ATTACHMENT 1

Ultra-Drain Guard

Part# 9217 / 9356	Oil & Sediment Model, 1-Pack	Part# 9376	Ultimate Model, 1-Pack
Part# 9218	Oil & Sediment Model, 10-Pack	Part# 9377	Ultimate Model, 10-Pack
Part# 9393	Oil & Sediment Model, High Capacity, 1-Pack	Part# 9378	Recycled Model, 1-Pack
Part# 9219 / 9358	Oil & Sediment Plus Model, 1-Pack	Part# 9379	Recycled Model, 10-Pack
Part# 9220	Oil & Sediment Plus Model, 10-Pack	Part# 9397	Heavy Metal Model, 1-Pack

INSTALLATION AND MAINTENANCE INSTRUCTIONS

Installation:

1. Remove catch basin grating
2. Clean dirt and debris from grating ledge
3. Insert Drain Guard. If using the Ultra-Drain Guard High Capacity Model, Part# 9393, Ultra-Drain Guard Retainers must be used – see below for installation instructions
4. Reinstall grate. To insure maximum effectiveness, Drain Guard skirt should be secured (pinched) between grating and ledge.
5. Cut the excess fabric off with a blade or knife if desired.

Installation with optional Ultra-Drain Guard Retainers (Part# 9237 / 9238)

- Follow steps 1 and 2 above. Insert Retainer through handling straps of Drain Guard. (Each Retainer should be holding two straps).
- Insert Drain Guard, placing Retainers across basin opening so that flat plates lay on grating ledge.
- Follow steps 4 and 5 above.

Maintenance and disposal:

1. The Ultra-Drain Guard filters are designed to be used for 3 to 6 months under normal conditions. Where heavy contamination is present the unit will have a reduced life expectancy. When the unit has collected about 6 inches of sediment it is recommended that it be replaced. The unit should also be replaced if free oil can be seen floating and is not being absorbed. The Ultra-Drain Guards should be inspected on a regular basis.
2. Dispose of unit in accordance with applicable Federal, state and local environmental laws and regulations. The user is solely responsible for compliance with maintenance and disposal laws and regulations. The manufacturer or seller assumes no responsibility for proper or improper maintenance or disposal.
3. Part# 9393 (High Capacity model) is equipped with two lifting straps to facilitate in removal of the Ultra-Drain Guard using a forklift or other lifting device, as this model can hold up to 300 lbs. of sediment.

Other Stormwater Management Products are available from UltraTech. Please call us at (800) 353-1611 for a complete catalog or visit us on the web: www.StormwaterProducts.com or for more information on our complete line of environmental containment, spill response, decon and facility protection products. Please visit us on the web: www.SpillContainment.com

ULTRATECH INTERNATIONAL, INC.

Ultra-Drain Guards®
Specifications

Material Specifications

Properties	ASTM Test	Value
Material: Non-woven, Polypropylene Geotextile		
Grab Tensile	D 4632	205 lbs
Elongation	D 4632	50%
Trapezoid Tear	D 4533	80 lbs
Puncture	D 4833	525 lbs
CBR Puncture	D 6241	600 lbs
Mullen Burst	D 3786	420 psi
Permittivity	D 4491	1.5 sec^{-1}
A.O.S. (U.S. sieve no.) / Microns	D 4751	80 / 180
UV Stability (strength retained %) 500 hrs	D 4355	70%
Fabric Weight (oz/yd2) (typical)	D 5261	8 oz/yd^2
Flow (through material)	D 4491	90 gpm/ft^2
Flow (bypass ports gpm) *		770 gpm
Flow (bypass ports cfs) *		1.7 cfs

* Larger bypass flow rate designs are available

Unit Specifications

Model	Oil Capture (Gal)	Sediment Capture (lbs)	Collection Area (dia x depth)	Flow Rate (gpm)	Dimensions
Oil & Sediment[2] Part # 9217	.87	40	10" x 18"	500	48" x 36" x 18"
Oil & Sediment[2] Part # 9356	1.55	40	10" x 18"	900	60" x 60" x 18"
Oil & Sediment Plus[2] Part # 9219	1.38	40	10" x 18"	500	48" x 36" x 18"
Oil & Sediment Plus[2] Part # 9358	2.06	40	10" x 18"	900	60" x 60" x 18"
Trash & Debris Part # 9227	----	40	10" x 18"	500	48" x 36" x 18"
Ultimate[3] Part # 9376	1.57	40	10" x 18"	500	48" x 36" x 38"
High Capacity Part # 9393	1.9	300	24" x 24"	1000	60" x 60" x 24"
Adjustable Frame Model Part# 8930	1.26	40	10" x 18"	500	Varies

UltraTech International, Inc. · 11542 Davis Creek Court, Jacksonville, Florida 32256 USA
(800) 353-1611 · 1-904-292-1611 · stormwaterproducts.com

ATTACHMENT 2

Title: Storm Water Pollution Prevention Plan

Approval:

	Signature	Date
Prepared by: Winston R. Esteves PE,CPESC Environmental Consultant		
Revised by: Hector M. Ávila Sr. Environmental Coordinator		20/04/2017
Approved by: Ramiro Rivera Maintenance Manager		04/20/2017
Approved by: Elias Sostre Operations Manager		5/9/2017
Approved by: Manuel Mata Plant Manager		20/04/2017

Distribution list:

1. Environmental
2. Material Handling Team Leader
3. Control Room
4. Maintenance Team Leader

Supersedes August 2011 / 2012 / 2014 / 2015 SWPPPs

March 2017

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Figure No. 1: Location Map
Figure No. 2: Coal-fired Power Plant Site Map
Figure No. 3: Marine Dock Site Map

APPENDIXES

Appendix No. 1: Storm Water BMPs Maintenance Matrix

WORKSHEETS

Worksheet No. 1: Pollution Prevention Team Members
Worksheet No. 2: List of Significant Spills and Leaks
Worksheet No. 3: Non-Storm Water Discharge Assessment and Certification
Worksheet No. 4: Storm Water Pollutant Source Identification
Worksheet No. 5: Storm Water Quarterly Routine Facility Inspection Form
Worksheet No. 6: Storm Water Quarterly Visual Assesments Form
Worksheet No. 7: Annual Report Form

ATTACHMENTS

Attachment No.1: Notice of Intent / EPA Acknowledgement
Attachment No.2: Permit Eligibility Documentation
- Endangered Species
- Historic Places
Attachment No.3: 2015 MSGP
Attachment No.4: Record of Amendments
Attachment No.5: Training Records
Attachment No.6: Routine Facility Inspections
Attachment No.7: Visual Assessments
Attachment No.8: Monitoring Data
Attachment No.9: Corrective Actions
Attachment No.10: Other Documentation

I. Introduction

A. Facility Information

AES Puerto Rico (AES-PR) is a bituminous coal-fueled power plant that generates and sells electricity to the Puerto Rico Electric Power Authority (PREPA) with a total power generation capacity of 454 Megawatts (MW); this represents approximately 15% of the electricity consumed on the island. AES-PR also produces steam and a manufactured aggregate known as Agremax.

AES-PR is located on an 85 acre tract of land owned by AES Puerto Rico, LP. It is bordered to the north by a pharmaceutical facility (TAPI Puerto Rico, Inc.-TAPI) and vacant land owned by the Puerto Rico Land Administration (PRLA); to the south by wetlands and Bahia Las Mareas; to the east by the former Chevron Phillips Chemical Puerto Rico Core, LLC (CPC) facilities; and to the west by AES Ilumina and PRLA vacant land. The facility owned and operated by AES-PR is composed of a coal-fired power plant and an ancillary marine dock that is not contiguous to the main power plant. It also occupies associated rights-of-way for elevated conveyors, transmission lines, make-up water supply lines, process steam piping and service/access roads. The facility operates under Standard Industrial Classification (SIC) Code No. 4911- Electric Services.

The physical address of this facility is:

AES Puerto Rico, LP
Km 142.0, State Road PR 3
Jobos Ward
Guayama, Puerto Rico

The facility representative and the postal address are:

Hector M. Avila Caballero
Sr. Environmental Coordinator
AES Puerto Rico, LP
P.O. Box 1890
Guayama, PR 00785

Figure No. 1 is the AES-PR Location Map that shows the body of water that could be affected by its discharge; the storm water discharges of the main facility drain south towards a wetland area; the dock facility drains directly to Bahia Las Mareas. The AES facilities are completely fenced and gated and include a power plant building, office / storage and maintenance buildings, open paved parking areas, cooling tower, open coal and manufactured aggregate stockpile areas, limestone storage dome, manufactured aggregate / coal pile runoff pond, a storm water runoff pond, a make-up water pond, a cooling tower water pond, water treatment facilities, material and equipment storage areas and storm water collection and conveyance systems. The coal pile runoff pond collects non-industrial storm water runoff from the coal stockpile, the limestone storage dome area, the manufactured aggregate stockpile and certain areas adjacent to these locations. The storm water runoff pond collects non-industrial storm water runoff. **Figures No. 2** and **No.3** are the Site Maps that show the layout and the location of the facility's main structures, storage areas, loading and unloading areas, location of storm water outfalls (3), patterns of storm water drainage and other information relevant to this Storm Water Prevention Pollution Plan (SWPPP).

B. Description of Industrial Activities

The main components of the power plant facility are two coal-fired circulating bed boilers and steam turbine units; air emissions control systems, a wet cooling tower, a water reuse and treatment system, and coal / limestone / ash / manufactured aggregate storage and handling systems. The operations of AES-PR marine dock are limited to bulk coal, limestone and manufactured aggregate handling operations and do not include vessel maintenance, equipment cleaning operations or material storage.

Bulk coal and limestone are delivered by marine vessel to the dock facility at the Las Mareas Harbor and transferred by a covered overland conveyor system to the power plant stockpiles area. Limestone can also be delivered by truck. Fly ash is removed from the facility by dry bulk tank trailers. Bottom ash in the form of manufactured aggregate is transferred by overland covered conveyor systems from the power plant to the dock facility and loaded into ocean vessels for marine transportation or removed from the facility by dump trucks. The marine dock receives approximately four coal shipments per month and four limestone shipments per year for the energy production operations. Manufactured aggregate is shipped off-site at least once per year.

All other plant consumables such as diesel fuel, oils, sulfuric acid, sodium hydroxide, lime, soda ash and urea are delivered by truck and stored in tanks or containers located within secondary containment areas.

C. Purpose

AES-PR has prepared and will implement this SWPPP according to good engineering practices and industry standards, the applicable storm water management regulations and the Multi-Sector General Permit (MSGP) for Industrial Activities, published by the US Environmental Protection Agency (EPA) on June 4, 2015. These regulations aim to prevent and control storm water pollution originating from rainwater discharges that come in contact with

pollutants present in exposed materials or industrial activities at certain facilities designated by their SIC Code. EPA has grouped the universe of affected industrial facilities into Sectors. With some exceptions, storm water discharges from parking lots, vegetated areas, and other non-industrial areas or activities within the affected facilities are not regulated under the 2015 MSGP. AES-PR is a coal power plant that generates and sells electricity to the PREPA. AES-PR also owns and operates ancillary marine dock facilities that are not contiguous to its main power generation plant. The AES-PR activities are covered under Sector O - Steam Electric Generating Facilities (SIC 4911-Electric Services).

The objectives of this SWPPP are:

- To identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activities from the AES-PR facility;

- To describe and ensure implementation of practices to minimize and control pollutants in storm water discharges associated with industrial activities from the facility; and

- To assure compliance with the terms and conditions of the 2015 MSGP.

This SWPPP intends to facilitate the process of evaluation of potential pollution sources at the AES-PR facility and the selection of appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff. The process involves four steps: (1) formation of a team of qualified facility personnel who will be responsible for implementing the SWPPP; (2) assessment of potential storm water pollution sources; (3) selection of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the SWPPP to prevent storm water contamination.

This SWPPP will be reviewed, modified and updated:

- If there is a change in design, construction, operation, or maintenance at the facility that would significantly affect the discharge or potential for discharge of pollutants from it;
- If the average of four quarterly sampling results exceeds an applicable benchmark;
- Within 14 calendar days of completing corrective action work that results in changes to any of the controls or procedures documented in this SWPPP; or
- Not later than 45 days after conducting the final routine facility inspection for the year.

II. Storm Water Pollution Prevention Team

A. Members, Roles and Responsibilities

The Storm Water Pollution Prevention Team (SWPPT) is a group of staff individuals responsible for assisting the plant management in developing, implementing, maintaining and revising the facility's SWPPP. The scope of activities and responsibilities of the SWPPT include:

- Identifying of potential storm water pollution sources at the facility;
- Identifying and implementing of Best Management Practices (BMPs) for each potential storm water pollution source identified at the facility;
- Identifying potential spill sources;
- Establishing storm water incident reporting procedures;
- Completing SWPPP inspections and record keeping;
- Reviewing environmental incidents to determine and implement necessary changes to the SWPPP;
- Establishing SWPPP training requirements for facility personnel;
- Evaluating the effectiveness of the SWPPP periodically;
- Making recommendations to management on SWPPP-related matters; and
- Reviewing changes in operational procedures, new processes and projects to determine their impact on the SWPPP.

Worksheet No.1 is a list of the SWPPT members responsible for the development and implementation of this SWPPP. This Worksheet also includes a brief description of each member's responsibilities.

III. Description of Potential Pollutant Sources

A. Site Map

Figures No. 2 and **No.3** are the Site Maps that have been developed for the coal-fired power plant and the marine dock facilities and show the general information required by the 2015 MSGP, including the additional requirements for Sector O, including but not limited to: main buildings and structures, potential storm water pollutant sources, fuel storage areas, loading and unloading areas, materials storage areas, waste storage areas, the location of storm water outfalls, patterns of storm water drainage and locations where significant materials or industrial activities are exposed to rainfall and runoff. There are three storm water outfalls at AES-PR: outfall serial 001 located at the at the marine dock area, outfall serial 002 located at the southeast corner of the power plant and outfall serial 003 at the west side of the power plant.

Significant materials or industrial activities are not exposed if they are protected by a storm resistant shelter to prevent exposure to rain and/or runoff. Significant materials include, but are not limited to the following: raw materials, fuels, solvents, detergents, plastic resin pellets, finished materials, raw materials used in food processing or production, hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), any chemical that the facility is required to report under the Emergency Planning and Community Right to Know Act Section 313, fertilizers, pesticides, scrap materials, waste products, cooling tower mist or blow downs, exhaust vents, and salt or coal storage.

The significant materials handled at AES-PR include coal, limestone, manufactured aggregate, fly ash, diesel fuel, oils, sulfuric acid, sodium hydroxide, lime, soda ash, urea, herbicides, scrap equipment and metals and sanitary wastes.

The main pollutants that could be discharged through the existing storm water system are suspended solids, pH, metals, herbicides, fecal coliforms,

nutrients and hydrocarbons. Suspended solids can originate from wind or water erosion of ground surfaces, stockpile areas and vehicle tracking onto access roads; pH can originate from the loading / unloading / storage / transfer operations. Hydrocarbons can originate from the loading / unloading / storage / transfer operations oil or fuel leaked or released from machinery and/or vehicles; fecal coliforms and nutrients can originate from overturned portable toilets and exposed urea; metals can originate from scrap yards and uncovered dumpsters; herbicides used around the site's perimeter fence, the switchyard and other areas can also be carried off by storm water runoff if improperly applied.

B. Potential Pollutant Sources

This section describes the assessment of the risk potential that exposed sources of pollution pose to storm water quality. It includes activities, materials, and physical features of the facility that have a potential to contribute significant amounts of pollutants to storm water.

Table 1 is a list of industrial activities at AES-PR. The pollutant sources and pollutant constituents include:

Table 1 Potential Pollutant Sources

Activity	Pollutant Source	Pollutant
Coal/ limestone/ash/ manufactured aggregate stockpiling and transfer	Fugitive dust, wind erosion, water erosion, vehicle tracking	Particulate matter, Total Suspended Solids (TSS),metals
Fuel and oil loading/unloading/ storage and transfer	Spills and leaks	Hydrocarbons
Chemicals loading/unloading/storage and transfer	Spills and leaks	pH, nutrients
Heavy equipment maintenance area	Spills and leaks	Hydrocarbons
Portable toilets	Spills and leaks from overturned units	Fecal coliforms, nutrients
Herbicide application	Incorrect application	Herbicides
Scrap yard and solid waste storage	Exposed equipment, scrap and wastes	Hydrocarbons, metals
Cooling tower	Windblown mist and foam	pH

C. Significant Spills and Leaks

Table 2 describes the areas of the facility where potential significant spills and leaks that could contribute pollutants to the site's storm water could occur and the outfalls likely to be affected by such spills.

Table 2 Areas Where Potential Spill/Leaks Could Occur

Location	Outfalls
Dock Area	001
Chemical storage tanks	003
Heavy equipment maintenance area	003
Boiler / turbine lube oil tanks and reservoirs	003
Electrical switchyard	003
Oil drums storage shed	003
Fuel unloading and storage area	003

Worksheet No.2 describes significant spills and leaks of oil, toxic, or hazardous pollutants that have occurred in the past 3 years at exposed areas or that drained to a storm water conveyance.

Note: no significant spills or leaks of oil, toxic or hazardous pollutants have occurred at the facility. Significant spills include but are not limited to releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act or Section 102 of CERCLA. Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

D. Non- Storm Water Discharge Assessment and Certification

Visual inspections of storm water outfalls during dry weather will be used to determine if non-storm water discharges exist. Only precipitation runoff or water that could be classified as storm water can be discharged from this facility. The non-storm water discharges assessment certification required by the MSGP is included in **Worksheet No. 3**.

E. Salt Storage

AES-PR does not have salt storage piles.

F. Sampling Data

Storm water discharge sampling data collected by AES-PR during the 2008 MSGP permit term is summarized and presented in **Attachment 1**.

G. Authorized Non-Storm Water Discharges

The MSGP authorizes the following non-storm water discharges:

- Discharges from firefighting activities;
- Fire hydrant flushings;
- Potable water, including waterline flushings;
- Uncontaminated condensate from air conditioners, coolers, compressors and outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with approved labeling;

- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building wash downs without detergents;
- Uncontaminated groundwater or spring water;
- Foundation or footing drains not contaminated with process materials; and
- Incidental windblown mist from cooling towers.

The sources of non-storm water discharges at AES-PR are the following:

- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building wash downs without detergents;
- Incidental windblown mist from cooling towers.

H. Prohibited Non-Storm Water Discharges

The MSGP prohibits the following non-storm water discharges for Sector O: non-storm water discharges subject to effluent limitations, storm water discharges from ancillary facilities not contiguous to a steam electric power generating facility, storm water discharges from gas turbine facilities, combined-cycle facilities where no supplemental fuel oil is burned, and cogeneration facilities utilizing a gas turbine.

