Services, Products, and Information.

IR 12.1: Improved quality of health services, products, and information

This IR has three sub-IRs which USAID believes will converge to result in better quality of all types of health related services and information offered to the population. Information refers to counseling, IEC/BCC and social marketing information, messages promulgated by community health volunteers regarding health behavior (e.g. when to seek care, using family planning, FGC, stigma reduction for HIV/AIDS, etc).

The GOS already has in place, in part due to USAID's support, many effective technical policies and protocols for quality health services. Building on this, it must be ensured that providers at all levels of the health system are adequately trained to carry out these activities, and that the curricula for nurses and midwives are regularly updated to include new policies and protocols as they are adopted. Examples include the neonatal care package, community treatment of pneumonia, and PMTCT. In addition to training, USAID believes that supervision and management are keys to improving service delivery, and that leadership is needed in the health system to apply best practices and ensure that they are offered correctly and appropriately in health facilities or in the community. Finally, ensuring the offer of quality services requires that the processes of planning, budgeting, and implementing those health plans and services are carried out effectively. USAID views increased accountability and transparency, as well as community organization, as essential achievements leading toward its ultimate health results and objectives.

Achievement of this IR will result in better quality of all types of health-related services and information offered to the population. Illustrative activities under this IR include but are not limited to:

- introducing or institutionalizing (depending on the region) a package of services to prevent adverse pregnancy and childbirth outcomes;
- integrating the newborn care package into all health facilities in the focus regions;
- training health workers at the community level to apply malaria and pneumonia case management protocols;
- providing technical assistance to health staff, community health workers, and health and management committees to improve planning and budgeting processes to ensure that appropriate equipment and drugs are budgeted for and procured;
- implementing systems of incentive for good performance and motivation of health workers;
- training VCT laboratory workers in quality control protocols;
- building capacity at the district level to carry out effective supervision of service delivery points;
- training health workers at all levels in new MOH protocols and procedures as necessary;
- promoting transparency and accountability measures, such as publication or posting of user fee schedules and budgets, in the health system and on health and management committees;
- assisting the GOS to monitor drug resistance, to ensure drug quality testing and to strengthen the regulatory structures of the Ministry of Health;
- introducing improved planning and budgeting tools, such as National Health Accounts, in the Ministry of Health;
- providing technical guidance in updating curricula for nurses and midwives to include new policies and protocols as they are adopted;
- engaging in central level policy dialogue to develop consensus among policymakers and stakeholders around key policies that will facilitate more effective use of financial and human resources for better health outcomes;

- working with the private sector and GOS to introduce micronutrient-fortified foods to the commercial market;
- building leadership capacity at district and regional levels to monitor and adapt interventions and scale them up;
- strengthening the MOH capacity to obtain additional resources and use them effectively;
- engaging Management Committees to begin functioning and providing oversight to the operations of Health Committees, ensuring transparent selection of members, clear definition of roles and responsibilities, and proper use of funds according to plans;
- providing technical and financial assistance to operate a “matching grants” program, particularly in under-served communities and in collaboration with other donors;
- strengthening psychosocial and nutrition components of the care and support package for persons living with HIV/AIDS and orphans and vulnerable children affected by HIV/AIDS;
- strengthening capacity and management in the National TB Program to improve clinical detection and cure rates;
- and building the capacity and infrastructure of the National AIDS Council to more effectively monitor and evaluate the evolution of the epidemic, the implementation of planned activities, and the effectiveness of various interventions.

I.R. 12.2 Increased use of appropriate health services, products, and information

This IR has two sub-IRs aimed at increased use of services, commodities, and information to make better health-related choices. Essential to increasing use are improving demand for, as well as access to, services and information. USAID will support increased demand through working with communities to create health plans with activities specific and appropriate to the community’s needs, and through approaches to promote information about the benefits of health services and healthy behaviors. For access, USAID is interested in improving affordability, availability, geographic access, and acceptability of health services and products and health behaviors. USAID also believes that improvements in transparency and accountability in the health system will also lead to increased demand for services.

