

**AMERICAN SAMOA COASTAL NONPOINT PROGRAM  
NOAA/EPA DECISIONS ON CONDITIONS OF APPROVAL**

**FOREWORD**

This document contains decisions on conditions of approval placed on the coastal nonpoint pollution control program submitted by the Territory of American Samoa pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The Findings for the American Samoa coastal nonpoint program were issued on October 3, 1997. Since that time, American Samoa has undertaken a number of actions to address conditions of approval on its coastal nonpoint program. Based on those actions and on the most recent materials American Samoa provided to document how the conditions have been met, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) find that American Samoa has satisfied all conditions of approval.

This document is organized in the same format used in the 1997 Findings for the American Samoa Coastal Nonpoint Program. For each condition included in the Findings, a decision regarding whether the condition has been met and a rationale for the decision is provided. For further understanding of terms in this document and the basis for the decisions, the reader is referred to the following:

*Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (EPA, January 1993)

*Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance* (NOAA and EPA, January 1993)

*Flexibility for State Coastal Nonpoint Programs* (NOAA and EPA, March 1995)

*Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA)* (NOAA and EPA, October 1998)

**FINAL APPROVAL DECISION**

NOAA and EPA find that the Territory of American Samoa has satisfied all conditions placed on approval of the American Samoa Coastal Nonpoint Pollution Control Program (ASCNPCP) submitted to NOAA and EPA pursuant to Section 6217(a) of CZARA. Therefore, American Samoa's coastal nonpoint program meets all program requirements and is hereby fully approved, constituting a final approval decision for the program.

Please note that the approval decision made for the American Samoa coastal nonpoint program does not relieve the Territory of any requirements under the Endangered Species Act.

**AGRICULTURE**

**CONDITION:** Within one year, American Samoa will (1) include in its program management measures in conformity with the 6217(g) guidance for confined animal facilities, nutrient management as it applies to animal waste, and pesticides; (2) include in its program enforceable policies and mechanisms to implement the pesticide management measure; and (3) provide a strategy (in accordance with section XIII, page 12) for use of the American Samoa Environmental Quality Act (EQA) as a back-up enforceable policy and mechanism to ensure implementation of the management measures for erosion and sediment control, confined animal facilities, and nutrient management as it applies to animal waste.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** The American Samoa Environmental Quality Act (EQA), codified as American Samoa Code Annotated (ASCA), Title 24, Chapter 01, and the American Samoa Water Quality Standards (ASWQS), revised in 1999, codified as American Samoa Administrative Code (ASAC), Title 24, Chapter 02, provide the Environmental Quality Commission (EQC) and the American Samoa Environmental Protection Agency (ASEPA) with authority to require management practices, consistent with 6217, for agricultural and other sources of nonpoint source pollution.

The ASWQS are established under the authority of the EQA. If it is determined that ASWQS have been violated or are threatened, the ASWQS may be used as an enforceable mechanism for compliance. Under the EQA, any provision of the EQA or regulation promulgated under it is enforceable by the Environmental Quality Commission. The Commission, in most cases, will proceed against a violator by Notice of Violation and Order for corrective action. In the event the violator does not comply with the Order, the Commission may seek an injunction in the High Court under ASCA § 24.0152. Monetary penalties are also available for non-permitted water pollutant discharges under ASCA § 24.0167.

The ASWQS are comprehensively implemented through ASEPA's nonpoint coastal monitoring program, pesticide management program, and its larger watershed protection plan implementation program. The Land Grant Program of the American Samoa Community College (LGP/ASCC), the Natural Resource Conservation Service (NRCS), and the Department of Public Health's environmental inspection program also implement portions of the program.

(1) Management Measures for Confined Animal Facilities and Nutrients from Animal Waste

EPA and NOAA find that the ASWQS satisfy the condition for management measures for confined animal facility operations (CAFOs), including wastewater and runoff from CAFOs. Specifically, ASWQS § 24.0208(d) addresses confined animal facility waste control and

ASWQS § 24.0208(e) addresses confined animal facility storm water runoff for new development.