None of the prohibited non-storm water discharges above are present at the AES-PR facilities.

IV. Storm Water Controls

AES-PR has developed and implemented storm water management controls also known as Best Management Practices (BMPs) based on the potential sources of pollutants identified at the facility. The following includes a brief description of the BMPs that already have been adopted:

A. Exposure Minimization

- Coal, limestone and manufactured aggregate are transported in covered conveyors;
- Limestone is stockpiled indoors;
- Oil drums are stored indoors;
- Heavy equipment and vehicle maintenance is performed under cover;
- Grading, berming, or curving in process and material storage areas;
- Spills and leaks are promptly cleaned using dry methods;
- Drip pans and absorbents are placed under or around leaky vehicles and equipment.
- All waste storage containers exposed to storm water are covered with lids or rollup covers.
- Zero Liquid Discharge (ZLD) salts waste containers will be placed inside secondary containment at all times.
- Water treatment clarifier sludge waste containers will be placed in roll-off containers inside secondary containment at all times.
- Limestone silos are contained within a dike to prevent that materials gain access to storm water drains.

- CDS/ESP air pollution control equipment is contained within a dike to avoid that particulate material gains access to storm water drains.

- All equipment and materials stored outside will be covered with a storm-resistant covers.

- Chemical containers/totes will be stored indoors or within secondary containment areas.

B. Good Housekeeping

All areas that are potential sources of pollutants will be kept clean using measures such as sweeping at regular intervals, keeping materials in order and labeled, and storing materials in appropriate containers. Some additional procedures specific to the industrial sectors of the facility will include:

- Control of fugitive dust emissions from coal handling areas and reduction of tracking of coal dust through the use of covered conveyors and washing the tires of vehicles in designated areas before they leave the stockpile area;

- Inspection of arriving delivery vehicles to ensure the overall integrity of the body or container and that they are not leaking;

- Containment curbs at fuel and chemical loading and unloading areas to contain spills;

- Impact, spill and overflow protection for above-ground liquid storage tanks;

- Spill Prevention, Control and Countermeasures (SPCC) Plan for bulk storage containers;

- Routine visual inspections of the structural integrity of all above-ground tanks and ancillary equipment that may be exposed to storm water;

- Oil-bearing equipment in the switchyard is provided with secondary containment;

- Inspection of manufactured aggregate and fly ash hauling vehicles for proper load cover, gate seal, and overall integrity of the container body;

- Immediate cleaning of spills in ash-loading areas;

- Draining fluids from equipment prior to storage at the scrap yard;

- Use of covered dumpsters in good condition for waste storage prior to pick up;

- Regular sweeping, cleaning and maintenance of all swales / drainage channels and impervious areas where particulate matter, dust or debris may accumulate e.g. loading and unloading and vehicle traffic areas.

- Removal of vegetative material from concrete swales and ditches once landscape maintenance is completed.

Solid materials which could be transported by storm water runoff and discharged to waters of the US include containers, packaging materials (foam, plastic, cardboard), disposable food containers, paper or plastic water cups, etc. To reduce the risk of discharging these solid wastes, the following good housekeeping practices will be followed:

- All waste materials accumulated onsite will be stored in a neat, orderly manner or in appropriate covered containers;

- Portable toilets will be located at least 25 feet away from storm water conveyance structures and anchored;

- If needed, wind barriers, trash interceptors or other similar devices will be used to intercept waste, garbage and debris that are blown by wind or floated by storm water runoff.

C. Maintenance

AES-PR has a preventive maintenance program that includes all mechanical equipment used for storm water management at the facility.

Some of the elements included in the program are:

- Identification of equipment, systems and facility areas that must be inspected;
- Schedule for periodic inspections;
- Maintenance of complete records;
- Work-order generation to track and fix equipment problems;
- Inspection and maintenance (repair and cleaning) of storm water management equipment (e.g. meteorological stations, automatic samplers, water tank truck, sweeper, sprinkler guns, water sprays);
- Inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures, resulting in discharge of pollutants to storm water;
- Maintenance of facility equipment and systems; and
- Visual inspection of areas.

These elements are used to prevent and detect conditions that may lead to discharges of pollutants to surface waters.

Equipment maintenance is performed under cover or inside building structures. Solvents, used oil and/or degreasers generated from these activities are collected and handled as hazardous waste or non-hazardous waste, as applicable. The amount of solvents and/or degreasers used is

minimal. No liquid materials are poured in the floor, floor drains, storm water drains and/or any sewer connection.

All BMPs identified in **Appendix 1** of this SWPPP will be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance will be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance will be scheduled and accomplished as soon as practicable. In the case of non-structural BMPs, the effectiveness of each BMP will be maintained by appropriate means (e.g., spill response supplies and trained personnel available).

D. Spill Prevention and Response

AES-PR has developed and implemented a SPCC Plan that identifies procedures that will be followed for cleaning up spills or leaks, how to report spills, how to work with an emergency, emergency telephone numbers, etc. The SPCC Plan also includes the emergency coordination team organization, responsibilities and procedures to respond to spill emergencies.

E. Erosion and Sediment Control

Structural erosion and sediment at control (E&SC) measures have been designed and implemented at the facility including the installation of erosion control blankets in erodible slopes, covered conveyors, a dedicated water truck to spray traffic areas, manufactured aggregate stockpile gabion retention wall, sprinkler system, concrete swales, a 14.5 million gallon no-discharge coal and manufactured aggregate runoff pond, a 1.9 million gallon storm water pond, reinforced silt fencing with sediment-filtering geotextile and a sediment trap for the coal stockpiles. Once a year AES-PR will evaluate the necessity and feasibility of providing additional structural systems e.g., storm water detention or retention structures, vegetated swales, velocity dissipation

devices, etc. to handle and improve storm water run-off quality. Any new systems added will be described in this Section

F. Management of Runoff

AES-PR has constructed an internal system to capture and reuse storm water runoff and eliminate industrial water discharges from its facility including a 14.5 million gallon no-discharge pond that collects runoff from the coal / manufactured aggregate stockpiles for reuse and a 1.9 million gallon storm water pond. Other runoff structural controls include grading and aggregate stabilization of perimeter roads and open areas, a catch basin and inlet at the north east corner of the property to divert off-site run-on, a berm along the AES east boundary with CPC, a grated inlet to intercept runoff before it leaves the facility at its southeast access gate, a berm along the north, south and west outside perimeter of industrial areas to prevent storm water discharges to the outside, a low wall along the perimeter of the cooling tower and a dedicated concrete channel within a larger concrete channel along a section of the AES west boundary to separate its storm water discharges from those of TAPI .

G. Salt Storage Piles

AES-PR does not have salt storage piles.

H. Employee Training

All employees that work in areas where significant industrial materials or activities are exposed to storm water or who are responsible for implementing activities necessary to meet the conditions of the 2015 MSGP, will be trained once per year in the components and goals of this Plan. Personnel responsible for the design, installation, maintenance and / or repair of controls, storage and handling of materials exposed to storm water, conducting inspections and monitoring and taking / documenting corrective

actions as required by this Plan will be trained. Documentation of these trainings will be kept with this Plan.

The first step in the implementation of this SWPPP will be to deliver training to personnel whose areas of responsibility can contribute to storm water contamination.

The training will include:

- Overview of the SWPPP;
- Spill response procedures, good housekeeping, maintenance and material management practices;
- Location of site controls and their maintenance;
- Pollution prevention procedures; and
- Conducting inspections, recording findings and taking corrective actions.

I. Non-Storm Water Discharges

As explained in Section III D. above, visual inspections of storm water outfalls during dry weather will be used to determine if non-storm water discharges exist. Only precipitation runoff or water that could be classified as storm water or non-storm water discharges authorized under the 2015 MSGP will be discharged from this facility.

J. Dust Generation and Vehicle Tracking

AES-PR has prepared and implemented a procedure to control the generation of dust and tracking of pollutants "SOP-CCP-004 Coal Combustion Residuals and Agremax™ Dust Control Plan". The following practices and techniques are among those that will be used to minimize fugitive dust and tracking of pollutants:

- Use of mobile sprinkler guns and water truck with water cannon at the manufactured aggregate stockpile area;
- Velocity limitations posting for vehicles moving within the facility;
- Immediate cleanup of spills in exposed areas to prevent washout by rain or offsite tracking of pollutants by vehicles;
- Removal of particulate matter from vehicles and equipment before movement onto paved roads;
- Load materials onto trucks in a manner that will prevent dropping of materials or debris onto roads;
- Secure and cover any materials to be transported to ensure that they do not become airborne during transportation; and
- Removal of material from paved roadways where material has been deposited.

K. Sector Specific Non-Numeric Effluent Limits

All non-numeric effluent limits for Sector O that are applicable to the AES-PR operations are discussed in the Good Housekeeping Section above. No pressure washing, blasting or painting of vessels, material storage, engine maintenance/ repair or dry dock activities take place at the AES-PR dock area.

V. Monitoring

The 2015 MSGP includes five types of analytical monitoring: quarterly benchmark, annual effluent limitations guidelines, state or tribal, impaired waters, and other monitoring. The following monitoring requirements apply to Sector O;

- Quarterly Benchmark Monitoring (MSGP Part 6.2.1)

Sector- Parameter	Benchmark Monitoring Concentration
O- Total Iron	1.0 mg/L

- Annual Effluent Limitations Guidelines Monitoring (MSGP Part 6.2.2)

Sector- Parameter	Effluent Limit
O(Coal Storage Pile Discharges)- TSS	50 mg/L
O(Coal Storage Pile Discharges)- pH	6.0 min - 9.0 max

NOTE: Coal storage pile runoff pond is mixed with manufactured aggregate and cannot be discharged.

- State or Tribal Specific Monitoring (MSGP Part 6.2.3) – None
- Impaired Waters Monitoring (MSGP Part 6.2.4) – None- for the adjoining wetlands, these are not impaired.
- Other monitoring required by EPA (MSGP Part 6.2.5) - Not applicable.

Applicable monitoring requirements apply to each outfall.

All required monitoring will be conducted in accordance with 40 CFR Part 136 analytical methods and performed on a storm event that results in an actual discharge that follows the preceding measurable storm event by at least 72 hours. For each monitoring event the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and the time (in days) since the previous measurable storm event will be recorded using on-site meteorological stations. A minimum of one grab sample must be collected at each outfall within the first 30 minutes of a measurable storm event.

VI. Inspections and Corrective Actions

AES-PR is subject to the following types of inspections under the 2015 MSGP:

- Routine Facility Inspections
- Quarterly Visual Assessments of Storm Water Discharges

The following inspection schedule and procedures will be followed:

- All inspections must be conducted by qualified personnel with at least one member of the SWPPT participating in the inspection and documented using **Worksheets No. 4-5** of this SWPPP.

- Routine facility inspections will be performed quarterly, during periods when the facility is in operation, by qualified personnel and at least one member of the SWPPT and documented using **Worksheet No. 4**.

- At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring.

- Visual assessments will be performed quarterly i.e. four times a year or every three months. The quarterly visual assessment periods are January 1-March 31; April 1-June 30; July 1-September 30; October 1-December 31.

- Visual assessment samples must be from each outfall during the first 30 minutes of discharge, collected in a clean, clear glass, or plastic container and examined in a well-lit area.

- Visual inspections must be performed and documented using **Worksheet No. 5**.

- Any corrective action(s) required as a result of any inspection required by the MSGP must be performed consistent with Part 4 of the MSGP and documentation kept with this SWPPP.

VII. Documentation/Certification of Permit Eligibility Related to Endangered Species and Historic Places

The 2015 MSGP requires that documentation be included with the SWPPP demonstrating that the facility is eligible to discharge storm water under its terms because the discharge or storm water discharge activities will not jeopardize endangered or threatened species or critical habitats designated under the Endangered Species Act (ESA) that are in proximity to AES-PR or have an effect on a property that is listed or eligible for listing on the National Register of Historic Places. This documentation is included in the Attachments Section of this SWPPP.

VIII. Copy of Permit Requirement

The 2015 MSGP requires that a copy of the permit be included in the SWPPP. The "acknowledgement" letter received from the NOI Processing Center is not the permit; it is essentially only the equivalent of a "receipt" for a facility's "registration" (NOI) to use the general permit authorizing to discharge storm water subject to the terms and conditions of the 2015 MSGP. Requiring a copy of the MSGP ensures that AES-PR personnel will have ready access to all permit requirements. Copy of the 2015 MSGP is included in the Attachments Section of this SWPPP.

IX. Reporting and Recordkeeping

All Notices of Intent (NOIs), Notices of Termination (NOTs), Annual Reports, Discharge Monitoring Reports (DMRs) and other reporting information must be submitted electronically to EPA using their NPDES eReporting Tool (NeT) or NetDMR system, as applicable.

All monitoring data collected must be submitted no later than 30 days after receiving complete laboratory results for all monitoring outfalls for the reporting period. Changes in monitoring frequency as specified in Part 7.4 of the MSGP must also be reported to EPA through the submittal of a "Change NOI" form using NeT.

The Annual Report, including all the information required by Part 7.5 of the MSGP, must be submitted to EPA by January 30th for each year of permit coverage.

Non-compliances which may endanger health or the environment must be reported orally within 24 hours to U.S. EPA Region 2 Caribbean Environmental Protection Division (CEPD) NPDES Stormwater Program, followed by a written follow-up report within five days of the oral report.

Reportable quantity spills must be reported as soon as having knowledge of them as required under Part 2.1.2.4.

Planned facility changes that could significantly change the nature or significantly change the nature or significantly increase the quantity of pollutants discharged must be notified to EPA no fewer than 30 days prior to making the changes.

Advance notice must be given to EPA of any changes which can be anticipated to result in noncompliance with MSGP requirements. Reports of compliance or noncompliance with progress reports, requirements or compliance schedules of the MSGP must be submitted no later than 14 days following each schedule date.

Other noncompliance not reported in the Annual Report, Compliance Schedule Report or 24-hour report must be reported at the time that the monitoring reports are submitted.

Relevant facts or information that you become aware of as not submitted or incorrectly submitted in a NOI must be promptly submitted to EPA

AES-PR will retain copies of this SWPPP, including any modifications, additional documentation requirements pursuant to Part 5.5, including documentation related to corrective actions, all reports and certifications required by the 2015 MSGP, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the facility's coverage under this permit expires or is terminated.

X. Management Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Signature_____ Date: 20/4/2017

Name: Manuel Mata
Plant Manager

Phone No. (787) 866-8117

Figure No. 1: Location Map

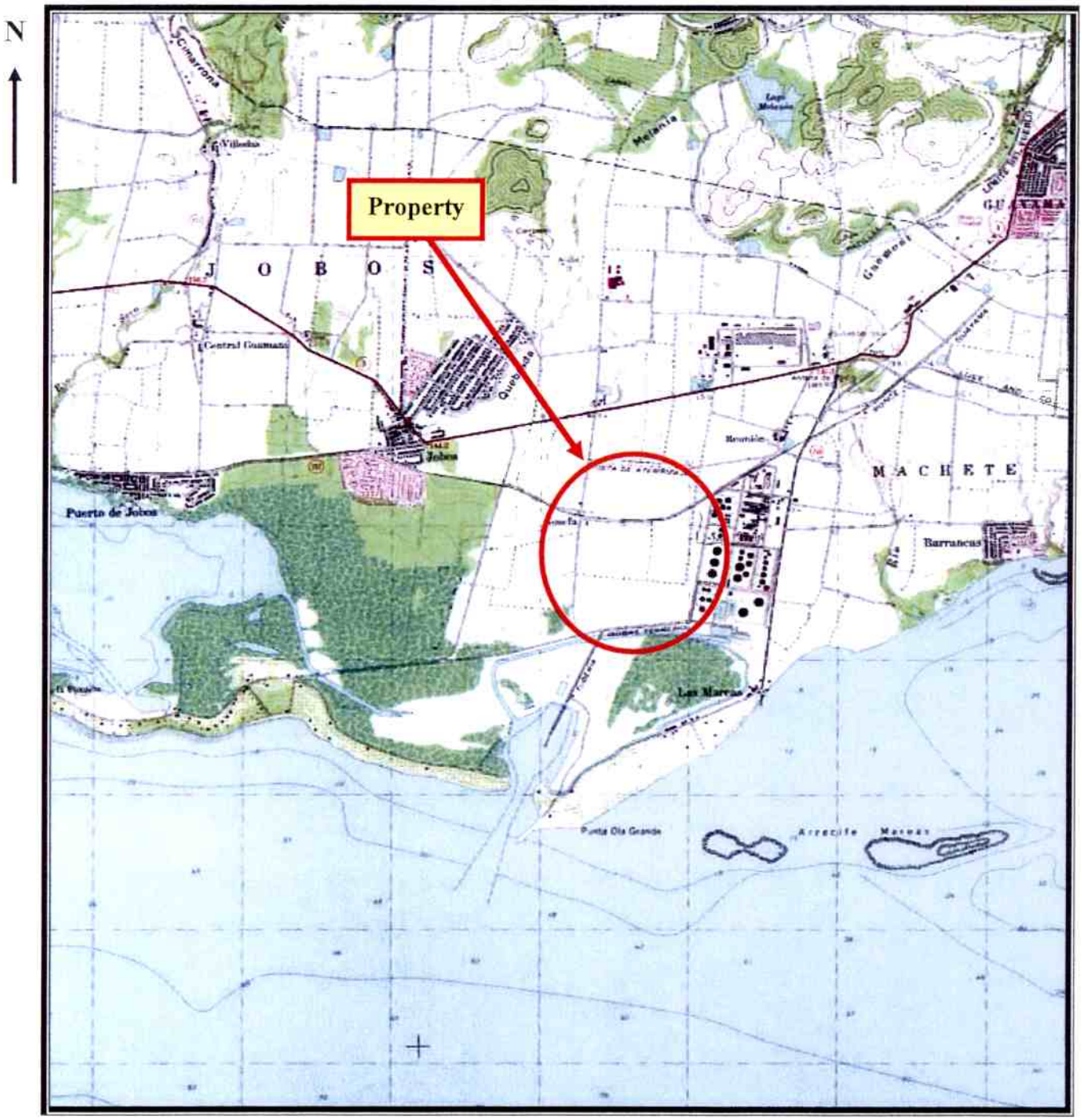


FIGURE 1 Site Location Map

Appendix No.1: Storm Water BMP's Maintenance Matrix

APPENDIX No.1 - STORM WATER BMP'S MAINTENANCE MATRIX

Task	BMP's	Area	Description	Area Owner	Frequency	Note
			OPERATION			
1	Storm Water concrete swale	East side next to switch yard up to power block area	Remove sediment and gravel accumulation.	OPER	Monthly	
2	Storm Water concrete swale	East side next to power block area (Unit 2)	Remove sediment and gravel accumulation.	OPER	Monthly	
3	Concrete swale	Starting west side of the cooling tower unit Storm Water Pond entrance	Remove sediment and gravel accumulation.	OPER	Monthly	
4	CDS/ESP Area Cleaning	Inside CDS/ESP floor area and between both units.	Maintain the area clean from ash, limestone, hydrated lime and other materials	OPER	Weekly	
5	Power block cleaning	Power block perimeter	Maintain the area clean from ash, refractory, limestone, hydrated lime and other materials	OPER	Weekly	
			COAL COMBUSTION PRODUCTS			
6	Storm Water concrete swale	East side next to urea transfer area until fly/bed ash silos	Remove sediment and gravel accumulation.	CCP	Monthly	
7	Storm Water concrete channel	Start at east side along the Agremax pile until south side were concrete channel connect with the inactive coal pile storm water channel	Remove Agremax, sediment and gravel accumulation.	CCP	Monthly	
8	Storm Water concrete channel	Starting in front of the limestone building until concrete channel front of active coal pile	Remove sediment and gravel accumulation.	CCP	Monthly	
9	Wheel washer	Front of limestone dome	Replace gravel and remove gravel to maintain it operational.	CCP	Weekly	
10	Truck washing area	Before entrance of paved road	Remove sediment and maintain the area stabilized to avoid tracking on paved roads.	CCP	Daily	
11	Gabion wall 10ft buffer zone	Along Agremax pile	Maintain a freeway of 10ft between the gabion wall and Agremax pile.	CCP	Daily	
12	Dust suppression	Agremax pile	Dust suppression from Agremax pile	CCP	Daily	
13	Street sweeper	All paved roads	Use of mechanical street sweeper to remove sediment and silt from road and ditches	CCP	Daily	