This IR will increase the use of services, commodities, and information to make better health-related choices. Essential to increasing use are improving demand for, as well as access to, services and information. Illustrative activities include but are not limited to:

- working with communities to create health plans with activities specific and appropriate to the community’s needs;
- designing communications strategies and tools to promote information about the benefits of using health services and products and practicing healthy behaviors;
- supporting social financing mechanisms, such as Mutual Health Organizations, to improve financial access to health services;
- expanding the number of services offered at each level of the health system, including the community level;
- training community health workers in distribution of family planning products, including registration and follow-up of users;
- promoting transparency and accountability measures, such as publication or posting of user fee schedules and budgets, in the health system and on health and management committees;
- socially marketing health products and services, including adding new products to the range of currently socially-marketed items;
- working with the private sector and private providers to increase commercial availability of health services and products;
- assisting community health workers to identify and address socio-culturally sensitive practices that affect health outcomes in their communities;
- introducing a voucher system to increase access to insecticide-treated bednets to prevent malaria for the most vulnerable populations;
- exploring the potential for Indoor Residual Spraying (IRS) with insecticide for malaria prevention;
- increasing civil society participation in health planning and monitoring of the health system;
- establishing programs to improve access to services for vulnerable groups;

- designing targeted HIV/AIDS prevention interventions for high-risk populations as well as prevention messages for the general population;
- improving follow-up for clinic-based TB treatment adherence in USAID-supported health facilities to decrease defaulter rates and improve cure rate;
- training community health workers in follow up of TB patients under treatment and in referral of possible TB cases for diagnosis;
- and institutionalizing HIV and TB reciprocal testing.

Key program components:

The IRs will be achieved through 5 key program components and will be managed by component. Key activities for the components include:

Health Care Financing and Policy: USAID intends to increase the efficiency in the use of resources available within the health sector; ensure that communities have access not only to their locally-generated health revenues, but also to an increased share of central government resources; build within the MOH a link for technical support to local communities; and increase involvement of private providers. Much of the work that USAID will undertake in this sector will be coordinated with the public, private and NGO sectors to promote transparency, increase civic participation, improve governance and ensure a more integrated approach. This component addresses IRs 1 and 2.

USAID will engage in central level policy dialogue to develop consensus among policymakers and stakeholders around key policies that will facilitate more effective use of financial and human resources

Maternal and Child Health and Family Planning: Maternal and child health and family planning activities will be undertaken by two different components in this program: the MCH/FP component and the Community Health component described below. These two components will undertake some similar activities, but in different settings, i.e., clinical and community. The Maternal and Child Health and Family Planning component will focus on facility-based interventions (i.e. within the MOH structures) and social marketing of appropriate products and services to promote family planning and maternal and child health. The maternal health improvement objective will be achieved through a combination of preventive measures, particularly family planning and quality antenatal care services, as well as improved birthing practices and management of obstetric emergencies. This component will contribute to improvements in child survival primarily through assisting the MOH with its implementation of a neonatal care package and through malaria prevention and treatment activities.

Malaria is the largest cause of both morbidity and mortality in Senegal, particularly affecting pregnant women and children under five. USAID will continue to support subsidization of insecticide treated nets (ITNs) and to strengthen clinical management of malaria progressively through the use of artemisinin-based combination therapy (ACT) and through the intermittent preventive treatment (IPT) of malaria in pregnancy. Community management of malaria will also be supported through the Community Health component described below.

A special emphasis will be placed on meeting the unmet demand for family planning through modern contraceptive methods. USAID will seek to improve the quality and availability of services and methods via improved supervision and training of providers, increased involvement of the private sector and an expanding program of social marketing. The Community Health component will also support community-based distribution of contraceptives.

Strengthening of the health system will also be a key part of the MCH/FP component's activity. Issues to be addressed will include improvements in supervision, motivation of health workers, accountability and transparency in the health system, and leadership capacity of health personnel.

This component focuses on family planning, maternal and neonatal health, social marketing, and health systems strengthening under IRs 1 and 2.

HIV/AIDS and TB Prevention and Control: The focus will be on facility-based and MOH interventions, while the Community Health component will undertake activities at the community level, outside the official structures of the MOH. USAID will support activities to expand and improve preventive services to Senegal's four main high-risk or bridge populations, namely commercial sex workers, transportation workers, fishing industry workers and men who have sex with men. Also key in prevention efforts will be the implementation of the Prevention of Mother to Child Transmission (PMTCT) program (with the MCH/FP component) and the expansion of Voluntary Counseling and Testing (VCT) services in Senegal. This component will also focus on strengthening the psycho-social and nutritional components of care and support for Persons Living with HIV/AIDS (PLWHA) and explore ways of easing the financial burden of treatment-associated costs.