American Samoa has requested an exclusion from the nutrient management measure, based on the relatively low rates at which commercial fertilizer is applied in American Samoa. EPA and NOAA have reviewed materials supporting this request, including the “Assessment of the Applicability of the Nutrient Management Measure As It Applies to Animal Waste Control Facilities” and have determined that the ASCNCP is exempted from the nutrient management measure.

## (2) Management Measures and Enforceable Policies for Pesticide Management

The American Samoa Department of Agriculture (DOA) has the authority, under the American Samoa Pesticide Act (ASPA), ASCA § 24.1205, to adopt rules regarding the application of pesticides. DOA has delegated this authority to the Executive Secretary of the EQC, which has promulgated rules at ASAC, Title 24, chapter 06. Pesticide management is implemented by ASEPA, LGP/ASCC, DOA, and NRCS. However, the regulatory use and management of pesticides are primarily the responsibility of ASEPA. The ASEPA Pesticide Management Program is fully implemented and enforced among the 1,196 farms, as well as importers and retailers of pesticides in American Samoa.

ASEPA is responsible for the pesticide regulatory and enforcement program as provided in the Pesticide Act and its implementing regulations, as well as the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The ASEPA pesticide regulations require certification for anyone applying restricted use pesticides, and all applicators and retailers of restricted use pesticides must be certified in order to purchase restricted use pesticides. The ASEPA pesticide program includes training, inspection and monitoring for properly registered pesticide sale and use, as well as enforcement of violations of laws and regulations on application, sale, and use of pesticides.

An ASEPA Pesticide Officer visits approximately 140 farms/year to insure that pesticides are being applied in accordance with regulatory and best management practices, and routinely checks retail establishments for properly labeled chemicals and EPA registration numbers as part of their field inspections. If illegal pesticides are discovered during an inspection, the Pesticide Officer confiscates the pesticides. The owners of the confiscated pesticides are required by regulation to return the pesticides to the vendor. The ASEPA Pesticide Officer trains Customs Agents with regard to detection of illegal importation of pesticides, and participates in customs inspections of air and sea vessels when they arrive in AS. Recent drinking water well sampling and coastal water monitoring in Pago Pago Harbor that revealed no significant pesticide concentrations validate ASEPA’s pesticide management program’s approach of public education and on-site field training and corrective action.

In addition to ASEPA’s pesticide management program, the LGP/ASCC, DOA, and NRCS

provide education and guidance to farmers and land owners. The LGP/ASCC assists farmers in all aspects of improving and maximizing productivity on their farms and plantations through education, demonstration of best management practices for pesticide application, and outreach. LGP/ASCC offers Pesticide Applicator Training (PAT) on a quarterly basis and Commercial Applicator Training (CAT) on a biannual basis.

DOA staff assists farmers by recommending and teaching Integrated Pest Management (IPM) strategies including appropriate cultural practices such as inter-cropping and crop rotation as part of their contribution to effective pesticide management practices. Almost every farmer in American Samoa implements some IPM practices depending on factors such as crop, pesticide, disease presence and location.

The NRCS provides guidance to land owners and farmers in the development of individual conservation plans, which can include IPM as a best management practice. In the conservation plans, pesticide management practices are specified as appropriate. The conservation plans developed with farmers through the NRCS adequately address this management measure. NRCS staff visit farms to determine if proper management is being practiced.

### (3) The American Samoa Environmental Quality Act (EQA)

American Samoa has in place and can use the EQA as a back-up enforceable policy and mechanism that ensures the implementation of management measures for erosion and sediment control, confined animal facilities, and nutrient management as it applies to animal waste.

The ASEPA staff conduct field monitoring and inspections of construction projects and land disturbing activities. They also provide outreach to advise and assist villagers in assuring that these land disturbing activities (e.g., farming, installing vegetative cover) do not cause harm to coastal water, streams, and wetlands. The American Samoa Department of Commerce (DOC) can issue Stop Orders to address violations of land use permits for construction projects, confined animal facilities, or earthmoving activities. Stop Orders may require best management practices or other compliance with the ASWQS. The DOC may also use permit revocation, injunctive relief and monetary penalties, as appropriate, pursuant to the applicable provisions of the American Samoa Coastal Management Act, ASCA § 24.0501 et seq.