14	Street water suppression	All paved roads	Use of water truck to wet paved street to avoid fugitive dust.	CCP	Daily	
15	Grating	Next to guard shelter at gate #3	Remove sediment and gravel accumulation.	CCP	Monthly	
16	Grating	Next to Fly/Bed Ash silos	Remove sediment and gravel accumulation.	CCP	Weekly	
17	Grating	At sample point 002	Remove sediment and gravel accumulation.	CCP/ENV	Monthly	
			MATERIAL HANDLING			
18	Storm Water concrete channel	South west concrete channel bordered the inactive coal pile until sediment trap.	Remove coal, sediment and gravel accumulation.	MH	Monthly	
19	Storm Water concrete channel	Starting in front of the active coal pile until sediment trap	Remove coal, sediment and gravel accumulation.	MH	Monthly	
20	Replacement supersilt fence membrane	Along Inactive Coal Pile	Inspect and replace membrane as needed.	MH	Quarterly	
21	100 yr. Diversion Channel Cleaning	From north side of the cooling tower until wetland.	Clean and remove sediment and vegetation from the channel.	MH	Annually	
22	Sediment trap cleaning	Coal pile runoff pond	Remove all sediment retained.	MH	Quarterly	
23	Coal transfer dust suppression	Active coal pile	Maintain water suppression to avoid fugitive dust during coal transfer to active pile.	MH	Every Transfer	
24	Marine Dock Area Cleaning	Marine Dock area	Clean the marine dock area each time coal/agremax transfer finish	MH/CCP	Every Transfer	
25	Conveyor coal transfer inspection	Conveyor transfer system from dock area to active piles.	Maintain all conveyor cover and close all transfer houses doors.	MH/CCP	Every Transfer	

			MAINTENANCE			
26	Coal pile runoff pond sediment assessment	Coal pile runoff pond	Measure amount of sediment and determine if cleaning is needed.	MAINT/ENV	Annually	
27	Storm water pond sediment assessment	Storm water pond	Measure amount of sediment and determine if cleaning is needed.	MAINT/ENV	Annually	
28	Storm water sampler equipment maintenance	SP-001 (Marine Dock Area), SP-002 (Gate #3) and SP-003 (100 yr. Diversion Channel Outfall)	Storm Water Sampling equipment components verification and maintenance as needed.	MAINT/ENV	Quarterly or before rain event	
29	Replacement of catch basin inlet protection filters	Various (SWB-06, SWB-09 and SWB-10)	Replace catch basin inlet protection.	MAINT/ENV	Quarterly	
30	Sample point maintenance	SP-001 (Marine Dock Area), SP-002 (Gate #3) and SP-003 (100 yr. Diversion Channel Outfall)	Maintain sample point in compliance with the MSGP	MAINT/ENV	Quarterly	
31	Unpaved road gravel stabilization	Around the plant	Stabilize all unpaved roads and areas with gravel.	MAINT/ENV	Semiannualy	
			WAREHOUSE			
32	Off Site concrete channel	North side of the plant property until guard shelter.	Remove sediment, gravel and landscape material accumulation.	WAREHOUSE	After each maintenance	Landscape Contractor perform work
33	Off Site concrete channel	West side of the plant property until head wall	Remove sediment, gravel and landscape material accumulation.	WAREHOUSE	After each maintenance	Landscape Contractor perform work
34	Concrete ditch	Starting at Admin building parking until maintenance shop	Remove sediment and gravel accumulation.	WAREHOUSE	Monthly	
35	Earth ditch	From east side of the property until Outfall 002 head wall	Landscape maintenance.	LANDSCAPE CONTRACTOR	Monthly	WAREHOUSE
36	Earth ditch	From heavy equipment shop until 100 yr. channel outfall	Landscape maintenance.	LANDSCAPE CONTRACTOR	Monthly	WAREHOUSE
37	Maintain waste container with roll up cover	Waste containers areas	Roll up covers Installation at waste containers for scrap metal, regular waste and vegetation waste.	WAREHOUSE	Daily	

WATER TREATMENT						
38	Cooling tower foam inspection	Cooling tower east and west sides.	Inspect for foaming formation and possible overflow.	WT	Daily	
39	Water treatment sludge containers	Water treatment area	All sludge containers should be maintained inside secondary containment	WT	Daily	
40	Grating	Back of water treatment plant	Remove sediment and gravel accumulation.	WT	Monthly	

Worksheet No. 1: Pollution Prevention Team Members

POLLUTION PREVENTION TEAM MEMBERS	Worksheet No.1 Date: March 2017

Leader: Hector Avila Title: Environmental Coordinator

Office Phone: 787-866-8117 ext. 2266

Responsibilities: Storm Water Pollution Prevention and Spill Prevention Control and Countermeasures Plan Administrator. Responsible for all environmental aspects of this plan. Coordinate the development and implementation of this plan. Arrange plant wide training related to this plan, keep necessary records and reports. Ensure the facilities Structural and Non – Structural Best Management Practices (BMP's) are implemented.

Members:

(1) Pedro E. Labayen Title: Storm Water Compliance Coordinator

Office Phone: 787-866-8117 ext. 2215

Responsibilities: (i) overseeing the preparation, amendment, and certification of the SWPPP; (ii) providing and/or coordinating applicable environmental training to the Facility's personnel; (iii)conducting quarterly and routine inspections; (iv) assisting employees and/or contractors with the installation, maintenance and improvements of non-structural and structural BMP's (v) conducting comprehensive site inspections; (vi) determining if appropriate actions have been timely made to address compliance violations or to make improvements to BMP's; (vii) coordinating the pick-up and analysis of storm water samples; (viii) monitoring compliance with this Order; and (ix) preparing and submitting Reports to EPA.

(2) Ramiro Rivera Title: Maintenance Manager
Office Phone: 787-866-8117 ext. 2208

Responsibilities: Ensure the implementation and development of this plan.

(3) Elias Sostre Title: Operations Manager

Office Phone: 787-866-8117 ext. 2257

Responsibilities: Ensure the facilities operations "Best Management Practices" are followed.

(4) Marco Aresti Title: Material Handling Team Leader
Office Phone: 787-866-8117 ext. 2240

Responsibilities: Ensure the facilities "Best Management Practices" related to the receiving, storage and processing of coal, limestone and ash are followed.

(5) Carlos Gonzalez Title: Coal Combustion Products Team Leader

Office Phone: 787-866-8117 ext. 2239

Responsibilities: Ensure the facilities "Dust Control Plan" and "Best Management Practices" related to the management, processing and storage of coal combustion products are followed.

Other Team members:

1. Henrick Roman – Shared Services Supervisor
2. Carlos Alequin – Maintenance Team Leader

The Team will be responsible for the development and implementation of this Plan. Other key responsibilities are:

1. Implementing all MSGP and SWPPP requirements.
2. Defining and agreeing upon an appropriate set of goals for the facility's storm water management program.
3. Periodically update the SWPPP, whenever there is a change in the process design, construction, operation or maintenance of equipment and physical plant, which may have an effect on the potential for the discharge of pollutants to the environment.

Worksheet No. 2: List of Significant Spills and Leaks

AES Puerto Rico, LP
Storm Water Pollution Prevention Plan

LIST OF SIGNIFICANT SPILLS AND LEAKS	Worksheet No.2 Completed by: [illegible] Title: SW Compliance Coord Date: March 30, 2017

No significant spills and/or leaks of toxic or hazardous pollutants have occurred at the facility in the three years prior to the effective date of the permit.

Definition: Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.

1st Year Prior

Date (month/day/year)	Spill	Leak	Location (as indicated on site map)	Description				Response Procedure		Preventive Measures Taken or contemplated
				Type of Material	Quantity	Source, If Known	Reason	Amount of Material Recovered	Material No Longer Exposed to Storm water (True/False)	

2nd Year Prior

Date (month/day/year)	Spill	Leak	Location (as indicated on site map)	Description				Response Procedure		Preventive Measures Taken or contemplated
				Type of Material	Quantity	Source, If Known	Reason	Amount of Material Recovered	Material No. Longer Exposed to Storm water (True/False)	
				None						

3rd Year Prior

Date (month/day/year)	Spill	Leak	Location (as indicated on site map)	Description						Preventive Measures Taken or contemplated
				Type of Material	Quantity	Source, If Known	Reason	Amount of Material Recovered	Material No. Longer Exposed to Storm water (True/False)	
				None						

Worksheet No. 3: Non-Storm Water Discharge Assessment Certification

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION FORM
AES PUERTO RICO

Worksheet No. 3

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION (Complete once per year)			Completed by: Pedro E. Labayen Title: Storm Water Compliance Coordinator Date: March 6, 2017		
Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test of Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
03/06/17	001	Visual	No Water Discharge	Marine Dock Area	Pedro E. Labayen
03/06/17	002	Visual	No Water Discharge	Traffic of Material	Pedro E. Labayen
03/06/17	003	Visual	No Water Discharge	Heavy Equipment Traffic	Pedro E. Labayen

CERTIFICATION

I, Pedro E. Labayen, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type of print) Pedro E. Labayen / Storm Water Compliance Coordinator	B. Area Code and Telephone No. (787) 866-8117
C. Signature	D. Date Signed March 6, 2017

Worksheet No. 4: Pollutants Source Identification

POLLUTANTS SOURCE IDENTIFICATION

Worksheet No.4

Date: March 2017

This list identifies all storm water pollutant sources exposed to rainfall and/or runoff and describes existing management practices that address those sources. The third column, lists BMP options that can be incorporated into the Plan to address remaining sources of pollutants.

Storm water Pollutant Sources	Existing Management Practices	Description of New BMP Options
Coal/ limestone/ash/ manufactured aggregate stockpiling and transfer	Wheel washers for trucks, water spray at truck loading for dry ash. Sweeping, water truck. Sprinkle for Agremax pile, dome for limestone storage, covered conveyor for coal transfer, gabions wall for agremax pile, coal pile runoff pond for agremax and coal runoff, sediment trap for agremax and coal conveyance system.	
Fuel and oil loading/unloading/ storage and transfer	Secondary containment for truck unloading and for fuel oil storage tank.	
Chemicals loading/unloading/storage and transfer	Secondary containment for all chemical unloading areas. Secondary containment for all chemical containers and bulk storage.	
Heavy equipment maintenance area	Oil separator	
Portable toilets	Anchors	
Herbicide application	Use as required by law and by certified person.	
Scrap yard and solid waste storage	Roll over tarps for bulk waste storage, covers for all waste containers, tarp to cover scrap materials.	
Cooling tower	Secondary containment for cooling tower, proper chemical application to avoid foaming.	
Limestone silo	Secondary containment.	
ESP and CDS Area	Secondary containment.	
Oil Storage	Secondary containment	
Water Treatment Area	Secondary containment	

POLLUTANTS SOURCE IDENTIFICATION

Worksheet No.4

Date: March 2017

This list identifies all storm water pollutant sources exposed to rainfall and/or runoff and describes existing management practices that address those sources. The third column, lists BMP options that can be incorporated into the Plan to address remaining sources of pollutants.

Storm water Pollutant Sources	Existing Management Practices	Description of New BMP Options
Non-storm water stream. Condensate from steam line.	Visual inspection and cap all drains.	
Settleable solids in concrete channel.	Sweep street and water truck wash. Stabilization for all slopes.	
Off-site tracking of sediments.	Wheel washer and truck cleaning before leaving the plant.	
Debris from landscape maintenance.	Maintenance and inspection protocol for contractors or facility personnel must adhere during landscape maintenance.	
Significant spills	SPCC Plan	
Wind-blown dust	Sprinkles, water truck, speed limits, aggregate cover for roads.	

Attachment No. 1: Notice of Intent

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Note: This is a "smart form"; as you fill out the form, additional questions willl appear that you will need to answer.

Permit Information

1. What action would you like to take? *

Change an Existing Notice of Intent Form (e.g. Make changes to Facility information, Discharge information, Monitoring requirements, etc.)

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in the Facility Operator Information section of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in the Permit Information section of this form. Submission of this NOI also constitutes notice that the operator identified in the Facility Operator Information section of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in the Facility Information section of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

Operator Name (Organization Name) *

AES PUERTO RICO, LP

Operator Name as Noted by the NOI Preparer

AES Puerto Rico, L.P.

Provide the existing NPDES ID for the Notice of Intent that you would like to update and click the Submit button.

2. NPDES ID *

PRR053093: AES PUERTO RICO, LP

☒ Confirm NPDES ID: PRR053093: AES PUERTO RICO, LP *

3. Which type of change are you making? Options 2 and 3 cannot be selected together on the same form. If you need to make both Facility Monitoring Changes (option 2) and changes to Discharge Information, SIC Code/ Activity Code, Sectors/Subsectors, or Outfall information (option 3), please submit two separate forms. Submit any changes under option 3 before submitting Facility Monitoring Changes (option 2). If you have previously submitted Facility Monitoring Changes (option 2) for this NPDES ID, please contact your EPA Regional permitting authority before submitting changes under option 3.

☐ 1. Facility Operator Info (only for typographical errors or re-naming without change of ownership), Facility Name/Address, Other Permit Number, SWPPP Information, Estimated Area of Industrial Activity, MS4 Discharge, or Historic Preservation Criterion

☐ 2. Please indicate if any of the below monitoring changes applies to your facility. Reporting any of the below changes to your monitoring requirements will trigger changes to your monitoring requirements in EPA's NetDMR system (e.g., if you report below that you are no longer subject to benchmark monitoring for all parameters, your NetDMR form will no longer be prepopulated with your benchmark monitoring requirements).

* Note that if you have changes to your monitoring requirements that are not described below, you must contact your Regional permitting authority who will be able to change your monitoring requirements in NetDMR.

Options C and D are mutually exclusive and cannot be selected together or with any other option. Additionally, options A and E cannot be selected together. If you need to submit Facility Monitoring Changes that

☒ 3. Discharge Information, SIC Code/Activity Code, Sectors/Subsectors, Outfall information

☐ 4. Endangered Species Criterion

2. Select the state/territory where your facility is located *

PR

3. Is your facility located on Indian Country lands? *

◯ Yes ◉ No

4. Are you requesting coverage as a "federal operator" as defined in Appendix A? * ◯ Yes ◉ No

5. Are you a new discharger or a new source as defined in Appendix A? * ◯ Yes ◉ No

5a. Have stormwater discharges from your facility been covered previously under an NPDES permit? * ◉ Yes ◯ No

5aa. Provide your most current NPDES ID (i.e., permit tracking number) if you had coverage under EPA's MSGP 2008 or the NPDES permit number if you had coverage under an EPA individual permit *

PRR05BL65

6. Do you directly discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 3 water (Outstanding National Resource Water) (See Appendix L)? Your project will be considered to discharge to a Tier 3 water if the first water of the US to which you discharge is identified by a state, tribe, or EPA as a Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first water of the US to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. * ◯ Yes ◉ No

7. Does your facility directly discharge to a Federal CERCLA site listed in Appendix P? For the purposes of this permit, a permittee discharges to a Federal CERCLA site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system. * ◯ Yes ◉ No

8. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required? * ◉ Yes ◯ No

9. By indicating "Yes", I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges listed in Part 1.1.3. Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), during an inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. * ◉ Yes ◯ No

10. Master Permit Number

PRR050000

B: Facility Information

Identify the applicable sector and subsector of your primary industrial activity (See Appendix D) that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP, and the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code:

15. Sector *

SECTOR O: STEAM ELECTRIC GENERATING FACILITIES

16. Activity Code *

SE: Steam Electric Generating Facilities, including coal handling sites

17. Subsector

O1: Steam Electric Generating Facilities, including coal handling sites

☐ Check to add an additional Sector and Subsector.

22. Is your facility presently inactive and unstaffed? *

◯ Yes ◉ No

C: Discharge Information

3. Identify .. ..e following Effluent Limitation Guideline(s) apply to any of your discharges

40 CFR Part/Subpart: Part 423	Eligible Discharges: Coal pile runoff at steam electric generating facilities	Affected MSGP Sector: O	New Source Date: 11/19/1982, 10/8/1974[1]	Does your facility have any discharges subject to this effluent limitation guideline? * ◯ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
001	+	17.9369	-	66.1591

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Las Mareas Harbor

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ◯ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *
OIL AND GREASE	Oil & Grease

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *
TEMPERATURE	Temperature, water deg. centigrade

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *
TURBIDITY	Turbidity

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *
PH/ACIDITY/CAUSTIC CONDITIONS	pH

3. Has a TMDL been completed for this receiving waterbody? *

◯ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
002	+	17.9431	-	66.1492

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

D. Substantially Identical to Any Outfalls Listed Above? *

◯ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Wetland

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◯ Yes ◉ No

3. Has a TMDL been completed for this receiving waterbody? *

◯ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
003	+	17.9454	-	66.1538

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

D. Substantially Identical to Any Outfalls Listed Above? *

◯ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Wetland

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

○ Yes ◉ No

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Provide the following information about your outfall latitude longitude.