USAID, along with the Centers for Disease Control and Prevention (CDC) and other partners, has supported and will continue to support the development of a well-functioning disease and behavioral surveillance system for Senegal. As program needs change and new partners and new techniques come on board, the structure of the surveillance system will change.

USAID is particularly interested in legal issues related to HIV/AIDS stigma and discrimination, and in advancing legislation currently pending related to discrimination against PLWHA.

In the area of Tuberculosis, this component will support the National Tuberculosis Program (NTP) and target clinical and laboratory services, including in Dakar, where about 50% of Senegal's TB burden is concentrated. Activities will be conducted at the facility level in order to achieve TB indicators that meet WHO standards and ensure an effective integration of HIV and TB activities, where appropriate.

Through activities to promote HIV prevention, AIDS care and support, systems strengthening for HIV and TB, and TB treatment, this component will contribute to the achievement of SO #12: **Improved Health Status of Families**, via IRs 1 and 2.

Community Health: The community health component of the USAID/Senegal health portfolio reflects the recognition that providing communities themselves with the tools (including information, training, access to services and commodities) to prevent and treat their most pressing health threats has the potential to immensely increase access to quality care and life-saving interventions. Community providers already exist throughout Senegal, and pilot activities have shown that providing training and supervision to these providers greatly improves treatment outcomes.

Activities to be supported under this component will align with - and be similar to - the activities mentioned above to be carried out by the MCH/FP and the HIV/AIDS and TB components. The difference will be that the two aforementioned components will work within the MOH structures and be more clinical in nature. This Community Health component will work directly in communities, often at the level of the health hut. The only medical service currently authorized for all health huts in Senegal is combination therapy for malaria. Many health huts should soon be authorized to provide cotrimoxazole for pneumonia cases, following a very successful pilot activity in 2004.

Along with community management of malaria, diarrhea, and pneumonia, other activities will include health communications at the community level, community-based DOTS (Directly Observed Treatment, Short-course) for TB and support for a neonatal care package (to complement the package to be introduced in clinical settings). USAID is particularly interested in reviving and expanding community-based distribution of contraceptives.

Another aspect of improving health at the community level is providing information and encouraging discussion around healthy behaviors and practices. Correct information about practices or services that may be culturally sensitive but which affect health outcomes will be appropriately raised and discussed by community health workers.

Pharmaceutical Logistics and Quality: To address the issues of pharmaceutical logistics and quality in Senegal, USAID will procure technical assistance to assist the Government of Senegal to monitor drug resistance, particularly related to drugs for the treatment of malaria, pneumonia and tuberculosis, to ensure

drug quality testing and to strengthen the regulatory structures of the Ministry of Health.

2.0. COUNTRY AND ENVIRONMENTAL INFORMATION (BASELINE INFORMATION)

The program will be implemented in all or part of seven Regions of Senegal including: Kaolack, Louga, Ziguinchor, Kolda, Thies, Saint Louis, and Dakar (city only). The following provides a brief description of the biophysical and socio-economic aspects of Senegal.

2.1. Country Climatic, Physical and Ecological Background

Senegal is the most western country in the Sahel. It is bounded in the West by the Atlantic Ocean, in the North by Mauritania, in the East by Mali, in the South-East by Guinea, in the South-West by Guinea-Bissau, and it completely enclaves The Gambia. It comprises an area of 196,722 km² which is mostly flat, without any pronounced relief.

2.1.1. Climate: Senegal has a harsh climate with generally high temperatures, and low to moderate rainfall. Rainfall is irregular both in distribution and frequency. The rainy season is limited to a seasonal monsoon, wetter in the South than in the North. Average annual rainfall varies between 200mm and 400mm from July to September in the North, 400-700mm in the center, and 700-1,000mm from May to October in the South.