Thus, the ASWQS may be implemented through the land use permitting process and enforced by either the land use permitting authority, the DOC, or by the Environmental Quality Commission pursuant to its authority to enforce the EQA and the ASWQS. The fulfillment of the strategy element of the condition is further discussed on pages 11 through 13 of this document.

**NEW DEVELOPMENT, SITE DEVELOPMENT, CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL and CONSTRUCTION SITE CHEMICAL CONTROL**

**CONDITION:** Within one year, American Samoa will include in its program management measures in conformity with the 6217(g) guidance for new development, site development, and construction site erosion and sediment and chemical control.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA have determined that the ASWQS, as amended in § 24.0208(e)(2), (b), and (g), coupled with the guidance, training, and booklets provided by the American Samoa Government (ASG) satisfy these conditions. Specifically, ASWQS § 24.0208(b)(2) addresses new development, ASWQS § 24.0208(e)(2) addresses site development, ASWQS § 24.0208(b)(2) addresses construction site erosion and sediment control on sites of one-acre or larger, and ASWQS § 24.0208(g) addresses construction site chemical control. With regard to new development, ASWQS § 24.0208(b)(2) states that BMPs “must be those provided by the (g) Guidance document... or other references, as approved by ASEPA,” providing American Samoa flexibility to use other criteria. However, in a letter dated November 1, 2002, ASEPA has clarified its policy is to implement the (g) guidance, and to use additional management measures where necessary to cover land disturbing activities unique to the Territory (and thus potentially not addressed by the (g) guidance measures). ASEPA also indicated that revisions to WQSs are underway to clarify that the (g) guidance measures must be implemented to address NPS pollution.

The American Samoa Coastal Management Program (ASCMP) implements the Territorial Land Use Permit (LUP) program, under which permits are required for all activities that may cause or threaten to cause adverse impacts to coastal resources, except for a limited class of uses exempt by law. ASCMP permits must be consistent with the ASCMP implementing regulations, ASAC, Title 26, Chapter 02, and are reviewed through an interagency process known as the Project Notification and Review System (PNRS). The Development Planning Office (DPO) and other PNRS member agencies, including ASEPA, can condition permits for compliance with their authorizing legislation. Both DPO and ASEPA have the authority to issue permit conditions related to erosion control under the American Samoa Coastal Management Act (ASCMA) and the EQA, respectively.

As noted in the discussion on agricultural activities, violations of a land use permit for the urban construction projects, or earthmoving activity, requiring best management practices or other compliance with the ASWQS, can be addressed through a Stop Order issued by the Department of Commerce, permit revocation, injunctive relief and monetary penalties, as appropriate, pursuant to the applicable provisions of the American Samoa Coastal Management Act, ASCA § 24.0501 et seq.

**WATERSHED PROTECTION and EXISTING DEVELOPMENT**

**CONDITION:** Within three years, American Samoa will include in its program management measures in conformity with 6217(g) guidance for watershed protection and existing development.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA have reviewed the American Samoa Nonpoint Source Upgrade Program, Watershed Protection Plan, Watershed Restoration Action Strategies, its 5/15 year strategy, and related materials, and find that these programs satisfy this condition.

NOAA and EPA have reviewed the Watershed Protection Plan and proposed Hydromodification Study and have determined that they adequately address the watershed protection management measure. In the last five years, the ASEPA and the ASCMP have undertaken a number of efforts to develop and implement the watershed protection management measure and the integrated watershed approach in American Samoa. The approach toward meeting the existing development management measure relies upon the integrated watershed approach as well as studies completed to evaluate the impacts of existing infrastructure and hydromodification on water quality. These efforts are described in the Watershed Protection Plan, Watershed Restoration Action Strategies, Wetlands Restoration and Enhancement Plan, Watershed Interagency Committee, Storm Water Evaluations, and the Hydromodification Study.