5. Latitude/Longitude Data Source *

GPS

6. Horizontal Reference Datum

NAD83

7. Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? *

○ Yes ◉ No

8. Do you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) (See Appendix L)? *

○ Yes ◉ No

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. 40 CFR 122.22 (d)

ro Labayen

om:	NeT@epa.gov
ent:	Saturday, October 03, 2015 7:34 PM
o:	Manuel Mata
c:	Pedro Labayen; lee.won@epa.gov; bosques.sergio@epa.gov; lescure.nasrin@epa.gov; emily@avanticorporation.com; farris.erika@epa.gov; Christiane@avanticorporation.com; bius.catherine@epa.gov
ubject:	EPA Multi-Sector General Permit (MSGP) Authorization is Active – AES Puerto Rico, L.P., NPDES ID: PRR053093, NeT Submission ID: MSGP-2851
Attachments:	AcceptedNewNOIReceipt.pdf

2015-10-03

Your Notice of Intent (NOI) requesting coverage for AES Puerto Rico, L.P., Road #3 km. 142 Jobos Ward Guayama PR 00784 under EPA's Multi-Sector General Permit (MSGP) has been accepted and authorization to discharge under the MSGP became effective at the conclusion of your 30-day waiting period, on 2015-10-03.

For tracking purposes, the following NPDES ID has been assigned to your **NOI: PRR053093**. Attached to this email, you will find a copy of your completed NOI form. To access your NOI in NeT, please visit: https://cdx.epa.gov/epa_home.asp.

; you know, the MSGP requires you to have developed a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting your NOI. The MSGP also includes specific requirements for implementing control measures (e.g., minimize exposure, good housekeeping, maintenance, spill prevention and response), conducting self-inspections and visual assessments of your discharges, taking corrective actions, and conducting staff training. You must comply with any specific requirements applicable to your industrial sector(s) in Part 8 and any state/tribal-specific requirements in Part 9 (see http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm). You are also required to submit an Annual Report in accordance with Part 7.5 of the MSGP that will contain the results from your past year's routine facility inspections, quarterly visual assessments, and corrective actions. Annual Reports must be submitted to EPA through NeT.

The MSGP includes five types of required analytical monitoring, one or more of which may apply to your discharge:

- Quarterly benchmark monitoring (see Part 6.2.1 and Part 8);
- Annual effluent limitations guidelines monitoring (see Part 6.2.2 and Part 8);
- State- or tribal-specific monitoring (see Part 6.2.3 and Part 9);
- Impaired waters monitoring (see Part 6.2.4); and
- Other monitoring as required by EPA (see Part 6.2.5).

Monitoring requirements in the MSGP (i.e., parameters required to be monitored and sample frequency) will be prepopulated on your electronic Discharge Monitoring Report (DMR) in EPA's NetDMR system, which is accessed at http://www.epa.gov/netdmr/. Where you have determined that no monitoring requirements apply to your discharge, there is no need to access the NetDMR system. In order to obtain access to this system, you must complete the electronic signature process. Please refer to the following guidance for information about submitting monitoring reports through NetDMR: http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm.

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Note: This is a "smart form"; as you fill out the form, additional questions willl appear that you will need to answer.

Permit Information

1. What action would you like to take? *

File a New Notice of Intent Form

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in the Facility Operator Information section of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in the Permit Information section of this form. Submission of this NOI also constitutes notice that the operator identified in the Facility Operator Information section of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in the Facility Information section of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

Operator Name (Organization Name)

Operator Name as Noted by the NOI Preparer

AES Puerto Rico, L.P.

2. Select the state/territory where your facility is located *

PR

3. Is your facility located on Indian Country lands? *

○ Yes ◉ No

4. Are you requesting coverage as a "federal operator" as defined in Appendix A? *

○ Yes ◉ No

5. Are you a new discharger or a new source as defined in Appendix A? * ○ Yes ◉ No

5a. Have stormwater discharges from your facility been covered previously under an NPDES permit? * ◉ Yes ○ No

5aa. Provide your most current NPDES ID (i.e., permit tracking number) if you had coverage under EPA's MSGP 2008 or the NPDES permit number if you had coverage under an EPA individual permit *

PRR05BL65

6. Do you directly discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 3 water (Outstanding Natural Resource Water) (See Appendix L)? Your project will be considered to discharge to a Tier 3 water if the first water of the US to which you discharge is identified by a state, tribe, or EPA as a Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first water of the US to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. * ○ Yes ◉ No

7. Does your facility directly discharge to a Federal CERCLA site listed in Appendix P? For the purposes of this permit, a permittee discharges to a Federal CERCLA site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system. * ○ Yes ◉ No

8. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required? * ◉ Yes ○ No

9. By indicating "Yes", I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges in Part 1.1.3. Any discharges not expressly authorized under the MSGP are not covered by the MSGP and they cannot become authorized by disclosure to EPA and/or a state via this Notice of Intent to be covered by the permit or by any other means (e.g., in the Stormwater Pollution Prevention Plan or during an inspection). If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. * ◉ Yes ○ No

10. Master Permit Number

PRR050000

A: Facility Operator Information

1. Operator Name (Organization Name) *

2. Street *

Road #3 km. 142 Jobos Ward

3. Supplemental Address

4. City *	5. State *	6. Zip Code *	7. Facility County or Similar Govt. Subdivision *
Guayama	PR	00784	Guayama

8. Phone (10-digits, No dashes) *	9. Extension	10. E-Mail *
7878668117		manuel.mata@aes.com

Operator point of contact information

11. First Name *	12. Middle Initial	13. Last Name *	14. Professional Title *
Manuel		Mata	Plant Manager

B: Facility Information

1. Facility Name *

AES Puerto Rico, L.P.

☒ Facility address same as facility operator address

2. Street/Location *

Road #3 km. 142 Jobos Ward

3. Supplemental Address

4. City *

Guayama

5. State *

PR

6. Zip Code *

00784

7. Facility County or Similar Govt. Subdivision *

Guayama

Latitude/Longitude for the facility:

8. Latitude (Decimal Degrees) *

+ 17.945983

9. Longitude (Decimal Degrees) *

- 66.151387

10. Latitude/Longitude Data Source *

Other

11. Horizontal Reference Datum

NAD83

12. What is the ownership type of the facility *

Corporation

13. Estimated area of industrial activity at your facility exposed to stormwater (to the nearest quarter acre) *

78

Identify the applicable sector and subsector of your primary industrial activity (See Appendix D) that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP, and the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code:

15. Sector *

SECTOR O: STEAM ELECTRIC GENERATING FACILITIES

16. Activity Code *

SE: Steam Electric Generating Facilities, including coal handling sites

17. Subsector

O1: Steam Electric Generating Facilities, including coal handling sites

18. Identify the applicable sectors(s) of any co-located industrial activity for which you are requesting permit coverage.

Sector

SECTOR Q: WATER TRANSPORTATION

Subsector *

Q1: Water Transportation Facilities

Add Sector

22. Is your facility presently inactive and unstaffed? *

○ Yes ◉ No

C: Discharge Information

1. Does your facility discharge into any saltwater receiving waters? *

◉ Yes ○ No

3. Identify if the following Effluent Limitation Guideline(s) apply to any of your discharges

40 CFR Part/Subpart: Part 423	Eligible Discharges: Coal pile runoff at steam electric generating facilities	Affected MSGP Sector: O	New Source Date: 11/19/1982, 10/8/1974[1]	Does your facility have any discharges subject to this effluent limitation guideline? * ○ Yes ◉ No

Outfalls

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *	
001	+	17.9369	-	66.1591	Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Las Mareas Harbor

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
OIL AND GREASE	Oil & Grease	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
TEMPERATURE	Temperature, water deg. centigrade	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
TURBIDITY	Turbidity	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
PH/ACIDITY/CAUSTIC CONDITIONS	pH	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *		
002	+	17.9431	-	66.1492	Lookup Receiving Waters Information	Delete Outfall

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Wetland

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

○ Yes ◉ No

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *		
003	+	17.9454	-	66.1538	Lookup Receiving Waters Information	Delete Outfall

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

Wetland

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

○ Yes ◉ No

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Add Another Outfall

Provide the following information about your outfall latitude longitude.

5. Latitude/Longitude Data Source *: GPS

6. Horizontal Reference Datum: NAD83

7. Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? *

○ Yes ◉ No

8. Do you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) (See Appendix L)? *

○ Yes ◉ No

D: Stormwater Pollution Prevention Plan (SWPPP) Information

SWPPP Contact Information

1. First Name *: Pedro

2. Middle Initial: E

3. Last Name *: Labayen

4. Professional Title *: Storm Water Compliance Coordinator

5. Phone (10-digits, No dashes) *: 7878668117

6. Extension:

7. E-Mail *: pedro.labayen@aes.com

8. Your current SWPPP or certain information from your SWPPP must be made available through one of the following two options. Select one of the options and provide the required information. *

Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.

☐ Option 1: Maintain a Current Copy of your SWPPP on an Internet page (Universal Resource Locator or URL).

☒ Option 2: Provide the following information from your SWPPP.

A. Describe your onsite industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning, cutting steel beams), and potential spill and leak areas. *

AES Puerto Rico (AES-PR) is a bituminous coal-fueled power plant that generates and sells electricity to the Puerto Rico Electric Power Authority (PREPA) with a total power generation capacity of 454 Megawatts (MW); this represents approximately 15% of the electricity consumed on the island. AES-PR also produces steam and a manufactured aggregate known as Agremax.
The main components of the power plant facility are two coal-fired circulating bed boilers and steam turbine units; air emissions control systems, a wet cooling tower, a water reuse and treatment system, and coal / limestone / ash storage and handling systems. The operations of AES-PR marine dock are limited to bulk coal, limestone and manufactured aggregate handling operations and do not include vessel maintenance,

equipmer ning operations or material storage.
Bulk coal and limestone are delivered by marine vessel to the dock facility at the Las Mareas Harbor and transferred by a covered overland conveyor system to the power plant stockpiles area. Limestone can also be delivered by truck. Fly ash is removed from the facility by dry bulk tank trailers. Manufactured aggregate is transferred by overland covered conveyor systems from the power plant to the dock facility and loaded into ocean vessels for marine transportation or removed from the facility by dump trucks. The marine dock receives approximately four coal shipments per month and four limestone shipments per year for the energy production operations. Manufactured aggregate is shipped off-site at least once per year.
All other plant consumables such as diesel fuel, oils, sulfuric acid, sodium hydroxide, lime, soda ash and urea are delivered by truck and stored in tanks or containers located within secondary containment areas.
The areas of the facility where potential significant spills and leaks could contribute pollutants to the site's storm water includes the water treatment chemical storage areas, heavy equipment maintenance area, boiler / turbine lube oil tanks and reservoirs, electrical switchyard, oil drum storage shed, fuel unloading and storage area, urea storage tanks and air pollution control chemicals storage area.

B. List the pollutants(s) or pollutant constituent(s) associated with each industrial activity exposed to stormwater that could be discharged in stormwater and/or in any authorized non-stormwater discharges listed in Part 1.1.3. *

The main pollutants that could be discharged through the existing storm water system are: suspended solids, pH, metals, herbicides, fecal coliforms, nutrients and hydrocarbons.

C. Describe the control measures you will employ to comply with the non-numeric technology-based effluent limits required in Part 2.1.2 and Part 8, and any other measures taken to comply with the requirements in Part 2.2 Water Quality-Based Effluent Limitations (see Part 5.2.4.1). *

Exposure Minimization
• Coal, limestone and manufactured aggregate are transported in covered conveyors;Limestone is stockpiled indoors; Oil drums are stored indoors; Heavy equipment and vehicle maintenance is performed under cover; Grading, berming, or curving in process and material storage areas; Spills and leaks are promptly cleaned using dry methods; Drip pans and absorbents are placed under or around leaky vehicles and equipment. All waste storage containers exposed to storm water will be covered with lids or rollup covers. Zero Liquid Discharge salts waste containers will be placed inside secondary containment at all times. Clarifier sludge waste containers will be placed inside secondary containment at all times. Limestone silos are contained within a dike to prevent that materials gain access to storm water drains. CDS/ESP equipment is contained within a dike to avoid material gain access to storm water drains. All equipment and materials stored outside will be covered with a storm resisting covering. Chemicals containers/totes will be stored indoors or in secondary containment.
Good Housekeeping
All areas that are potential sources of pollutants will be kept clean using measures such as sweeping at regular intervals, keeping materials in order and labeled, and storing materials in appropriate containers. Some additional procedures specific to the industrial sectors of the facility will include:
• Control of fugitive dust emissions from coal handling areas and reduction of tracking of coal dust through the use of covered conveyors and washing the tires of vehicles in designated facilities before they leave the stockpile area; Inspecting arriving delivery vehicles to ensure the overall integrity of the body or container and that they are not leaking; Containment curbs at fuel and chemical loading and unloading areas to contain spills; Impact, spill and overflow protection for above-ground liquid storage tanks; Spill Prevention, Control and Countermeasures (SPCC) Plan for bulk storage tanks; Routine visual inspections of the structural integrity of all above-ground tanks and ancillary equipment that may be exposed to storm water; Oil bearing equipment in the switchyard is provided with secondary containment; Inspection of manufactured aggregate and fly ash hauling vehicles for proper load cover, gate seal, and overall integrity of the container body; Immediate cleaning of spills in ash loading areas; Draining fluids from equipment prior to storage at the scrap yard; Use of covered dumpsters in good condition for waste storage prior to pickup; Regular sweeping, cleaning and maintenance of all swales / drainage channels and impervious areas where particulate matter, dust or debris may accumulate e.g. loading and unloading and vehicle traffic areas. Removal of vegetative material from concrete swales and ditches once landscape maintenance is completed.
Maintenance
AES-PR has a preventive maintenance program that includes all mechanical equipment and storm water management devices at the facility.
Some of the elements included in the program are: Identification of equipment, systems and facility areas that must be inspected; Schedule for periodic inspections; Maintenance of complete records; Work-order generation to track and fix equipment problems; Inspection and maintenance (repair and cleaning) of storm water management devices (e.g. dock PVC drain header and sediment trap) to ensure that solids are intercepted and retained prior to discharge); Inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures, resulting in discharge of pollutants to storm water; Inspection and replacement of storm water catch basin filters; Maintenance of facility equipment and systems; and Visual inspection of areas.
All BMPs identified in this SWPPP will be maintained in effective operating condition.

D. Provide a schedule for good housekeeping and maintenance (see Part 5.2.5.1) and a schedule for all inspections required in Part 4 (see Part 5.2.5.2). *

The following inspection schedule and procedures will be followed:
• All inspections must be conducted by qualified personnel with at least one member of the SWPPT participating in the inspection and documented
• Routine facility inspections will be performed quarterly, during periods when the facility is in operation, by qualified personnel and at least one member of the SWPPT and documented
• At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring.
• Visual assessments will be performed quarterly i.e. four times a year or every three months. The quarterly visual assessment periods are January 1-March 31; April 1-June 30; July 1-September 30; October 1-December

31.
• Visual assessment samples must be from each outfall during the first 30 minutes of discharge, collected in a clean, clear glass, or plastic container and examined in a well-lit area.

The following schedule for good housekeeping and maintenance will be followed:
• Remove sediment and gravel accumulation at storm water concrete channels around power generation area minimum on a monthly basis.
• Housekeeping to all power generation area and maintained clean from ash, limestone, hydrated lime and other materials on a weekly basis.
• Maintenance of concrete channels, grating, wheel washer and truck washing station at the coal combustion products area on a weekly basis, including replace gravel and remove gravel to maintain it operational.
• Daily use of the dust suppression system from Agremax pile.
• Daily use of mechanical street sweeper to remove sediment and silt from road and ditches.
• Replace catch basin inlet protection on a monthly basis.
• Daily use of water truck to wet paved street to avoid fugitive dust.
• Quarterly maintenance of the sediment trap, concrete channels and silt fence around the coal pile storage area.
• Provide water suppression and cleaning at the dock area in every coal transfer.
• Quarterly storm water sampling equipment components verification and maintenance as needed.
• Provide off site concrete channel cleaning after landscaping maintenance.
• Daily maintain waste container with roll up cover.
• All sludge containers should be maintained inside secondary containment.

E: Endangered Species Protection

1. Using the instructions in Appendix E of the MSGP, under which endangered species criterion listed in Part 1.1.4.5 are you eligible for coverage under this permit? *

Criterion C – Discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat

2. Provide a brief summary of the basis for the criterion selected in Appendix E (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service to determine no species in action area; implementation of controls approved by EPA and the Services). *

Implementation of controls approved by EPA.

a. What federally-listed species or federally-designated critical habitat are located in your "action area." *

Puerto Rican Broad-winged Hawk, Puerto Rican Plain Pigeon, Puerto Rican Sharp-shinned Hawk, Yellow-shouldered Blackbird.
Palo de Jazmin, Uvillo.
West Indian Manatee
Hawksbill Sea Turtle, Leatherback Sea Turtle, Puerto Rican Boa
Elkhorn Coral Critical Habitat
Staghorn Coral Critical Habitat

b. Using the Criterion C Eligibility Form, check which of the following is applicable to your facility and answer any corresponding questions. *

☐ I submitted my completed Criterion C Eligibility Form to EPA at least 30 days prior to submitting this NOI and agree to implement any controls that were determined by EPA to be necessary to ensure that my discharges and/or discharge-related activities will have no likely adverse affects on listed species and critical habitat.

☒ I submitted my completed Criterion C Eligibility Form to EPA at least 30 days prior to submitting this NOI and have not been notified of any additional controls necessary to ensure no likely adverse affects on listed species and critical habitat.

Date your Criterion C Eligibility Form was sent to EPA (in DD/MM/YYYY format) *

21 Jul 2015

* Note: After you submit your NOI and before your NOI is authorized, EPA may notify you if any additional controls are necessary to ensure your discharges have no likely adverse affects on listed species and critical habitat.

F: Historic Preservation

1. If your facility is not located in Indian country lands, is your facility located on a property of religious or cultural significance to an Indian tribe? *

○ Yes ◉ No

2. Using the instructions in Appendix F of the MSGP, under which historic properties preservation criterion listed in Part 1.1.4.7 are you eligible for coverage under this permit *

Criterion A - No subsurface stormwater controls

Certification Information

Certifier E-Mail *

manuel.mata@aes.com

☒ Confirm Certifier: manuel.mata@aes.com *

Attachment No. 2: Permit Eligibility Documentation

-Endangered Species

-Historic Places

Criterion C Eligibility Form

Instructions:

In order to be eligible for coverage under criterion C, you must complete the following form and you must submit it to EPA following the instructions in Section VII a **minimum of 30 days prior to filing your NOI for permit coverage.** After you submit your form, you may be contacted by EPA with additional measures (e.g., additional stormwater controls or modifications to your discharge-related activities) that you must implement in order to ensure your eligibility under criterion C.

If after completing this worksheet you cannot make a determination that your discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or designated critical habitat, you must submit this completed worksheet to EPA, and you may not file your NOI for permit coverage until you receive a determination from EPA that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat.