2.1.2. Surface Water: Senegal is cut by four major rivers: Senegal, Sine-Saloum, Gambia and Casamance. Because of the seasonality of the rains and the high evaporation rate, there are practically no permanent surface bodies of significance except for the Lac de Guiers which is replenished yearly by the floods of the Senegal River. The decrease in rainfall over the last 40 years has also affected flood volumes of the main rivers. For example, volumes in the Senegal River have decreased from more than 30 billion m³ to less than 20 billion m³, the lowest being in 1984 with less than 10 billion m³.

2.1.3. Ground Water: Groundwater reserves are relatively abundant in Senegal. These include numerous shallow aquifers replenished by rain waters, and a deeper Maestrichian formation that underlies most of the country.

2.1.4. Soil Fertility: Except along the Senegal River Basin where the soil texture tends to be higher in clay content, the soils of Senegal range from dry sandy soils in the north through the tropical ferruginous soils of the central Sahelo-Sudanian region to the ferralitic soils of the Sudanian region in the South. Overall, soil fertility is low and soils are also generally fragile, making them highly susceptible to water and wind erosion when disturbed.

2.2. Population

The population of Senegal is growing at the relatively high rate of 2.64 percent per year, having increased from approximately 3.2 million at independence in 1960 to 6.9 million and 9.96 million respectively in 1988 and 2002. As a result of this rate of increase, nearly 45% of the population is under the age of 15. The average population density was 16/km² in 1960 compared to 57/km² in 2006; outside of urban areas, population density is very uneven.

The second major feature of population is a sustained migration from rural to urban areas. Whereas 73% of the population lived in rural areas in 1960, and 27% in urban areas, only 59.3% live in rural areas in 2006 and 40.7% in urban areas. The population growth rate from 1988 to 2006 averaged 2.98% per year in cities and only 2.44% per year in the rural areas.

Senegal has been modestly successful in improving the physical quality of life since independence. Life expectancy increased from 42 to 52.3; crude death rate decreased from 23 to 9.6 per 1,000 persons; and crude birth rate fell from 47 to 36.0 per 1,000 persons. Child mortality (age 0 to 5) decreased from 287 per 1,000 in 1971-75 to 121 per 1,000 in 2005. In addition, the 2005 Demographic and Health Survey (DHS) indicates that only 10.3% of women use modern contraceptives. HIV sero-prevalence among the general population is estimated at 0.7% in 2005. The health care system in Senegal has also been plagued with the

inconsistent quality of preventive and curative care and frequent unavailability of trained staff and essential products at health centers. Supervision of health services has been poor or non-existent, and the lack of local government support and involvement in health services remains a serious obstacle to improved quality.

3.0 EVALUATION OF ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

The goal of this five-year initiative is to improve the health status of families in targeted areas of Senegal and will be achieved through the following IRs: **(1) Improved Quality of Health Services, Products, and Information** and **(2) Increased Use of Appropriate Health Services, Products and Information**.

The following provides an evaluation of potential environmental impact of key activities planned under the program.

Health Care Financing and Policy: USAID will provide technical assistance and training, and support policy dialogue activities to increase the efficiency in the use of resources available within the health sector; ensure that communities have access not only to their locally-generated health revenues, but also to an increased share of central government resources; build within the MOH a link for technical support to local communities; and increase involvement of private providers. These activities are not expected to affect the physical environment in any way and, therefore, meet the criteria for **Categorical Exclusion** pursuant to 22CFR 216.2 (c) (2) (i).

Maternal and Child Health and Family Planning: This technical program focuses on family planning, maternal and neonatal health, social marketing of contraceptives and insecticide-treated bed nets, and health systems strengthening. Activities also include health care, education and communication, and technical assistance.

Health care activities envisioned will generate a minimal amount of hazardous (sharps) materials from vaccination and other injection procedures from community level health services. The majority of these materials are routinely burned at each facility. Needles and other clinical sharps are normally disposed of in pit latrines or other burial sites to prevent injury to other persons after use.

Of all activities, only malaria-related activities are considered to have a potential environmental effect. USAID/Senegal will likely provide financial, material and technical support to apply a to-be-determined insecticide within homes. The type of insecticide and the strategy for spraying residences have not yet been decided. These activities will not begin until further guidance is issued from Washington and decisions are made regarding the type of insecticide to be used and the approach for spraying (unlikely to begin before May 2007). The program will also assist in the distribution of insecticide treated bed nets.