Papa Stream is an example of a wetland restoration project that has been completed. Two miles of stream were re-vegetated on Papa Stream. Another wetland restoration project, the Nu'uuli Mangrove Restoration, is underway covering about 1-2 acres. Another example of how these management measures are being implemented, in conjunction with the Watershed Protection Plan, is demonstrated by the present effort to restrict development in the Maleimi Valley Watershed. The ASEPA and Department of Commerce recognize that this watershed represents the main groundwater supply for American Samoa, and are in the process of having the Maleimi Valley declared a special land use zone that would prohibit any commercial and industrial development, and limit residential development. This should be accomplished by early 2003.

**NEW and OPERATING ONSITE DISPOSAL SYSTEMS (OSDS)**

**CONDITION:** Within two years, American Samoa will finalize its proposed OSDS regulations, and include management measures in conformity with the 6217(g) guidance on setbacks and avoidance of unsuitable areas; inspection of new and operating systems; and requirements for denitrifying systems where nitrogen-limited surface waters may be adversely affected by nitrogen loadings from OSDS.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA have determined that the ASWQS, as amended, satisfy the condition for denitrifying systems and satisfy management measures for setbacks and avoidance of unsuitable areas in regard to new OSDS. Specifically, ASWQS § 24.0208(c)(2) addresses requirements for denitrifying systems. The regulations in this section also call for all new OSDS to be in conformance with public health rules, building codes, water quality standards, and sewer regulation. Wetlands set back buffer requirements are 25 feet for non-commercial or non-industrial development and 50 feet for commercial or industrial development (ASAC § 26.0222(E)(2)). Streams and shorelines come under the definition of Wetlands (ASAC § 26.0222(A)). Therefore, it is prohibited to construct a residential septic system within 25 feet of stream or shoreline or wetland. ASAC § 24.0205(b)(1)(B)(V) also specifically states that septic tanks must not be placed with 200 feet of a Class 1 Fresh Surface Water. The American Samoa Power Authority (ASPA) also rigorously inspects new OSDS systems to prevent improper installation.

The ASEPA, and other ASG agencies submitted a comprehensive program in May 2002 to inspect the approximately 5,589 existing septic tanks in American Samoa. The core of this effort will be an ASEPA inspection program that will inspect approximately 40 OSDS a week (480 per year). These inspections will utilize traditional indicators of OSDS malfunctioning (rich grass, sewage backup in the house, depressions due to collapsed leach fields, etc.), but will be improved upon completion of application of additional techniques to be contained in a “Pacific Island Onsite Wastewater Treatment Systems Manual,” which is currently under development. ASEPA and other agencies also participate in an Island-wide Village Inspection Program that inspects septic tanks as part of a general Village environmental and sanitation review.

ASEPA will utilize its monitoring program to track nutrients and pathogens, and determine whether the source is failing OSDS or small scale CAFOs (piggeries) are the sources. Although existing ASEPA monitoring indicates that nitrate and nitrite levels are far below existing standards, pathogens were found in some wells. The ASEPA Near shore Marine Water Quality Monitoring Plan, which is part of the American Samoa Coastal Nonpoint Source Monitoring Strategy, assesses water quality by comparing monitoring data to the narrative and numeric criteria in the American Samoa Water Quality Standards (ASWQS). The comparisons are used to determine whether the designated uses assigned to the waterbody are supported and to issue weekly public beach advisories. Where uses are impaired, the Territory identifies the pollutants causing water quality impairments, and the sources of those pollutants. Pathogen indicators, nutrients, turbidity, and siltation are the main pollutants of concern. Additionally, the newly developed ASEPA Stream water Monitoring Plan includes measurement of nutrients. Both of these monitoring plans are designed to support the 305b process for determining whether designated uses are being impaired. The American Samoa Coastal Nonpoint Source Monitoring Strategy discusses the monitoring goal of assessing water quality and what activity may be implemented to remediate a water quality problem that may result from nonpoint source pollution.

The ASEPA is also examining the potential use of small scale package treatment plants to address OSDS problems in particular villages with widespread OSDS problems, and which cannot hook up to the central waste water treatment system.