Note: Much of the information needed for this form can be obtained from your draft SWPPP which will be needed when you file your NOI.

SECTION I. OPERATOR, FACILITY, AND SITE LOCATION INFORMATION.

1) Operator Information

a) **Operator Name:** AES Puerto Rico

b) **Point of Contact**

First Name: Manuel **Last Name:** Mata

Phone Number: 787-866-8117

E-mail: manuel.mata@aes.com

2) Facility Information

a) **Facility Name:** AES Puerto Rico

b) **Check which of the following applies:**

☐ I am seeking coverage under the MSGP as a new discharger or as a new source

☐ I am seeking coverage under the MSGP as an existing discharger and my facility has modifications to its discharge characteristics (e.g., changes in discharge flow or area drained, different pollutants) and/or discharge-related activities (e.g., stormwater controls)

Indicate the number of years the facility has been in operation: _____ years

Provide your NPDES ID (i.e., permit tracking number) from your previous MSGP coverage: _____

☒ I am seeking coverage under the MSGP as an existing discharger and there are no modifications to my facility.

Indicate the number of year the facility has been in operation: 13 years

Provide your NPDES ID (i.e., permit tracking number) from your previous MSGP coverage: PRR05BL65

c) Facility Address:

Address 1: Road #3 km. 142 Jobos Ward

Address 2: _____

City: Guayama State: PR Zip Code: 00784

d) Identify the primary industrial sector to be covered under the 2015 MSGP:

SIC Code 4911 or Primary Activity Code ____

Sector O and Subsector O1

e) Identify the sectors of any co-located activities to be covered under the 201r MSGP:

Sector Q Subsector Q1

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

f) Estimated area of industrial activity exposed to stormwater: 78 acres

g) Provide a general description of the industrial activities that are taking place at this facility:

AES Puerto Rico (AES-PR) is a bituminous coal-fueled power plant that generates and sells electricity to the Puerto Rico Electric Power Authority (PREPA) with a total power generation capacity of 454 Megawatts (MW).

The facility is composed of a coal-fired power plant and an ancillary marine dock that is not contiguous to the main power plant.Bulk coal and limestone are delivered by marine vessel to the dock facility at the Las Mareas Harbor and transferred overland by a covered-elevated conveyor system to the power plant stockpiles area.

There are three storm water outfalls at AES-PR; outfall serial 001 at the marine dock area, outfall 002 located at the southeast corner of the power plant and outfall serial 003 at the west side of the power plant. The storm water discharges of the main facility drain south towards an onsite wetland area; the dock facility drains directly to Bahia Las Mareas.

3) Receiving Waters Information

List all the stormwater outfalls from your facility.				For each outfall, provide the following receiving water information:	
Outfall ID	Design Capacity (if known)	Latitude (decimal degrees)	Longitude (decimal degrees)	Name of the receiving water that receives stormwater from the outfall and/or from the MS4 that the outfall discharges to	Type of Waterbody (e.g., lake, pond, river/stream/creek, estuarine/marine water)
001		17.9369	-66.1591	Las Mareas Harbor	marine water
002		17.9431	-66.1492	Wetland	wetland
003		17.9454	-66.1538	Wetland	wetland
		___.____	___.____		
		___.____	___.____		

SECTION II. ACTION AREA

Ensure that your action area is described in Attachment 1, as required in Step 2.

SECTION III. LISTED SPECIES AND CRITICAL HABITAT LIST

Ensure that the listed species and critical habitat list is included in Attachment 2, as required in Step 3.

Review your species list in Attachment 2, choose one of the following three statements, and follow the corresponding instructions:

> ***Note:*** For the purposes of this permit, "terrestrial species" would not include animal or plant species that 1) spends any portion of its life cycle in a waterbody or wetland, or 2) if an animal, depends on prey or habitat that occurs in a waterbody or wetland. For example, shorebirds, wading birds, amphibians, and certain reptiles would not be considered terrestrial species under this definition. Please also be aware that some terrestrial animals (e.g., certain insects, amphibians) may have an aquatic egg or larval/juvenile phase.

☐ The species list includes only terrestrial species and/or their designated critical habitat. No aquatic or aquatic-dependent species or their critical habitat are present in the action area. **You may skip to Section IV of this form. You are not required to fill out Section V.**

☐ The species list includes only aquatic and/or aquatic-dependent species and/or their designated critical habitat. No terrestrial species or their critical habitat are present in the action area. **You may skip to Section V of this form and are not required to fill out Section IV.**

☒ The species list includes both terrestrial and aquatic or aquatic-dependent species and/or their designated critical habitat. **You must fill out both Sections IV and V of this form.**

SECTION IV. EVALUATION OF DISCHARGE-RELATED ACTIVITIES EFFECTS

Note: You are only required to fill out this section if your facility's action area contains terrestrial species and/or their designated critical habitat. If your action area only contains aquatic and/or aquatic-dependent species and/or their designated critical habitat, you can skip directly to Section V.

Most of the potential effects related to coverage under the MSGP are assumed to occur to aquatic and/or aquatic-dependent species. However, in some cases, potential effects to terrestrial species and/or their critical habitat should be considered as well from any discharge-related activities that occur during coverage under the MSGP. Examples of discharge-related activities that could have potential effects on listed terrestrial species or their critical habitat include the storage of materials and land disturbances associated with stormwater management-related activities (e.g., the installation or placement of stormwater control measures).

A. Select the applicable statement(s) below and follow the corresponding instructions:

☒ There are no discharge-related activities that are planned to occur during my coverage under the MSGP. You can conclude that your discharge-related activities will have no likely adverse effects, and:

- If there are any aquatic or aquatic-dependent species and/or their critical habitat in your action area, you must skip to Section V, *Evaluation of Discharge Effects*, below.
- If there are no aquatic or aquatic-dependent species you may skip to Section VI and verify that your activities will have no likely adverse effects. You must submit this form to EPA as specified in Section VII of this form. You may select criterion C on your NOI form and may submit your NOI for permit coverage 30 days after you have submitted this *Criterion C Eligibility Form*. You must also provide a description of the basis for the criterion you selected on your NOI form, **including the species and critical habitat list(s) in your action area**, as well as any other documentation supporting your eligibility. You must also include this completed *Criterion C Eligiblity Form* in your SWPPP.

☐ There are discharge-related activities planned as part of the proposal. Describe your discharge-related activities in the following box and continue to (b) below.

Describe discharge-related activities:

B. In order to ensure any discharge-related activities will have no likely adverse effects on listed species and/or their designated critical habitat, you must certify that all the following are true:

☐ Discharge-related activities will occur:

- on previously cleared/developed areas of the site where maintenance and operation of the facility are currently occurring or where existing conditions of the area(s) in which the discharge-related activities will occur precludes its use by listed species (e.g., work on existing impervious surfaces, work occurring inside buildings, area is not used by species), and
- if discharge-related activities will include the establishment of structures (including, but not limited to, infiltration ponds and other controls) or any related disturbances, these structures and/or disturbances will be sited in areas that will not result in isolation or degradation of nesting, breeding, or foraging habitat or other habitat functions for listed animal species (or their designated critical habitat), and will avoid the destruction of native vegetation (including listed plant species).

☐ If vegetation removal (e.g., brush clearing) or other similar activities will occur, no terrestrial listed species that use these areas for habitat would be expected to be present during vegetation removal.

If all the above are true, you can conclude that your discharge-related activities will have no likely adverse effects, and:

- If there are any aquatic or aquatic-dependent species and/or critical habitat in your action area, you must skip to Section V, *Evaluation of Discharge Effects*, below.
- If there are no aquatic or aquatic-dependent species you may skip to Section VI and verify that your activities will have no likely adverse effects. You must submit this form to EPA as specified in Section VII of this form. You may select criterion C on your NOI and may submit your NOI for permit coverage 30 days after you have submitted this completed form. You must also provide a description of the basis for the criterion you selected on your NOI form, **including the species and critical habitat list(s)**, and any other documentation supporting your eligibility. You must also include this completed *Criterion C Eligibility Form* in your SWPPP.
- **If any of the above are not true**, you cannot conclude that your discharge-related activities will have no likely adverse effects. You must complete the rest of this form (if applicable), and must submit the form to EPA for assistance in determining your eligibility for coverage.

SECTION V. EVALUATION OF DISCHARGE EFFECTS

Note: *You are only required to fill out this section if your facility's action area includes aquatic and/or aquatic-dependent species and/or their critical habitat.*

In this section, you will evaluate the likelihood of adverse effects from your facility's discharges. The scope of effects to consider will vary with each facility and species/critical habitat characteristics. The following are examples of discharge effects you should consider:

- *Hydrological Effects.* Stormwater discharges may adversely affect receiving waters from pollutant parameters such as turbidity, temperature, salinity, or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- *Toxicity of Pollutants.* Pollutants in stormwater may have toxic effects on listed species and may adversely affect critical habitat. Exceedances of benchmarks, effluent limitation guidelines, or state or tribal water quality requirements may be indicative of potential adverse effects on listed species or critical habitat. However, some listed species may be adversely affected at pollutant concentrations below benchmarks, effluent limitation guidelines, and state or tribal water quality standards. In addition, stormwater pollutants identified in Part 5.2.3.2 of your SWPPP, but not monitored as benchmarks or effluent limitation guidelines, may also adversely affect listed species and critical habitat.

As these effects are difficult to analyze for listed species, their prey, habitat, and designated critical habitat, this form helps you to analyze your discharges and make a determination of whether your discharges will have likely adverse effects and whether there are any additional controls you can implement to ensure no likely adverse effects.

A. Evaluation of Pollutants and Controls to Avoid Adverse Effects. In this section, you must document all of your pollutant sources and pollutants expected to be discharged in stormwater. You must also document the controls you will implement to avoid adverse effects on listed aquatic and aquatic-dependent species. You must include specific details about the expected effectiveness of the controls in avoiding adverse effects to the listed aquatic-and aquatic-dependent species. Attach additional pages if needed.

Potential Pollutant Source	Potential Pollutants	**Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species.** Include information supporting why the control(s) will ensure no adverse effects, including any data you have about the effectiveness of the control(s) in reducing pollutant concentrations. You may also attach photos of your controls to this form.
e.g., vehicle and equipment fueling	**e.g.,** • **Oil & grease** • **Diesel** • **Gasoline** • **TSS** • **Antifreeze**	**e.g.,** • **Fueling operators (including the transfer of fuel from tank trucks) will be conducted on an impervious or contained pad or under cover** • **Drip pans will be used where leaks or spills of fuel can occur and where making and breaking hose connections** • **Spill kit will be kept on-site in close proximity to potential spill areas** • **Any spills will be cleaned-up immediately using dry clean up methods** • **Stormwater runoff will be diverted around fueling areas using diversion dikes and curbing**

Potential Pollutant Source	Potential Pollutants	Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species.
Coal/ limestone/ash/ /manufactured aggregate stockpiling and transfer.	Particulate matter, total suspended solids, pH, nutrients, metals	• Coal, limestone and manufactured aggregate are transported in covered conveyors; • Limestone is stockpiled indoors; • Grading, berming, or curving in process and material storage areas; • Limestone silos are contained within a dike to prevent that materials gain access to storm water drains; • Inspection of manufactured aggregate and fly ash hauling vehicles for proper load cover, gate seal, and overall integrity of the container body; • Immediate cleaning of spills in ash loading areas.
Chemicals loading/unloading/storage and transfer.	pH, nutrients	• Chemicals containers/totes will be stored indoors or in secondary containment.
Exposed equipment, scrap and wastes	Hydrocarbons, metals	• Heavy equipment and vehicle maintenance is performed under cover; • Drip pans and absorbents are placed under or around leaky vehicles and equipment; • All waste storage containers exposed to storm water will be covered with lids or rollup covers.
Fuel and oil loading/unloading/ storage and transfer	Hydrocarbons	• Oil drums are stored indoors and in secondary containment; • Spills and leaks are promptly cleaned using dry methods; • Spill Prevention, Control and Countermeasures (SPCC) Plan for bulk storage tanks; • Routine visual inspections of the structural integrity of all above-ground tanks and ancillary equipment that may be exposed to storm water; • Oil bearing equipment in the switchyard is provided with secondary containment.
Erosion and Sediment	Particulate matter, total suspended solids, pH, nutrients, metals	• Installation of erosion control blankets in erodible slopes, • A dedicated water truck to spray traffic areas, • Manufactured aggregate stockpile gabion retention wall, • Sprinkler system, • A 14.5 million gallon no-discharge coal-manufactured aggregate runoff pond, • A 1.9 million gallon storm water pond, • Reinforced silt fencing with sediment-filtering geotextile and a sediment trap for the coal stockpiles, • The dock area has a collection and treatment system consisting of a contained concrete driveway provided with a PVC pipe collection header and one sediment trap, • Inspection and replacement of storm water catch basin filters, • Regular sweeping, cleaning and maintenance of all swales / drainage channels and impervious areas.

Potential Pollutant Source	Potential Pollutants	Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species.
Dust Generation and Vehicle Tracking	Particulate matter, total suspended solids	• Use of a sprinkler system and water truck at the coal and manufactured aggregate stockpile areas; • Velocity limitations posting for vehicles moving within the facility; • Immediate cleanup of spills in exposed areas to prevent washout by rain or offsite tracking of pollutants by vehicles; • Removal of particulate matter from vehicles and equipment before movement onto paved roads; • Load materials onto trucks in a manner that will prevent dropping of materials or debris onto roads; • Secure and cover any materials to be transported to ensure that they do not become airborne during transportation; • Removal of material from paved roadways where material has been deposited; • Use of mechanical street sweeper to remove debris, sediment, feed ingredients, feed and other materials from the Facility and • Use of wheel washing station for material delivering trucks before leaving the Facility.
Waste, Garbage and Floatable Debris	Particulate matter, total suspended solids, metals	• All waste materials accumulated onsite will be stored in a neat, orderly manner or in appropriate covered containers; • Portable toilets will be located at least 25 feet away from storm water conveyance structures and anchored; • If needed, wind barriers, trash interceptors or other similar devices will be used to intercept waste, garbage and debris that are blown by wind or floated by storm water runoff.

☐ Check if you are not able to make a preliminary determination that any of your pollutants will be controlled to a level necessary to avoid adverse effects on aquatic and/or aquatic-dependent listed species and their designated critical habitat. You must check in **Section VI** that you are unable to make a determination of no likely adverse effects, and must complete the rest of the form. You must submit your completed form to EPA for assistance in determining your eligibility for coverage.

B. Analysis of Effects Based on Past Monitoring Data. Select which of the following applies to your facility:

☐ I have no previous monitoring data for my facility because there are no applicable monitoring requirements for my facility's sector(s).

☐ I have no previous monitoring data for my facility because I am a new discharger or a new source, but I am subject to monitoring under the 2015 MSGP. You must provide information to support a conclusion that your facility's discharges are not expected to result in benchmark or numeric effluent limit exceedances that will adversely affect listed species or their critical habitat:

☐ My facility has not had any exceedances under the 2008 MSGP of any required benchmark(s) or numeric effluent limits.

☒ My facility has had exceedances of one or more benchmark(s) or numeric effluent limits under the 2008 MSGP, but I have addressed them during my coverage under the 2008 MSGP, or in my evaluation of controls to avoid adverse effects in (A) above. Describe all actions (including specific controls) that you will implement to ensure that the pollutants in your discharge(s) will not result in likely adverse effects from future exceedances.

AES Puerto Rico L.P. is under an Administrative Order On Consent Docket Number CWA-02-2015-3102 to attend the benchmark exceedances. Description for all actions and implemented controls were documented and submitted as per AOC requirements.

☐ Check if your facility has had exceedances of one or more benchmarks or numeric effluent limits under the 2008 MSGP and you have not been able to address them to avoid adverse effects from future exceedances, or if you are a new discharger or a new source but you are not sure if you can avoid adverse effects from possible exceedances. You must check in Section VI that you are unable to make a determination of no likely adverse effects. You must submit your completed form to EPA for assistance in determining your eligibility for coverage. You may not file your NOI for permit coverage until you are able to make a determination that your discharges will avoid adverse effects on listed species and designated critical habitat.

SECTION VI VERIFICATION OF PRELIMINARY EFFECTS DETERMINATION

Based on Steps I – V of this form, you must verify your preliminary determination of effects on listed species and designated critical habitat from your discharges and/or discharge-related activities :

☒ Following the applicable Steps in I – V above, I have made a preliminary determination that my discharges and/or discharge-related activities are not likely to adversely affect listed species and designated critical habitats.

☐ Following the applicable Steps in I – V above, I am **not** able to make a preliminary determination that my discharges and/or discharge-related activities are not likely to adversely affect listed species and designated critical habitats.

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: MANUEL MATA

Title: PRESIDENT

Signature: Date 07/21/2015

E-mail: MANUEL.MATA@AES.COM

SECTION VII CRITERION C ELIGIBILITY FORM SUBMISSION INSTRUCTIONS

You must submit this completed form to EPA at msgpesa@epa.gov, including any attachments and any additional information that demonstrates how you will avoid or eliminate adverse effects to listed species or critical habitat (e.g., specific controls you will implement to avoid or eliminate adverse effects). **Any missing or incomplete information may result in a delay of your coverage under the permit**.

If you have made a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this form must be submitted a minimum of 30 days prior to submitting your NOI for permit coverage under criterion C. Please note that during either the 30-day *Criterion C Eligibility Form* review period prior to your NOI submission, or within 30 days after your NOI submission and before you have been authorized for permit coverage, EPA may advise you that additional information is needed, or that there are additional measures you must implement to avoid likely adverse effects.

If you are unable to make a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this worksheet must be submitted to EPA, but you may not file your NOI for permit coverage until you have received a determination from EPA that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat.

Attachment 1

Include a map **and a written description** of the action area of your facility, as required in Step 2. You may choose to include the map that is generated from the FWS' on-line mapping tool IPaC (the *Information, Planning, and Consultation System*) located at http://ecos.fws.gov/ipac/.

The written description of your action area that accompanies your action area map must explain your rationale for the extant of the action area drawn on your map. For example, your action area written description may look something like this:

> *The action area for the (name of your facility)'s stormwater discharges extends downstream from the outfall(s) in (name of receiving waterbody) (# of meters/feet/kilometers/miles). The downstream limit of the action area reflects the approximate distance at which the discharge waters and any pollutants would be expected to cause potential adverse effects to listed species and/or critical habitat because (insert rationale). The action area does/does not extend to the (name of receiving waterbody)'s confluence with (name of confluence waterbody) because (insert rationale).*

Note that you action area written description will be highly site-specific, depending on the expected effects of your facility's dishcarges and discharge-related activities, receiving waterbody characteristics, etc.

The action area for AES Puerto Rico stormwater discharges from Outfall 1 extends to the Las Mareas Harbor's confluence with the Caribbean Sea. For Outfalls 2 and 3 it is limited to a wetland area within the south portion of the AES property.