These activities are not expected to have an overall negative effect on the environment because they are accompanied by efforts to control the distribution and destruction of used bed nets. These conditions are spelled out in a pesticide evaluation report and safer use action plan (PERSUAP) that will be followed. The PERSUAP is included in this IEE by reference. The PERSUAP was developed to address all USAID activities in Senegal that directly or indirectly support the distribution of insecticide treated bed nets. This PERSUAP was prepared in accordance with the guidance contained in the USAID Bureau for Africa's "Programmatic Environmental Assessment (PEA) for Insecticide-Treated Materials in USAID Programs in Sub-Saharan Africa' 2002" http://www.afr-sd.org/documents/iee/docs/32AFR2_ITM_PEA.doc.

HIV/AIDS and TB Prevention and Control: USAID will provide technical assistance, training, education, information to promote HIV prevention, AIDS care and support, systems strengthening for HIV and TB, and TB treatment.

These activities will have no effect on the environment, and therefore meet the criteria for **Categorical Exclusion** pursuant to 22CFR 216.2 (c) (2) (i).

Pharmaceutical Logistics and Quality: USAID will procure technical assistance to assist the Government of Senegal to monitor drug resistance, particularly related to drugs for the treatment of malaria, pneumonia and

tuberculosis, to ensure drug quality testing and to strengthen the regulatory structures of the Ministry of Health.

These activities will have no effect on the environment, and therefore meet the criteria for **Categorical Exclusion** pursuant to 22CFR 216.2 (c) (2) (i).

4.0 RECOMMENDED MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

Based on the environmental review procedures and the discussion included within this IEE, This section focuses upon recommendations to reduce possible negative impacts of program activities.

Under **IR 1: Improved quality of health services, products, and information** a **categorical exclusion** is recommended for all activities under all 5 program components involving education, technical assistance, training [per 22CFR216.2(c)(2)(i)]; for activities involving analyses, studies, academic or research workshops and meetings [per 22 CFR 216.2(c)(2)(iii)]; and for document and information transfer activities [per 22CFR216.2(c)(2)(v)].

Under **I.R. 12.2 Increased use of appropriate health services, products, and information** a **categorical exclusion** is recommended for all activities under all 5 program components involving education, technical assistance, training [per 22CFR216.2(c)(2)(i)]; for activities involving analyses, studies, academic or research workshops and meetings [per 22 CFR 216.2(c)(2)(iii)]; and for document and information transfer activities [per 22CFR216.2(c)(2)(v)].

A **Negative Determination with Conditions** is recommended for health care activities involving disposal for medical and health care wastes, as per 22 CFR 216.3 (a) (2) (iii).

Conditions:

1. Sound disposal procedures for medical and health care waste will be promoted at all health care institution receiving assistance under this SO. These procedures will be done in accordance with criteria and best practices established in chapter 8: Healthcare Waste in the www.encapa.africa USAID/AFR/SD publication *Environmental Guidelines for Small-Scale Activities in Africa*. Minimum procedures include, among others, the establishment of written plans and procedures, staff training, promotion of protective clothing and good hygiene practices, designated storage locations, waste minimization, waste segregations and treatment and the identification of an appropriate final disposal site;
2. All funding provided to institutions under this SO will stipulate agreement to this principle.

A **Negative Determination with Conditions** is recommended for insecticide treated bed nets. The conditions are that the procedures spelled out in a pesticide evaluation report and safer use action plan (PERSUAP) will be followed. The PERSUAP was developed under Program/Activity Number HRN-A-00-99-00016-00, in April 2003, to address all USAID activities in Senegal that directly or indirectly support the distribution of insecticide treated bed nets. This PERSUAP was prepared in accordance with the guidance contained in the USAID Bureau for Africa's "Programmatic Environmental Assessment (PEA) for Insecticide-Treated Materials in USAID Programs in Sub-Saharan Africa 2002 ".http://www.afsd.org/documents/iee/docs/32AFR2_ITM_PEA.doc.

A **deferral of a threshold determination** is recommended for support to IRS, pending identification of the pesticides to be used. IRS support may not proceed until the IEE is amended to remove the deferral, after the appropriate environmental review has occurred.