### **ROADS, HIGHWAYS, AND BRIDGES**

**CONDITION:** Within three years, American Samoa will include in its program management measures in conformity with the 6217 (g) guidance for construction project erosion and sediment control, construction site chemical control, operation and maintenance, and runoff systems. Within three years, the Territory will also include in its program enforceable policies and mechanisms to ensure implementation of the operation and maintenance and runoff measures throughout the 6217 management area.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** State and Territory coastal nonpoint control programs are no longer required to include the Construction Site Erosion and Sediment Control and the Construction Site Chemical Control Management Measures because the NPDES storm water regulations for these activities apply nationwide and therefore throughout the coastal management areas of states and territories.

EPA and NOAA find that the ASWQS, as amended, and mentioned in earlier urban sections on Site Development, and Construction Site Erosion, Sediment, and Chemical Control, satisfy the management measures for operation and maintenance and runoff systems for roads, highways and bridges. Section 24.0208(e)(2) addresses operation and maintenance and runoff systems as it provides for prevention of water quality impacts from maintenance of new, modified or existing land uses. These measures are implemented through the Land Use Permit review and enforcement system discussed in the Urban measures section above.

### **MARINA FLUSHING, WATER QUALITY ASSESSMENT, HABITAT ASSESSMENT, SHORELINE STABILIZATION, FUELING STATION DESIGN, AND SEWAGE FACILITY MANAGEMENT**

**CONDITION:** Within three years, American Samoa will include in its program management measures in conformity with the 6217(g) guidance for marina flushing, water quality assessment, habitat assessment, shoreline stabilization, fueling station design, and sewage facility management.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA have determined that the ASCNPCP is exempted from the marina siting and design management measures for marina flushing, water quality assessment, habitat assessment, shoreline stabilization, fueling station design, and sewage facility

management. This determination is based on EPA and NOAA review of the materials ASEPA and ASCMP submitted, including an “Assessment of the Applicability of the Marinas and Boating Siting and Design Management Measures.” This analysis demonstrated that it is unlikely for there to be either construction of a new marina or an expansion of the Territory’s only existing marina located in Pago Pago Harbor. American Samoa’s economy is not tourism-based and there is no demand for new boat slips. Furthermore, the ASG has no plans for the immediate or foreseeable future for any improvements to the existing marina, or the construction of a new marina, as there is literally no revenue generated by the existing marina, and there would be no revenue, or interest, generated by a new marina. In the unlikely event that expansion of the Pago Pago Harbor marina is contemplated in the future (10-20 years), the ASG has the authority, through the AS Land Use Permit Process to review the project as a major siting and can ensure the implementation of appropriate management measures to protect water quality in the Harbor.

**STORMWATER MANAGEMENT, SOLID WASTE MANAGEMENT, FISH WASTE MANAGEMENT, LIQUID MATERIAL MANAGEMENT, PETROLEUM CONTROL, BOAT CLEANING, PUBLIC EDUCATION, SEWAGE FACILITY MAINTENANCE, and BOAT OPERATION**

**CONDITION:** Within three years, American Samoa will include in its program management measures in conformity with the 6217(g) guidance and develop a strategy (in accordance with section XIII, page 12) for use of the EQA as a back-up enforceable policy and mechanism to ensure implementation of these management measures throughout the 6217 management area.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA have determined that the ASCNCP submission demonstrated that nonpoint source pollution from the existing marina does not and is not reasonably expected to present significant adverse effects to living coastal resources or human health, and thus the Territory is exempted from the above noted management measures for marina operation and maintenance. This determination is based on EPA and NOAA review of supporting materials that ASEPA and ASCMP submitted in April 2001, including an “Assessment of the Applicability of the Marinas and Boating Operation and Maintenance Management Measures.” In addition, EPA and NOAA utilized supporting documentation that was developed and implemented as part of American Samoa’s Coastal Nonpoint Pollution Control Program, including the American Samoa Watershed Protection Plan (4 volume set including a Stormwater Management component); Water Restoration Action Strategy for Pago Pago Harbor; AS Nonpoint Source Upgrade; and the Pago Pago Harbor TMDL, to support this exemption.