See FWS Map and FWS / NMFS Lists on Attachment 2.

Attachment 2

List or attach the listed species and critical habitat in your action area on this sheet, as required in Step 3. You must include a list for applicable listed NMFS and FWS species and critical habitat. If there are listed species and/or critical habitat for only one Service, you must include a statement confirming there are no listed species and/or critical habitat for the other Service. For FWS species, include the full printout from your IPaC query. *Note: If your Official Species List from the USFWS indicated no species or critical habitat were present in your action area, include the full consultation tracking code at the top of your Official Species List in your NOI submittal in the question "Provide a brief summary of the basis for the criterion selected in Appendix E." If an Official Species List was not available on IPaC, list the contact date and name of the Service staff with whom you corresponded to identify the existence of any USFWS species or critical habitat present in your action area.*

See attached FWS Report and NMFS List.

U.S. Fish & Wildlife Service

AES-Puerto Rico

IPaC Trust Resource Report

Generated July 21, 2015 12:06 PM MDT

US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

AES-Puerto Rico

PROJECT CODE

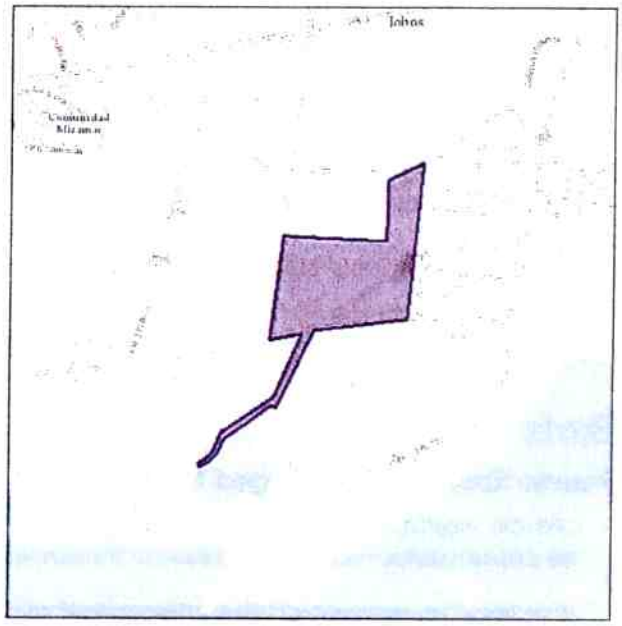
7EXC2-CDTAN-CBLJ2-Q7YKG-6UWTVQ

LOCATION

Guayama County, Puerto Rico

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 622-491
(787) 851-7297

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Birds

Puerto Rican Broad-winged Hawk Buteo platypterus brunnescens **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06Y

Puerto Rican Plain Pigeon Columba inornata wetmorei **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B049

Puerto Rican Sharp-shinned Hawk Accipiter striatus venator **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06Z

Yellow-shouldered Blackbird Agelaius xanthomus **Endangered**

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B05T

Flowering Plants

Palo De Jazmin Styrax portoricensis **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q2R6

Uvillo Eugenia haematocarpa **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q2A2

Mammals

West Indian Manatee Trichechus manatus **Endangered**

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A007

Reptiles

Hawksbill Sea Turtle Eretmochelys imbricata **Endangered**

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C00E

Leatherback Sea Turtle Dermochelys coriacea **Endangered**

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C00F

Puerto Rican Boa Epicrates inornatus **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C00P

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

Elkhorn Coral Critical Habitat Final designated
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=P001#crithab

Staghorn Coral Critical Habitat Final designated
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=P000#crithab

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Antillean Mango Anthracothorax dominicus — **Bird of conservation concern**
Year-round

Audubon's Shearwater Puffinus lherminieri — **Bird of conservation concern**
Season: Breeding

Black Swift Cypseloides niger — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FW

Black Rail Laterallus jamaicensis — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09A

Bridled Quail-dove Geotrygon mystacea — **Bird of conservation concern**
Year-round

Caribbean Coot Fulica caribaea — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B083

Gull-billed Tern Gelochelidon nilotica — **Bird of conservation concern**
Season: Wintering

Least Bittern Ixobrychus exilis — **Bird of conservation concern**
Year-round

Least Tern Sterna antillarum — **Bird of conservation concern**
Season: Breeding

Lesser Yellowlegs Tringa flavipes — **Bird of conservation concern**
Season: Wintering

Limpkin Aramus guarauna — **Bird of conservation concern**
Year-round

Loggerhead Kingbird Tyrannus caudifasciatus — **Bird of conservation concern**
Year-round

Mangrove Cuckoo Coccyzus minor — **Bird of conservation concern**
Year-round

Masked Duck Nomonyx dominicus — **Bird of conservation concern**
Year-round

Prairie Warbler Dendroica discolor — **Bird of conservation concern**
Season: Wintering

Puerto Rican Oriole Icterus dominicensis — **Bird of conservation concern**
Year-round

Puerto Rican Vireo Vireo latimeri — **Bird of conservation concern**
Year-round

Ruddy Duck Oxyura jamaicensis jamaicensis — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B084

Semipalmated Sandpiper Calidris pusilla — **Bird of conservation concern**
Season: Wintering

Short-eared Owl Asio flammeus — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD

Smooth-billed Ani Crotophaga ani — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DS

Solitary Sandpiper Tringa solitaria — **Bird of conservation concern**
Season: Wintering

Swainson's Warbler Limnothlypis swainsonii — **Bird of conservation concern**
Season: Wintering

White-cheeked Pintail Anas bahamensis — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0C9

White-crowned Pigeon Patagioenas leucocephala — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B076

Wilson's Plover Charadrius wilsonia — **Bird of conservation concern**
Year-round

Worm Eating Warbler Helmitheros vermivorum — **Bird of conservation concern**
Season: Wintering

Yellow-breasted Crake Porzana flaviventer — **Bird of conservation concern**
Year-round

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

Refuge data is unavailable at this time.

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

NOAA FISHERIES
Southeast Region
Protected Resources Division

Puerto Rico's Threatened and Endangered Species

For more information on listed species please visit:
http://www.nmfs.noaa.gov/pr/species/esa/listed.htm
http://sero.nmfs.noaa.gov/protected_resources/index.html

Marine Mammal Species	Scientific Name	Status
blue whale	*Balaenoptera musculus*	Endangered
fin whale	*Balaenoptera physalus*	Endangered
humpback whale	*Megaptera novaeangliae*	Endangered
sei whale	*Balaenoptera borealis*	Endangered
sperm whale	*Physeter macrocephalus*	Endangered
Sea Turtle Species		
green sea turtle	*Chelonia mydas*	Threatened[1]
hawksbill sea turtle	*Eretmochelys imbricata*	Endangered
Kemp's ridley sea turtle	*Lepidochelys kempii*	Endangered
leatherback sea turtle	*Dermochelys coriacea*	Endangered
loggerhead sea turtle	*Caretta caretta*	Threatened[2]
Fish Species		
scalloped hammerhead shark	*Sphyrna lewini*	Threatened[3]
Invertebrate Species		
pillar coral	*Dendrogyra cylindrus*	Threatened
rough cactus coral	*Mycetophyllia ferox*	Threatened
lobed star coral	*Orbicella annularis*	Threatened
mountainous star coral	*Orbicella faveolata*	Threatened
boulder star coral	*Orbicella franksi*	Threatened
elkhorn coral	*Acropora palmata*	Threatened
staghorn coral	*Acropora cervicornis*	Threatened

Critical Habitat Designations

For final rules, maps, and GIS data please visit:
http://sero.nmfs.noaa.gov/maps_gis_data/protected_resources/critical_habitat/index.html

Green sea turtle: Coastal waters surrounding Culebra Island, Puerto Rico.

Hawksbill sea turtle: Coastal waters surrounding Mona and Monito Islands, Puerto Rico.

Elkhorn and Staghorn corals: There are four designated marine areas in Florida, Puerto Rico, and the U.S. Virgin Islands (i.e., St. John /St. Thomas, and St. Croix).

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[1] Florida's breeding population is listed as endangered.
[2] Northwest Atlantic distinct population segment.
[3] Central and southwest Atlantic distinct population segment.

NOAA FISHERIES
Southeast Region
Protected Resources Division

Species Proposed for Listing Under the Endangered Species Act

Federal action agencies are encouraged to include species proposed for listing under the Endangered Species Act (ESA) in their Section 7 consultation requests. Species that are proposed for listing are those which have been found to warrant federal protection under the ESA, but a final rule formally listing the species has not yet published. By including these species in your Section 7 consultation, reinitiating consultation after the ESA listing is finalized may not be necessary.

For more information on species proposed for listing under the ESA, please visit:
http://www.nmfs.noaa.gov/pr/species/esa/candidate.htm#proposed

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: MANUEL MATA

Title: PRESIDENT

Signature: _____ Date: 07/21/2015

E-mail: MANUEL.MATA@AES.COM

SECTION VII CRITERION C ELIGIBILITY FORM SUBMISSION INSTRUCTIONS

You must submit this completed form to EPA at msgpesa@epa.gov, including any attachments and any additional information that demonstrates how you will avoid or eliminate adverse effects to listed species or critical habitat (e.g., specific controls you will implement to avoid or eliminate adverse effects). **Any missing or incomplete information may result in a delay of your coverage under the permit**.

If you have made a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this form must be submitted a minimum of 30 days prior to submitting your NOI for permit coverage under criterion C. Please note that during either the 30-day *Criterion C Eligibility Form* review period prior to your NOI submission, or within 30 days after your NOI submission and before you have been authorized for permit coverage, EPA may advise you that additional information is needed, or that there are additional measures you must implement to avoid likely adverse effects.

If you are unable to make a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this worksheet must be submitted to EPA, but you may not file your NOI for permit coverage until you have received a determination from EPA that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat.

Attachment No. 4: Record Of Ammendments

AES Puerto Rico

Record of Amendments AES Puerto Rico, L.P.		
DATE OF AMMENDMENT	DESCRIPTION OF TECHNICAL AMENDMENT	AMENDMENTS MADE BY
---	Original document prepared January 2003 (PRR05B149).	---
Friday, August 20, 2004	Pollution Prevention Team Members updated. Revised the monthly inspection checklist. Updated the materials inventory (oil and chemicals list). Site drawings replaced. Certification pages re-signed/updated.	William G. Vela
Tuesday, September 25, 2007	Plan rewritten, coverage limited to Dock Facility. Added missing Endangered Species / Historic Places. Updated PPT members list.	G. Siberon
Monday, November 05, 2007	Updated PPT members and approval list.	C. Gonzalez
Monday, January 26, 2009	Revised SWPPP to comply with 2008 MSGP (PRR05BL65).	G. Siberon
Wednesday, August 31, 2011	Revised SWPPP to cover power plant.	H. Avila
Thursday, August 30, 2012	Updated SWPPP according with Engineering Analysis and updated PPT members.	H. Avila
Wednesday, August 28, 2013	Updated to include new structural BMPs.	H. Avila
Thursday, January 15, 2015	Updated to include new structural and non-structural BMPs.	H. Avila
Saturday, August 01, 2015	New document prepared according to MSGP 2015 (PRR053093).	Winston Esteves, P.E.
Wednesday, March 29, 2017	Updated to include the Dust Control Plan SOP and ammend aplicable sector for the dock area.	Winston Esteves, P.E.

Title:

Coal Combustion Residuals and Agremax™ Dust Control Plan

Approvals:

	Signature	Date
Approved by: Pedro Labayen		4/7/17
Reviewed by: Carlos M. Gonzalez		4/7/17
Environmental Coordinator Hector Avila		4/7/17
Elias Sostre Operations Manager		4/10/17
Manuel Mata President		4/7/17

Distribution List:

1. CCP Area
2. Material Handling
3. Environmental Coordinator
4. Operations & Maintenance Area
5. Plant Manager

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Appendices

Appendix 1 Dust Control Maps

Appendix 2 Dust Control Inspection Checklist

Appendix 3 Dust Control Activity Flowchart

Appendix 4 Citizen Complaints Log

Appendix 5 Dust Control Training Syllabus

Appendix 6 Employee Training Attendance Form

Appendix 7 Weekly Stockpile Inspection Form

Appendix 8 Annual CCR Fugitive Dust Control Reports

Appendix 9 Annual Inspection Reports

1. Purpose

This Standard Operating Procedure (SOP) identifies methods to prevent, reduce or mitigate fugitive dust from the coal combustion residuals (CCRs) and Agremax™ handling activities at the AES-PR site.

The primary purpose of this SOP is to explain how the requirements in Section 2.1.2.12 of the US Environmental Protection Agency's (EPA) 2015 Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (2015 MSGP) - Dust Generation and Vehicle Tracking of Industrial Materials; and the Standards for the Disposal of Coal Combustion Residuals From Electric Utilities (CCR Rule) of April 17, 2015 will be implemented and monitored at AES-PR.[1]

2. Scope

The Coal Combustion Residuals and Agremax™ Dust Control Plan (Plan) described in this SOP addresses fugitive dust emissions (i.e., emitted from any source other than a stack or chimney) from coal combustion residuals (ash) and Agremax™ handling equipment and operations which are non-point sources and area sources within the AES-PR property boundaries as shown in Appendix 1. It does not address particulate or gaseous emissions from point or other (usually enclosed) sources regulated under the facility's air emission permit issued in accordance with the provisions of Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) and the

[1] AES Puerto Rico's temporary storage of its inventory of manufactured aggregate is not subject to the CCR Rule, 40 C.F.R. Part 257. Nonetheless, as a protective measure, AES Puerto Rico has prepared this Plan and taken other steps to satisfy CCR Rule requirements applicable to CCR landfills. By undertaking these measures, AES Puerto Rico does not admit its facility is a CCR landfill covered by the CCR Rule and expressly preserves all rights and defenses.

Code of Federal Regulations, Title 40 Part 70 e.g. coal combustion and transfer and power generation areas.

It identifies sources of fugitive dust, outlines the techniques and practices for detecting, monitoring, controlling, minimizing and preventing dust emissions, provides procedures to handle citizen complaints, employee training program guidelines to help them recognize potential sources of dust and the management practices to prevent and control them, identifies the persons and procedures responsible for control equipment availability / operation and maintenance and identifies the inspection / recordkeeping / reporting / notification practices that will be followed.

3. Responsibilities

3.1. The AES-PR Coal Combustion Products (CCP) and Material Handling (MH) leaders are the dust control site coordinators responsible for the implementation of this SOP, including: reading and understanding it, ensuring that all employees / workers / subcontractors know and understand their dust control responsibilities, monitoring the worksite for compliance with the requirements of this SOP, designing watering schedules, ensuring that adequate watering capability is available, determining when to use standby controls when primary controls are ineffective, determining when to cease and start operations, maintaining records and revising the SOP as necessary, including when the primary and standby or contingency controls don't result in effective control.

3.2. The Shift Team Leaders and the CCP/MH Operators are responsible for controlling their operational areas to minimize dust generation. This includes limiting or stopping operations during high winds and/or visible dust plume conditions that cannot be controlled. Limitation or ceasing of operations will be documented using the Dust Control Inspection Checklist (Appendix 2).

3.3. The CPP/MH Operators are responsible for enforcing the requirements of this SOP and notifying the dust control site coordinator or Shift Team Leader of any visible dust plumes which require immediate attention, including those that cross the site boundary. The operational activity that caused the emission will be ceased temporarily until a re-evaluation of the dust control measures is completed and additional controls are identified and implemented, if needed. Limitation or ceasing of operations will be documented using the Dust Control Inspection Checklist (Appendix 2).

3.4. All dust control equipment i.e., water truck, sweeper, sprinklers, hoses, will be maintained in good operational order by the responsible areas. The water truck will be the responsibility of MH, the sweeper will be the responsibility of CCP; all other controls will be the responsibility of the Maintenance Area. Each area will document and maintain records of how frequently equipment maintenance is done and of all equipment malfunctions and downtimes.

4. Safety Precautions

All AES-PR employees and contractors must use the safety and personal protective equipment required for conducting the activities described herein, including but not limited to hard hats, safety glasses, harness, life preservers and other, as appropriate.

5. Dust Emission Sources

The potential dust emission sources covered by this Plan are located at the southeast quadrant of the plant site and the marine dock. See Appendix 1

Fly ash and bottom ash are produced by the coal combustion process and stored in two elevated silos and eventually transferred from the silos directly into totally-enclosed bulk trailers for transport by public highway to off-site users.

Agremax™ is a manufactured aggregate produced by AES-PR using its own CCRs. Ashes that are not delivered to off-site users are mixed in a pug mill conditions this CCR to produce Agremax™ with enough moisture to prevent wind dispersal without producing free liquids before feeding a conveyor belt used to transfer the mixture to an open stockpile area where it is also kept wet by the application of water sufficient to prevent dispersal by wind (without producing free liquids) before feeding a conveyor belt used to transfer the mixture to an open Stockpile Area at the facility where it is also kept wet by the application of water sufficient to prevent dispersal by wind (without producing free liquids) before it is spread by a bulldozer. A stockpile[2] to store the inventory of Agremax™ is formed by a bulldozer or by dump trucks that are loaded with Agremax™ by an excavator or front end loader, and the trucks then place the Agremax™ onto a stockpile. From the Stockpile Area the Agremax™ is loaded by an excavator or front-end loader into dump trucks, covered, and sent for transport by public highway to off-site users or for disposal. Alternatively, the Agremax™ can be fed by a bulldozer into a crusher located in the Stockpile Area. The crusher feeds an enclosed conveyor to transfer the Agremax™ to marine vessels in the dock area for shipment overseas. Dust can be generated from the ash-Agremax™ transfer operations, truck loading and unloading, crusher loading, from paved and unpaved haul roads within the site, and from the Stockpile Area.

6. Controls

The main equipment and structures used for controlling dust emissions include a water truck with rear spray nozzles and front water cannon, a broom sweeper, mobile water sprinkler guns,

[2] AES-PR currently maintains two separate Agremax™ stockpiles. These two stockpiles are located in the Stockpile Area behind the plant. One stockpile includes the Agremax™ inventory produced and stored before October 17, 2015. The second stockpile has Agremax™ inventory produced on or after October 17, 2015. Each stockpile will be covered by this SOP.

large water hoses, fixed water spray nozzle systems / articulated telescoping spouts at drop and loading / shipping areas, a truck wheel cleaning station and curved- paved haul roads.

In addition to the use of the equipment and structures described above, primary (first approach) and contingency (standby or backup strategy) control measures are used to control the generation of dust emissions. Refer to the flowchart in Appendix 3.