Monitoring:

As required by ADS 204.5.4, the SO12 team and implementing partners will “actively monitor and evaluate whether the environmental features designed for the activity resulting from the 22 CFR 216 processes are being implemented effectively and whether there are new or unforeseen consequences arising during implementation that were not identified and reviewed in accordance with 22 CFR 216.” Zero tolerance for any medical wastes that are not disposed of according to WHO guidelines will be promoted at all institutions receiving assistance under this SO. All revised and new agreements with institutions funded under this SO will stipulate agreement to this principle. WHO literature detailing the importance of safe disposal and safe disposal techniques for medical wastes will be widely disseminated. USAID and its implementation partners will carefully monitor clinical interventions to ensure correct disposal of sharps, bio-hazardous and other potentially hazardous and infectious materials through accepted entombment and incineration methods. In addition, USAID and its implementation partners will ensure that procedures spelled out in the pesticide evaluation report and safer use action plan (PERSUAP) addressing all health activities in Senegal are followed.

The SO Team shall also monitor the need for additional environmental review based on IEE recommendations. SO12, in collaboration with implementing partners, shall ensure that provisions of the IEE, including the conditions and monitoring set forth herein, are incorporated into all contracts, cooperative agreements, grants and sub-grants, as appropriate.

5.0 SUMMARY OF FINDINGS

This IEE is directed at the entire Strategic Objective No. 12, which will include some or all of the illustrative activities listed herein. The program includes the continuation of family planning, STI/AIDS prevention, and maternal and child health activities implemented under the previous Decentralized Health Services Strategic Objective Program (SO 685-0309) and described in its IEE dated June 19, 1998 and new interventions, principally in newborn care, post-abortion care, tuberculosis, malaria and community health. Of these, only malaria-related activities are considered to have a potential environmental effect.

1. Pursuant to 22CFR 216.2(c)(2)(i), a **Categorical Exclusion** is recommended for IRs 1 and 2 for all training, education capacity building, communication and technical assistance activities implemented under this SO as they have no effect on the environment.
2. Pursuant to 22 CFR 216.2(c)(2)(v), a **Categorical Exclusion** is recommended for IRs 1 and 2 for all documentation and information transfer activities implemented under this SO as they have no effect on the environment.
3. As per 22 CFR 216.3 (a) (2) (iii), a **Negative Determination with Conditions** is recommended for IRs 1 and 2 for all health care activities under this SO. The conditions are that sound disposal procedures for medical and health care waste established in the www.encapa.africa USAID/AFR/SD publication *Environmental Guidelines for Small-Scale Activities in Africa* will be promoted at all health care institution receiving assistance under this SO. All revised and new agreements with institutions funded under this SO will stipulate agreement to this principle.
4. Pursuant to 22 CFR 216.3 (b) (1) (I) (a-1), a **Negative Determination with Conditions** is recommended for IR 2 for insecticide treated bed nets. The conditions are that the procedures spelled out in a pesticide evaluation report and safer use action plan (PERSUAP) will be followed. The PERSUAP was developed under Program/Activity Number HRN-A-00-99-00016-00, in April 2003, to address all USAID activities in Senegal that directly or indirectly support the distribution of insecticide treated bed nets. This PERSUAP was prepared in accordance with the guidance contained in the USAID Bureau for Africa’s “Programmatic Environmental Assessment (PEA) for Insecticide-Treated Materials in USAID Programs in Sub-Saharan Africa, 2002” http://www.afr-sd.org/documents/iee/docs/32AFR2_ITM_PEA.doc.
5. A **deferral of a threshold determination**, per 22 CFR 216.3(a)(7)(iii), is recommended for support to IRS, pending identification of the pesticides to be used. IRS support may not proceed until the IEE is amended to

remove the deferral, after the appropriate environmental review has occurred.

Monitoring:

As required by ADS 204.5.4, the SO12 team and implementing partners will “actively monitor and evaluate whether the environmental features designed for the activity resulting from the 22 CFR 216 processes are being implemented effectively and whether there are new or unforeseen consequences arising during implementation that were not identified and reviewed in accordance with 22 CFR 216”. The SO Team shall also monitor the need for additional environmental review based on IEE recommendations. SO12, in collaboration with implementing partners, shall ensure that provisions of the IEE, including the conditions and monitoring set forth herein, are incorporated into all contracts, cooperative agreements, grants and sub-grants, as appropriate.