These documents provide a detailed history of activities in Pago Pago Harbor and conclusively identify point and nonpoint sources of pollution to Pago Pago Harbor. Most importantly, the few small boats and structure that make up the marina are not identified or discussed in these

referenced documents as being a nonpoint source of pollution that would cause significant effects to the marine environment in the Harbor. The ASG and the scientists that assisted in the preparation of the 6217/319 program documents (i.e., marine biologists) have concluded that the degraded water quality and the lack of coral reefs in the inner harbor is a result of limited water exchange that constrained and greatly retarded the flushing, mixing, and circulation of extremely high nutrient and sludge inputs from the tuna canneries; point source discharges from waste water treatment facilities and NPDES permitted stormwater sources; sedimentation from soil erosion and freshwater runoff; contaminants of concern in stream discharges (e.g., nutrients, bacteria from piggeries); commercial vessel discharges; typhoons; and coral bleaching. The ASEPA and ASCMP assessment was based on a detailed field inspection and evaluation of all of the marina and boat operations in Pago Pago Harbor. This work further describes, as in the previously referenced documents, that Pago Pago Harbor is first and foremost an industrial/commercial harbor where vessel traffic and activity is composed almost entirely of tuna cannery longliners and purse seiners, cargo ships, and oil tankers.

There are only 65 small boats stored on the water, for which there are no marina-specific issues that require special management measures at this time. The recreational boats include small sailboats, dinghies, and racing long boats. Specifically, the assessment found that the fish waste, liquid material, petroleum control, boat cleaning, maintenance of sewage facilities, and boat operation measures do not apply to the Harbor because the activities covered by these measures are not present to any significant degree in the marina, and consequently will not cause any significant adverse effects to living coastal resources or human health. For example, the major cleaning of boat hulls, if it occurs, will not take place in the marina, but on land at a commercial dry dock. The assessment notes that littering in the Harbor is a problem, but that it is not directly tied to boats in the marina. The ASG is attempting to curb littering throughout the Territory.

### **HYROMODIFICATION**

**CONDITION:** Within three years, American Samoa will include in its program (1) management measures in conformity with the 6217(g) guidance for channelization and channel modification, and eroding streambanks and shorelines; (2) a process to improve the physical and chemical characteristics of surface waters and restore instream and riparian habitat in existing modified channels; and (3) a process to stabilize eroding streambanks and shorelines causing nonpoint problems that are not reviewed under existing authorities.

**DECISION:** American Samoa has satisfied this condition.

**RATIONALE:** EPA and NOAA find that the ASWQS, as amended, satisfy the management measures for channelization and channel modification and eroding streambanks and shorelines required by this condition. Specifically, Section 24.0208(f)(1), (2), and (3) of the ASWQS address the evaluation of hydromodification impacts, project planning, design, and BMP use as well as operation and maintenance in relation to the “physical and chemical characteristics of

surface waters as well as instream and riparian habitat.”

The Territory has completed several planning studies that address the measures to improve the physical and chemical characteristics of surface waters and restore instream and riparian habitat in existing modified habitats; and to stabilize eroding streambanks and shorelines causing nonpoint problems that are not reviewed under existing authorities.

EPA and NOAA find that the combined management measures including those generated from the Territorial Watershed Restoration Action Plans, the Wetlands Restoration and Enhancement Plan, the proposed Hydromodification Study, and the Watershed Interagency Committee satisfy the processes identified in these conditions. These activities have been described in “Summary of Actions to Meet the Section 6217 Watershed Protection and Existing Development Management Measures in American Samoa,” provided to EPA and NOAA in 2001.

### **MONITORING and STRATEGY AND EVALUATION OF BACKUP AUTHORITIES**

**CONDITION:** Within one year, American Samoa will include in its program a monitoring plan that enables the Territory to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

**CONDITION:** Within one year, American Samoa will develop a strategy to implement the management measures for agricultural erosion and sediment control, confined animal facilities, nutrient management as it applies to animal waste, marina and boat operation and maintenance, and marina stormwater management throughout the 6217 management area. This strategy will include a description and schedule for the specific steps the Territory will take to ensure implementation of the management measures; describe how existing or new authorities can be used to ensure implementation where voluntary efforts are unsuccessful; and identify measurable results which, if achieved, will demonstrate the Territory’s ability to achieve implementation of the management measures using the described approach.