Primary controls include initial and annual personnel training, a daily operational inspection checklist to monitor the implementation and effectiveness of the control measures, daily evaluation of weather forecast and real-time instrumental monitoring of weather conditions (precipitation, wind speed-direction [refer to AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002]), around the clock watering of stockpile surfaces and pre-shift watering of haul roads, daily log of water truck use, covered transfer conveyors, continuous observation of visible dust emissions (VDE), daily sweeping / cleaning of paved roads, maintenance / repair of paved road surfaces, immediate cleanup of track-out and material spillage onto paved roads, prohibited use of blower devices or dry rotary brushes or brooms, enforcement of posted vehicle and moving equipment speed limits to 10 miles per hour (mph) or less , traffic restrictions, minimization of drop distances at transfer points, loading of trucks to prevent their contents from dropping/leaking/ blowing or otherwise escaping, sweeping or spray-cleaning and covering dump trucks prior to leaving the facility, 6-inch minimum bed freeboard clearance requirements for loading dump trucks, surface roughening-compaction of stockpile surfaces, placing stockpile ridges at right angles to prevailing winds, conducting loading and unloading activities on the downwind side of a stockpile, watering of exposed areas before forecasted high winds, restriction or termination of a stockpile disturbance and hauling activities during high sustained wind conditions (i.e., 25 miles per hour or higher) and scheduled washing of mobile equipment.

At the start of each shift or material handling equipment startup and at least twice during each shift, the CPP/MH Operators will assess the operational status of all controls and record such assessments using the Dust Control Inspection Checklist in Appendix 2 which will be used to monitor the implementation and effectiveness of the control measures. Water truck operations may be curtailed during wet weather if the CPP/MH Operators confirm that the Agremax™ is sufficiently wet as to not require further wet abatement (one inch of precipitation is equivalent to an application of 5.6 gallons of water per square yard). These determinations will also be recorded in the Dust Control Inspection Checklist.

If after the implementation of primary control measures, visible dust emissions persist, contingency control measures including additional wetting of the stockpiles with sprinklers, applying chemical dust suppressants, surfacing of unpaved haul roads with aggregate cover / aprons and restriction /termination of activities could be implemented. Because the control effectiveness of chemical dust suppressants depend on the dilution rate, the application rate, time between applications, size/speed / amount of traffic and meteorological conditions any chemical dust suppressants used will be applied according to the manufacturer's instructions.
If primary and contingency controls don't result in effective control, this SOP must be revised.

The dust type / source and the primary control measures used for each source can be described as follows:

6.1. Agremax™- Ash / Paved Haul Roads

Description: Emissions can be generated from uncovered truck beds, spillage from haul trucks, vehicle dust carryout and track out. Wind and traffic, including plant (front end loaders, trucks and trailers) and customer vehicles, re-suspend the deposited material creating secondary sources of dust emissions. The average vehicle weight is highly variable, ranging from small pick-up trucks (1 ton) to large trucks / trailers (30 tons).

Control Methods and Equipment: Wet suppression by water truck with rear water sprinklers and water cannon, daily pavement cleaning with water hoses, speed limit restrictions to 10 mph or less posted along haul route, daily wet mechanical sweeping of pavement, immediate cleanup of material spillages, dump truck freeboard / cover, wheel washing and hosing at fixed station, curved shoulders and pavement surface repair as needed.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet, clean and structurally sound.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.2. **Agremax™ / Unpaved Roads**

Description: Emissions can be generated from wind erosion of uncovered truck beds and road surfaces and heavy equipment traffic (bulldozer, excavator, front end loader, trucks and trailers).

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon, vehicle speed limits to 10 mph or less, dump truck freeboard / cover.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.3. **Agremax™ / Stockpile.**

Description: Agremax™ is a cementitious aggregate material which forms a surface crust resulting in limited fugitive dust emissions. It is stored in an open storage pile that continuously changes in shape and volume; this state of flux limits the practicality and effectiveness of permanent or fixed structural controls like windbreaks. Emissions may be generated from the initial Agremax™ conveyor drop discharge into the Stockpile Area, pushing by heavy equipment to create a stockpile, loading and unloading of dump trucks to remove or add Agremax™ to a stockpile and for off-site transportation, pushing Agremax™ into the crusher feeding the conveyor to the dock and from wind erosion of stockpile surfaces. The maximum stockpile work area is about 6.17 acres.

Control Methods and Equipment: Daytime and night time wet suppression of stockpile surfaces by ten Sime Skipper mobile sprinkler guns (each sprinkler can cover an area up to 1.2 acres, therefore providing more than enough wetting capacity for the complete Agremax™ stockpile), daytime wet suppression of stockpile surfaces (including side slopes) by water truck with adjustable angle water cannon, fixed water spay nozzles at conveyor drop discharge point, reduced drop heights for truck loading, hose wetting of crusher feed and dump truck unloading , surface roughening - compaction of stockpile surfaces with bulldozer, stockpile ridges at right angles to prevailing winds, confining loading and unloading to downwind side of stockpile, watering of exposed areas before forecasted high winds. The combined efficiency of all the Agremax™ moisture content controls described should be well above the 90 % reported just for watering storage piles. In contrast, control efficiencies of only 75 % can be expected from providing 3-sided enclosures e.g., wind breaks with 50 % porosity making such control unnecessary and burdensome.

Frequency of Application: Around the clock and at the beginning of the work shift, and as required to keep stockpile surfaces wet.

Monitoring: Twice during each shift

Recordkeeping: Dust Control Inspection Checklist

6.4. **Ash / Transfer to Bulk Trailers**

Description: Fugitive dust emissions may be generated during the chute connection and disconnection steps required for loading ash from the elevated storage silos into bulk trailers for off-site transportation.

Control Methods and Equipment: Discharge drop height control using articulated- telescopic loading spout, enclosed loading area, wet suppression with water spray nozzles at west side of loading bay, truck- trailer cleaning with water hose before leaving the loading bay.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.5. **Ash / Power Block Outage**

Description: Fugitive dust emissions may be generated during the discharge of bottom ash from the heat exchangers into a small stockpile on the floor of the Power Block Area during outages (twice/year).

Control Methods and Equipment: The floor surface is not exposed to precipitation, a vacuum truck is used to collect the bottom ash from the floor.

Frequency of Application: Twice / year during outages.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.6. **Agremax™ / Dump Truck Loading and Unloading**

Description: Dust emissions may be generated during the loading of Agremax™ into dump trucks to create a stockpile or for off-site transportation and during unloading of dump trucks into a stockpile.

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon or large hoses, front end loader and excavator discharge drop height reduction.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.7. **Agremax™ / Conveyor Loading and Transfer**

Description: Dust emissions can be generated by wind blowing over the elevated conveyor used to transfer Agremax™ to marine vessels at the dock area and when it is discharged into the vessel's holding compartment.

Control Methods and Equipment: Covered conveyors, discharge drop height control with articulated- telescopic loading spout.

Frequency of Application: Each loading

Monitoring: Twice Daily (During Vessel Loading)

Recordkeeping: Dust Control Inspection Checklist

7. Citizen Complaints and Corrective Actions

Citizen complaints claiming CCR fugitive dust events at AES-PR will be documented using the Citizen Complaints Log in Appendix 4 so they can be investigated by the Environmental staff. Because CCR dust events may be short-term and visual observations will probably be required, expeditious attention will be provided to these events. If the origin of the complaint is determined to be due to CCR fugitive dust, then corrective and follow-up actions will be identified and included in the Log. This Log of Citizen complaints and a summary of corrective actions taken, if any, will be kept for use in the preparation of the Annual Fugitive Dust Control Report described below.

8. Training

To ensure that the dust control practices are followed, AES-PR will conduct an employee awareness training that will include all applicable dust control measures and the importance of strict compliance. Records of the trainings will be maintained, including the sign-in sheets.

8.1 The designated employees and/or contractors responsible for the performance and/or supervision of dust control activities must receive initial and yearly classroom and hands-on training on this SOP.

8.2 Training in the requirements of this SOP will be provided prior to commencing duties at the affected areas and at least every year following the Training Syllabus in Appendix 5.

8.3 All trainings will be documented using the Employee Training Attendance Log in Appendix 6.

9. Inspections, Reports and Corrective Actions

In addition to the twice-daily inspections described above, AES-PR will perform weekly inspections by a qualified person to identify conditions with the potential to disrupt operations or safety of the CCR inventory stored in the Stockpile Area. The inspections will be documented using the form in Appendix 7.

AES-PR will prepare an Annual CCR Fugitive Dust Control Report that includes the following:

- Descriptions of actions taken to control CCR fugitive dust
- A record of all citizen complaints and a summary of any corrective actions taken

Finally, AES-PR will engage a qualified professional engineer to prepare an Annual Inspection Report addressing geometry changes, approximate volume, structural weaknesses, existing conditions and any other changes that can disrupt the operation, safety or stability of a stockpile.

10. Recordkeeping

All versions of this Plan, the annual CCR Fugitive Dust Control Reports, documentation detailing corrective measures, weekly and annual inspections will be kept in the facility's operating record as they become available.

All information related to this SOP will be kept for three years after the expiration of the site's industrial storm water discharge permit under the 2015 MSGP or five years following the date on which it was prepared, whichever is later.

11. Internet Requirements and Notifications

AES-PR will ensure the Puerto Rico Environmental Quality Board is notified of the availability of the Plan, including any subsequent amendments, and of the availability of the Annual CCR Fugitive Dust Control Report, as provided in the CCR Rule. AES-PR will also ensure the most recent version of the Plan and Annual CCR Fugitive Dust Control Report is posted on a publicly-accessible internet site (CCR Web site) for the AES-PR facility, as provided by the CCR Rule.

12. Licensed Professional Engineer Certification

This Dust Control Plan was prepared following the guidelines of 40 CFR 257.80 to cover the needs of the AES Puerto Rico facility located at Km. 142.0 State Road PR-3, Jobos Ward, Guayama, PR.

I, Winston R. Esteves, a Puerto Rico licensed Professional Engineer, certify that:

- I am familiar with the requirements of 40 CFR 257.80;
- I have visited and examined the AES Puerto Rico, facility;
- This Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the CCR rule;
- Procedures for required inspections have been established; and
- That this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of the duty to fully implement this Fugitive Dust Control Plan. This Plan is only valid to the extent that the facility owner or operator maintains, tests and inspects controls, equipment, and other devices as prescribed herein. I did not test for proper operation of any equipment, devices, control systems or any other equipment systems not specifically mentioned.

Winston R. Esteves, PE

3/29/17
Date

8827
License Number
8/31/17
License Renewal Date

P.E. Seal

13. Periodic Plan Assessment and Amendments

The effectiveness of this Plan will be assessed to determine if updates or amendments are necessary after reviewing the Annual Fugitive Dust Control Report, the Annual Inspection Report and whenever there is a change in conditions that would substantially affect it e.g. construction and operation of a new CCR unit, significant increases in quantities of CCR managed, changes in CCR handling / storage practices or modifications to CCR handling / storage equipment. All technical amendments to this SOP will be certified by a Professional Engineer.

A record of the amendments made to this SOP is included below.

Record of Amendments

Date of Amendment	Amended Sections or Topics	Amendments Made By
---	Original document prepared in August 2015.	---
September 19, 2016	Addition of CCR Rule Provisions for Fugitive Dust	Winston R. Esteves, PE
March 29, 2017	Revision to include EPA August12, 2016 Water Compliance Inspection comments	Winston R. Esteves, PE

14. References

1- AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002.

2- Air & Waste Management Association. Air Pollution Engineering Manual. 2000.

3- California Stormwater Quality Association. California Stormwater BMP Handbook-Construction. Wind Erosion Control WE-1. May 2011.

4- Noyes Data Corporation. Dust Control Handbook. Pollution Technology Review No. 161. 1988.

5- US Department of Health and Human Services. Dust Control Handbook for Industrial Minerals Mining and Processing. January 2012.

6- United States Environmental Protection Agency (USEPA). Emission Control Technologies and Emission Factors for Unpaved Road Fugitive Emissions. EPA 625/5-87-022. September 1987.

7- USEPA. Control of Open Fugitive Dust Sources. EPA 450/3-88-008. September 1988

8- USEPA. AP-42 Compilation of Air Pollutant Emission Factors. Volume 1: Stationary Point and Area Sources. Chapter 13: Miscellaneous Sources. January 1995.

9- USEPA. Storm Water Management Fact Sheet- Dust Control EPA 832-F-99-003. September 1999.

10- USEPA. Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Form Industrial Activities, Federal Register, Vol. 73, No. 189, September 29, 2008.

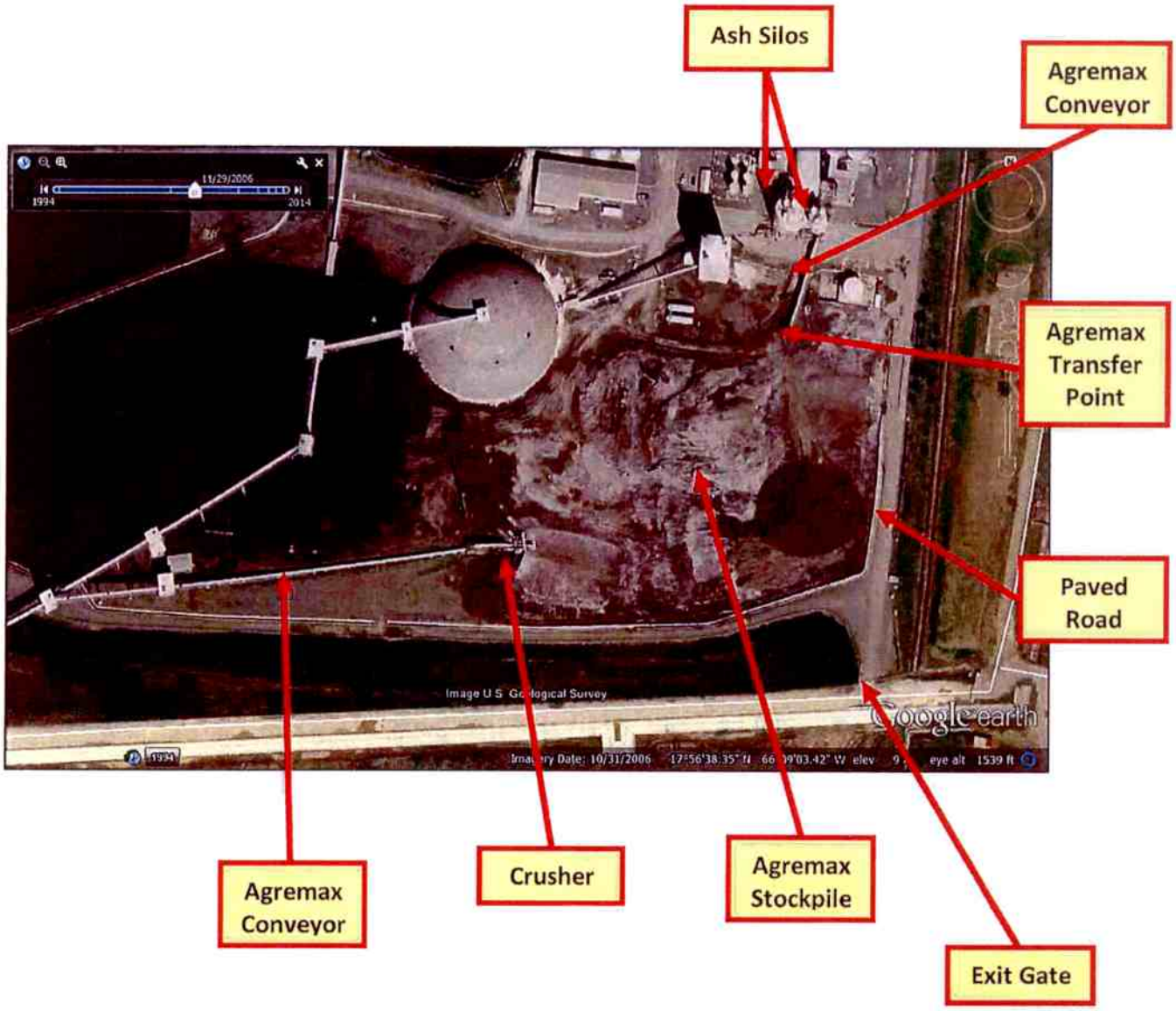
11- USEPA. Water: Best Management Practices; Dust Control. Source: http://www.epa.gov/polwaste/npdes/swbmp/Dust-C. Web Page last updated on Tuesday, July 1, 2014; Accessed and printed on March 27, 2015. [4 pages]

12- USEPA. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule 80 FR 21301-21501. April 17,2015

13- Western Regional Air Partnership. WRAP Fugitive Dust Handbook. Chapter 9. Storage Pile Wind Erosion. September 7, 2006.

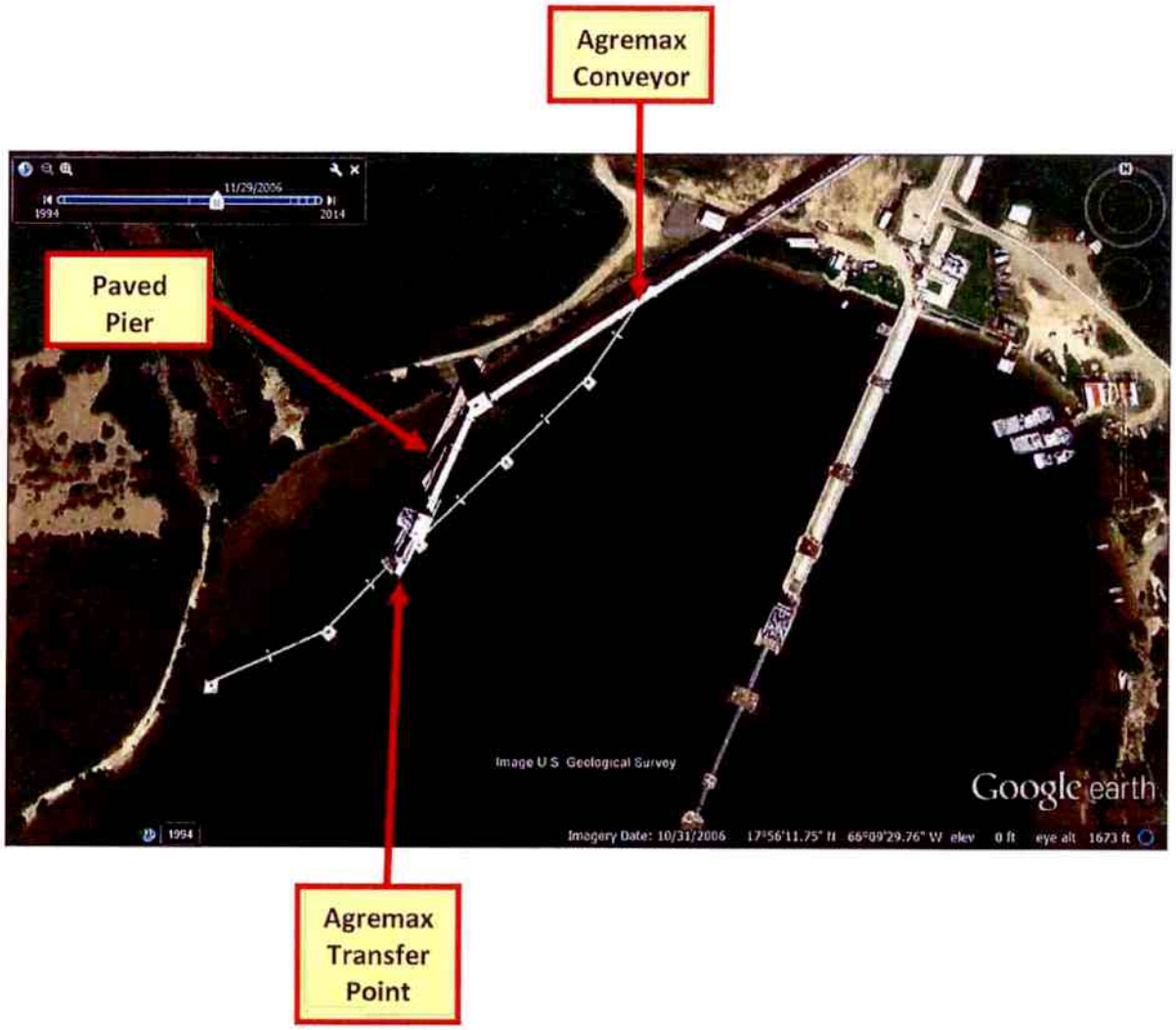
AES Puerto Rico

Plant Dust Control Map

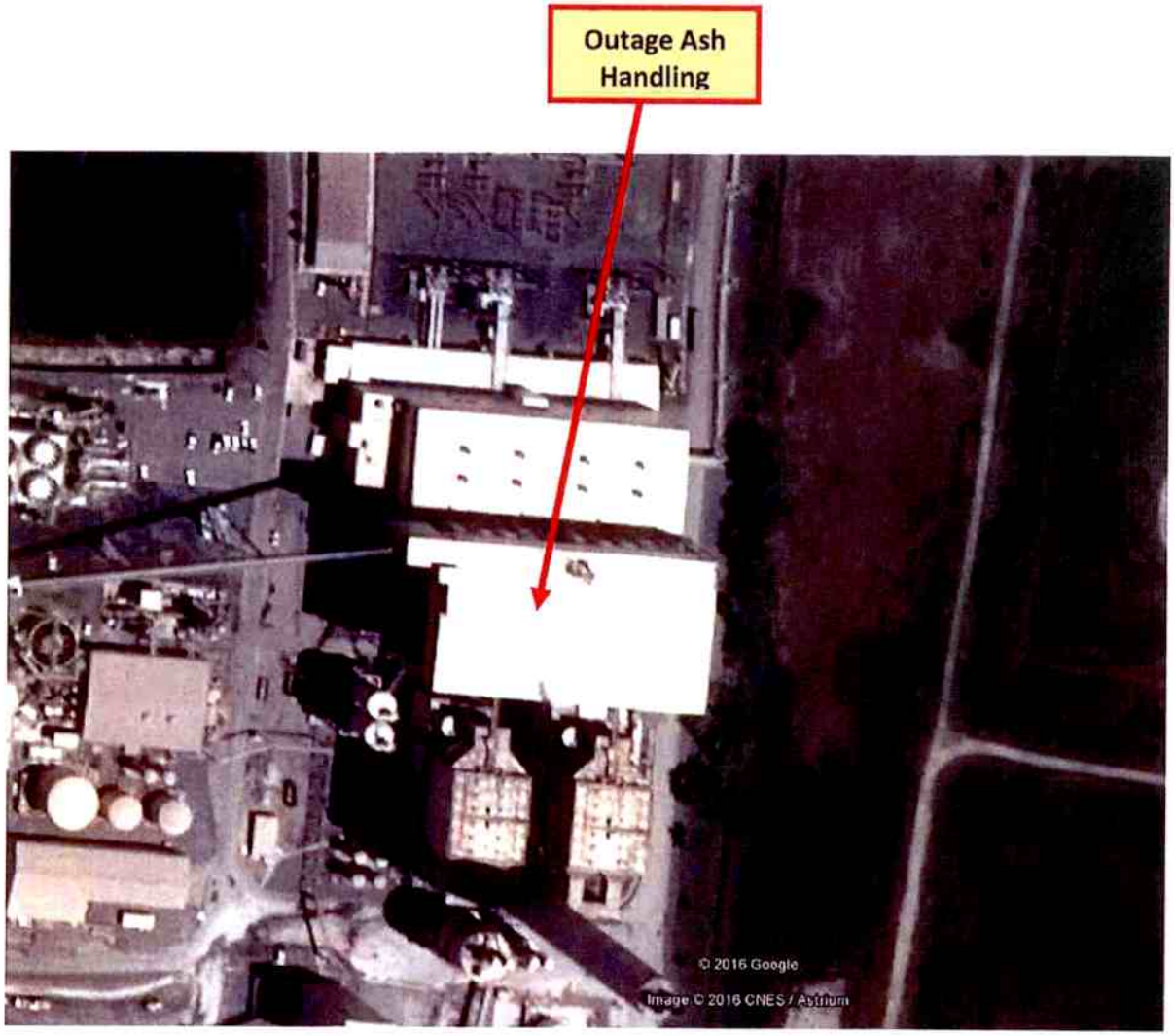


AES
Puerto Rico

Plant Dust Control Map



AES Puerto Rico
Plant Dust Control Map



AES Puerto Rico

Dust Control Checklist

Control Equipment

Skipper Sprinkler Guns (10)	_____ Operational	_____Not Operational
Water Truck (1)	_____ Operational	_____Not Operational
Broom Sweeper (1)	_____ Operational	_____Not Operational
Vacuum Truck	_____ Operational	_____Not Operational
Large Water Hoses ( )	_____ Available	_____Not Available

Paved Haul Roads

Surface in Good Condition	_____ Yes	_____ No
Wet Surfaces	_____ Yes	_____ No
Blowers or Dry Sweeping Used	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No
Visible Speed Limit Signs Posted	_____ Yes	_____ No
Spilled Materials	_____ Yes	_____ No
Tracked Sediments	_____ Yes	_____ No
Wheel Washer Station	_____ Yes	_____ No
- Adequate Water level	_____ Yes	_____ No
- Adequate Aggregate Depth	_____ Yes	_____ No
- Aggregate Surface Clean	_____ Yes	_____ No

Haul Trucks

Within Speed Limits	_____ Yes	_____ No
Within Established Routes	_____ Yes	_____ No
Covered with Tarp	_____ Yes	_____ No

Free of Debris	_____ Yes	_____ No
Adequate Freeboard	_____ Yes	_____ No
Low Loading Drop Height	_____ Yes	_____ No

Unpaved Haul Roads

Wet Surface	_____ Yes	_____ No
Aggregate Cover	_____ Yes	_____ No
Over Watering Observed	_____ Yes	_____ No
Road Erosion Observed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Conveyors

Silos to Stockpile Fully Enclosed	_____ Yes	_____ No
Stockpile to Dock Silos Fully Enclosed	_____ Yes	_____ No
Water Applied at Conveyor Drop Point	_____ Yes	_____ No
Water Applied at Crusher Feed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Fixed Transfer Points

Silos to Stockpile Water Sprays Operational	_____ Yes	_____ No
Stockpile Crusher Feed Wet	_____ Yes	_____ No
Conveyor to Marine Vessel Telescoping Spout Operational	_____ Yes	_____ No
Silos to Bulk Trailers Telescoping Spout Operational	_____ Yes	_____ No
Leak Proof Spout Connection	_____ Yes	_____ No
Ash Silos Water Curtain Operational	_____ Yes	_____ No

Agremax Stockpile

Wet Stockpile Surfaces	_____ Yes	_____ No
Water Sprays Overlap	_____ Yes	_____ No
Chemical Dust Suppressants Used	_____ Yes	_____ No
Activities on downwind side	_____ Yes	_____ No
Slope Surface Roughening /Compaction	_____ Yes	_____ No
Ridges at Right Angles to Prevailing Winds	_____ Yes	_____ No
Slope Erosion Observed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Power Bock Outage

Bed Ash Stockpile Removal With Vacuum Truck	_____ Yes	_____ No

Wind Speed_____ **Wind Direction**_____

Comments:_____

_____

_____

_____

_____

_____

_____

_____

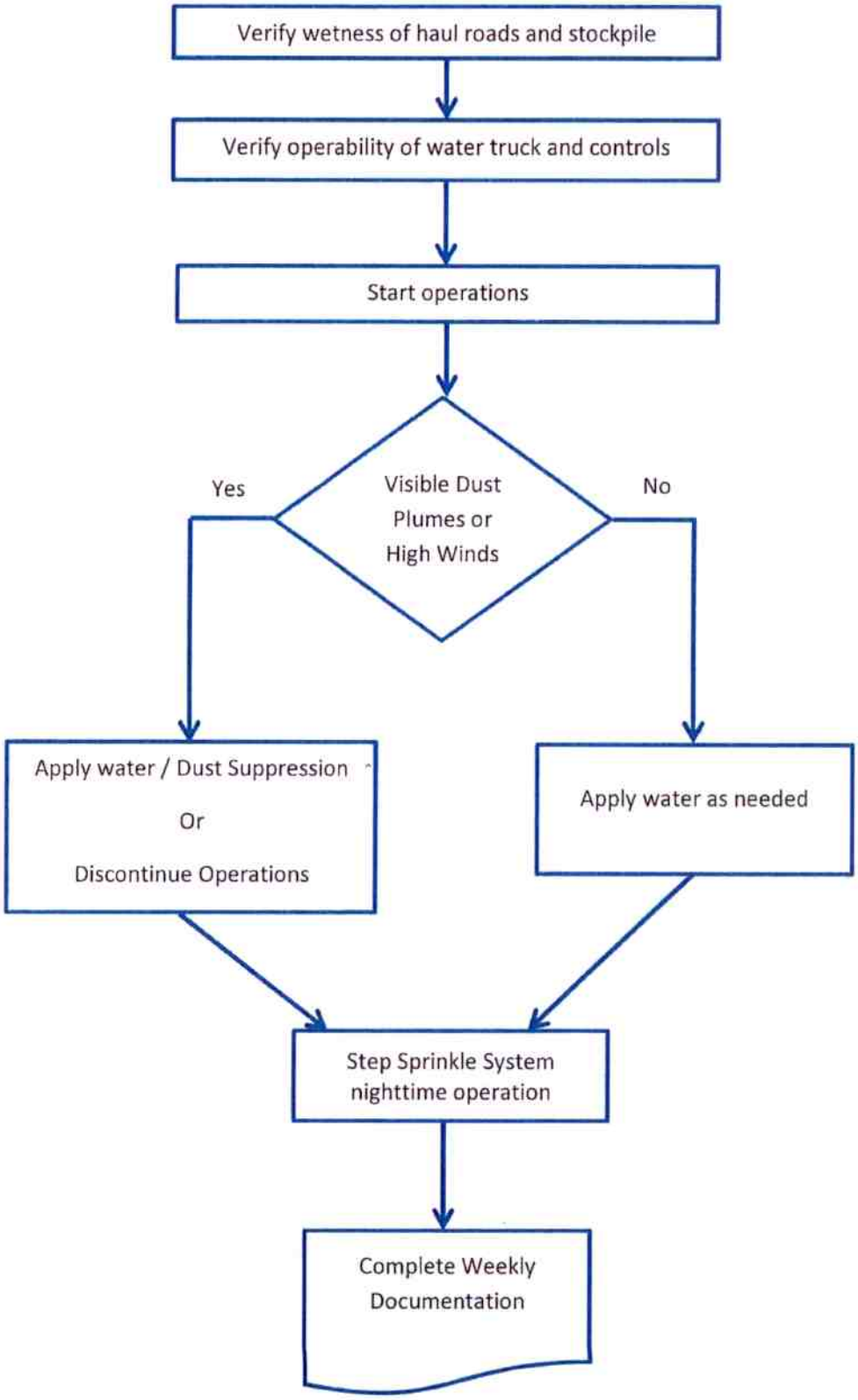
_____

_____

Name / Signature_____

Date_____ Time_____

Dust Control Activity Flow Chart



AES Puerto Rico

Fugitive Dust Citizen Complaints Log

Date and Time Complaint Received	
Person Receiving Complaint	
Method Complaint Registered or Received	
Description of Complaint	
Area of Site Originating Complaint (if applicable)	
Corrective Actions Description and Timetable (if applicable)	
Follow-up Actions (if applicable)	

AES
Puerto Rico

DUST CONTROL TRAINING SYLABUS

Subject Category: Compliance with permit requirements

Training Length: 2- 4 hr

Delivery Mode: Lecture, field exercise

Training Instructional Materials / Handouts: Power Point Presentation and Hard Copies

Schedule: Once / year

Training Purpose: Provide information to employees responsible for ash and Agremax handling activities

Instructors: AES or contracted

Written Exam: No

Practical Exam: Yes

WEB Resource: N/A

Topics to be covered:

Dust Control Requirements

Fugitive Dust Sources

Primary and Contingency Controls

Prohibited Practices

Responsibilities

Monitoring and Recordkeeping

Corrective Actions

AES Puerto Rico

Dust Control SOP Training Attendance

Date: _____

Name	Shift/Team	Signature
1		
2		
3		
4		
5		
6		
8		
9		
10		
11		
12		
13		
14		
15		

AES Puerto Rico

Weekly Stockpile Inspection Form

Date:_____ Inspector:_____

Time:_____ Weather Conditions:_____

Stockpile Height:_____ Stockpile Volume:_____

	Inspection Item	Yes	No	Notes
1.	Adequate access			
2.	Adequate setback from gabion wall/structures			
3.	Excess water runoff			
4.	Water ponding flooding			
5.	Animal burrows			
6.	Side slopes stable			
7.	Steep slopes			
8.	Colapsed slopes			
9.	Slope rills			
10.	Surface water runon			

Additional Notes:_____

_____

_____

_____

_____

_____

ATTACHMENT 3

CCR 2017 Inspection Report
AES Puerto Rico

Introduction

Purpose Annual inspection under the Standards for the Disposal of Coal Combustion Residuals From Electric Utilities of April 17, 2015 (CCR Rule).

Scope Review of available information and perform a visual inspection of the AES Puerto Rico (AES-PR) Agremax™ Stockpile Area.

Facility Location

General AES-PR is located in the south coast of the island of Puerto Rico, about 3.4 miles southwest of downtown Guayama.

Address AES Puerto Rico
Km 142.0 State Road PR-3
Guayama, Puerto Rico 00784

Facility Description

AES-PR is a bituminous coal power plant that generates and sells electricity to the Puerto Rico Electric Power Authority with a total power generation capacity of 520 Megawatts; this represents approximately 15% of the electricity consumed on the island. AES-PR also produces a manufactured aggregate known as Agremax™, produced by AES-PR. using its own CCRs. Dry ashes that are not delivered to off-site users are mixed in a pug mill that conditions this CCR to produce Agremax™ before feeding a conveyor belt used to transfer the mixture to the Stockpile Area at the facility. A stockpile to store the inventory of Agremax™ is formed by a bulldozer or by dump trucks that are loaded with Agremax™ by an excavator or front end loader, and the trucks then place the Agremax™ onto a stockpile. From the Stockpile Area the Agremax™ is loaded by an excavator or front-end loader into dump trucks, and sent for transport by public highway to off-site users or for disposal. Alternatively, the Agremax™ can be fed by a bulldozer into a crusher located in the Stockpile Area. The crusher feeds a conveyor to transfer the Agremax™ to marine vessels in the AES-PR dock area for shipment overseas.

CCR Unit Description

Location

The Stockpile Area is located at the southeast quadrant of the AES-PR site, south of the power plant and east of the limestone storage dome.

Volume

At the time of the inspection the approximate volume of Agremax™ contained in the stockpile was 430,000 tons.

Components

Equipment and facilities of the Stockpile Area include a front-end loader, a bulldozer, a backhoe, a water truck with rear spray nozzles and front water cannon, a broom sweeper, mobile water sprinkler guns, large water hoses, fixed water spray nozzle systems, a truck wheel cleaning station and a feeder / breaker mill. It also includes a three-layer physical containment system to prevent run-on or migration of sediments and runoff from the stockpile. This triple-containment system is composed of a gabion wall, drainage channels made of reinforced concrete and concrete low wall external to an internal road at the south side of the stockpile.

Review of Available Information

The daily inspection records for the October 2016 to July 2017 were reviewed as part of this scope of work. There were no significant issues identified during said inspections and action items have been addressed.

Visual Inspection

Date

Thursday July 6, 2017.

Time/Weather

Calm wind and sunny weather conditions prevailed.

Methodology and Limiting Conditions

WRE confirmed the Stockpile Area boundaries and performed a vehicle and walking reconnaissance around its accessible perimeter and terraces but did not look at areas where gaining access may have presented health and/or safety hazards. The Stockpile Area was viewed during afternoon hours for visual evidence of signs of distress or malfunction.

Escort

Gil Rosario of AES provided escort during the visual inspection.

General Observations	The Stockpile Area was operational at the time of the visual inspection. A main work terrace with berms on the edges was observed at the top of the stockpile.
Access Road	The access road was observed to be well graded, with berms on the edges, free of potholes and wetted.
Stockpile Surface / Slopes	No animal burrows were observed. Slopes appeared adequate.
Erosion	Localized rills were observed on the surface of stockpile slopes, they appeared to be related to over-watering by the water sprinkler guns.
Dust	Dust controls, including the broom sweeper, mobile water sprinkler guns, large water hoses and fixed water spray nozzle systems were observed to be in good condition. The water truck was not operational at the time. Some fugitive dust caused by wind was observed on the west slope of the Stockpile at the time of inspection.
Sediment	The gabion wall surrounding the Stockpile Area was observed to be free of sediment and with an adequate and unobstructed setback.
Drainage	The drainage channels surrounding the Stockpile Area were observed to be free of standing water or sediment and unobstructed.
Containment Structures	The low wall appeared to be structurally sound. No gaps or cracks were observed on its concrete surfaces.

Conclusions

Changes in Geometry	The size of the Stockpile has increased to an estimated height of 120 feet.
Potential Structural Weaknesses	Based on the visual inspection, no apparent or potential structural weaknesses were observed.
Other Changes	The stockpile slopes have become longer and steeper.

Certification

I hereby certify that I visually inspected and prepared this Report for the Stockpile Area, owned and operated by AES-PR in accordance with the Coal Combustion Residuals Rule 40 CFR 257.84(b). I am a dully-licensed Professional Engineer under the laws of Puerto Rico.

Winston R. Esteves P.E.

7/13/17
Date

8827
License Number

8/31/17
License Renewal Date

P.E. Seal