In order to evaluate the adequacy of this strategy, American Samoa will also develop and apply credible survey tools to demonstrate the ability of the Territory’s approach to achieve implementation for these management measures. The use of credible assessment techniques is necessary in order for NOAA and EPA to evaluate, at the end of the three year period described in the March 16, 1995 guidance issued by NOAA and EPA entitled *Flexibility for State Coastal Nonpoint Programs*, whether the Territory’s approach has been successful or whether new, more specific authorities will be needed.

**DECISION:** American Samoa has satisfied these conditions.

**RATIONALE:** The ASEPA has developed and implemented the “American Samoa Coastal

Nonpoint Source Monitoring Strategy,” (May 2002) which addresses both of the above conditions. NOAA and EPA find the monitoring plan to be well conceived, practical and enforceable, and believe it can specifically address the effectiveness of the Nonpoint Source Control Program, including BMP effectiveness.

The strategy has the stated monitoring goal of to assess over time the success of nonpoint source control management measures in reducing pollution loads and improving water quality. To achieve this goal ASEPA has two primary objectives:

1. To determine trends in water quality by tracking changes in designated use support for the watersheds of American Samoa. The designated use support determinations are the aquatic life in streams, aquatic life in ocean, fish consumption, recreation, and drinking water, and whether these uses are fully supported, threatened, partially supported, or not supported. Baseline monitoring, and the subsequent trend monitoring provide the data and system to develop the spreadsheets for this information.
2. ASEPA’s second objective is to evaluate the effectiveness of BMPs for improving water quality and restoring impaired uses using the information from objective 1. This objective will be achieved through effectiveness monitoring, which focuses on selected management measures, as well as implementation monitoring, which tracks management practices by each watershed and source category, such as erosion and sediment control, CAFO waste management, and pesticide management. Implementation monitoring is accomplished by responsible agencies conducting site visits to farms or villages or construction sites that have instituted best management practices. This information is tracked by ASEPA and correlated with the development of the baseline and trend monitoring data.

Utilizing their coastal nonpoint source monitoring strategy, ASEPA will be able to assess the extent to which implementation of management measures is reducing pollution loads and improving water quality over time. As discussed in ASEPA’s goal and objectives, the baseline data collected during baseline monitoring, along with data collected in the trend monitoring effort, will support designated use trend analysis. ASEPA considers designated use support to be fundamental to understanding the status and impacts to water quality for each watershed. On a separate system, BMP implementation will be tracked using data collected during effectiveness monitoring and implementation monitoring. Ultimately, a spreadsheet will track trends in designated use support, along with BMP implementation by source category, on a watershed-by-watershed basis. From these trends, an evaluation of the management measures can be made.

By employing a watershed-by-watershed tracking system, ASEPA has successfully integrated this strategy with its Watershed Protection Plan, which then contributes to the implementation of the ASCNPCP. The total surface area of American Samoa is 76.1 sq miles and this small surface

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area has been divided by ASEPA into 41 watersheds, with an average size of approximately 1.5 sq. miles per watershed. ASEPA's water quality monitoring program (coastal and stream), along with other ASG agency monitoring activities concerning coral, fish, and benthic populations, covers 37 out of the 41 watersheds, and also covers 99% of the population of American Samoa. Therefore, tracking on a watershed scale is fully adequate to meet this management measure's monitoring goals and objectives, and fit nicely with the restoration activities that have been implemented under the watershed protection plan.

The ASEPA's coastal nonpoint source monitoring strategy measures overall program effectiveness and then documents the associations between management measure implementation and trends in water quality, and then accounts for the associations with a general description of the primary mechanism. These monitoring efforts (baseline, trend, effectiveness, implementation) should assess over time the success and effectiveness of NPS management measures in reducing pollution loads and improving water quality.