GUAM POWER AUTHORITY *Standard Operating Procedure*	* SOP-083	Issued: 08/06/93
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Title: AIR QUALITY CONTROL CONTINGENCY PLAN (Piti-Cabras Complex)	Approved By: JOHN M. BENAVENTE, Gen. Mgr.	
Effective Date: 8/6/93	Supersedes No.	Page 1 of 27

1.0 INTRODUCTION

The following excerpt from the ***"Petition of Guam Power Authority and the United States Navy for Relief Under Section 325 of the Clean Act,"*** pages 15 and 16 states the background and rationale behind the fuel switching strategy under the which this Air Quality Control Contingency Plan is based:

"The steam-electric generation plants at the Cabras and Piti Power Plants are subject to an exemption from the Clean Air Act which enables them to use a fuel switching air pollution control strategy." Section 325 (b) of the Clean Air Act, 42 U.S.C. § 7625-1 (b); 40 C.F.R. Part 69 (1991).

This fuel switching strategy which this document contains is based upon unique meteorological conditions on Guam, under which the trade winds blow from the east more than 90 percent of the time. This meteorological fact is combined with economic reality: the use of low sulfur fuel during periods of off-shore breeze would be excessively wasteful economically [...] Congress recognized in Section 325 (b) that the use of high sulfur fuel in these power plant units during easterly trade winds is a sensible strategy [...] USEPA affirmed this result in regulatory form in 1985 as it codified and extended the Congressional exemption. 40 C.F.R. § 69.12."

2.0 MONITORING AND RECORDING WIND SPEED AND DIRECTION RESPONSIBILITIES

The Guam Power Authority Power System Control Center (GPA PSCC) Dispatchers are responsible for continously monitoring and recording wind direction for the purposes outlined in this document.

3.0 PROCESSING OF RECORDED WIND SPEED AND DIRECTION DATA

GPA shall use the data collected under its responsibility in section 2.0 to calculate wind speed and direction at intervals of 15 minute averages. The hourly cycle of averages shall begin on the hour.

The calculation of 15 minute averages for wind speed and direction shall conform to the procedures set forth in the USEPA document: *"On-Site Meteorological Program Guidance for Regulatory Modelling Applications (EPA 450/4-87-013)."*

4.0 ULTIMATE RESPONSIBILITY FOR CONFORMANCE WITH THIS AIR QUALITY CONTROL CONTINGENCY PLAN FOR THE PITI-CABRAS COMPLEX

The following two individuals are ultimately responsible for compliance with the provisions of this Air Quality Control Contingency Plan for the Piti-Cabras Complex:

1. the General Manager of the Guam Power Authority

2. the Commanding Officer, United States Navy Public Works Center (USN PWC).

5.0 AFFECTED PITI-CABRAS ELECTRIC POWER GENERATION UNITS

The Piti-Cabras Complex Electric Power Generation Units listed in Table 1 are subject to the provisions of this document.

Table 1. Piti-Cabras Complex Electric Power Generation Units Affected by this Document

ITEM	UNIT NAMES	DESCRIPTION
1	Cabras 1 & 2	the two existing 66-MW fossil fuel-fired steam electric power generating units at Cabras Pwr.Plt
2	Piti Units	the existing fossil fuel-fired steam electric power generating units at the Piti Power Plant
3	Cabras 3 & 4	the two 35-MW slow speed diesel engine electric power generating units to be constructed at the Cabras Power Plant
4	TBD	additional units as per GPA or USN Public Works request and USEPA review

6.0 FUEL SULFUR LIMITS

The *fuel sulfur limits* are defined as follows in this plan:

High sulfur: 2.84% S maximum
Low sulfur : 1.19% S maximum

6.1 Fuel Compliance Documentation

Fuel purchases must conform to these limits. Fuel analysis must be collected to confirm compliance with these limits. All data supporting fuel purchases and analysis must be kept for audit purposes. GPA accounting shall be responsible for providing proof of fuel purchases for GPA Power Plants. Navy shall be responsible for providing proof of fuel purchases for Navy Power Plants. GPA and Navy shall be responsible for providing fuel analyses for fuel they purchase for the IWPS.

The USN shall provide a monthly low sulfur fuel usage and inventory to GPA. Inquiries about this report should be addressed to USN PWC Code 612. The copies of this report shall be submitted to the GPA General Manager.

Internal copies shall also be directed to the following GPA personnel:

1) Assistant General Manager of Operations
2) Manager of Generation
3) Manager of Engineering
4) Manager of T & D

6.2 Fuel Sampling Guidelines

The GPA and the USN shall take samples of both high and low sulfur fuels according to the guidelines provided by sections 6.2.1, 6.2.2 and 6.2.3.

6.2.1 Occasions for Mandatory Fuel Sampling (Generating Unit fuel supplied from Bulk Storage Tanks)

This section applies to all electric power generating units listed in Table 1 which are supplied fuel oil from a bulk storage tank.

GPA and the USN shall determine and record the sulfur content of fuel oil supplied to units described in the previous paragraph whenever fuel oil is transferred to the bulk storage tank from any source. All records of determinations of fuel sulfur content shall be collected by GPA and GPA and Navy sources.

6.2.2 Occasions for Mandatory Fuel Sampling (Generating Unit Fuel Supplied without intermediate Bulk Storage)

This section applies to all electric power generating units listed in Table 1 which are supplied fuel oil without use of an intermediate bulk storage tank.

GPA and the USN shall determine and record the sulfur content of fuel oil supplied to units described in the previous paragraph on a daily basis. All records of determinations of fuel sulfur content shall be collected by GPA from GPA and Navy sources.

6.2.3 Fuel Sulfur Content Determination -- Standard Guideline

The determination of fuel oil sulfur content shall be in accordance with ASTM D 2880-71.

6.3 Forbidden Fuels

Fuel oil exceeding 2.84% sulfur content by weight shall not be burned by any plant listed in Table 1.

7.0 DEFINITION OF WIND CONDITION TERMS

The following terms are used throughout the Air Quality Control contingency Plan. These terms described the alert, adverse, calm and nominal wind conditions which affect the type of fuel to be utilized by the Piti-Cabras Complex. Adverse and calm wind conditions are also called air episode conditions.

7.1 Wind Direction Coordinate System

Meteorological wind direction is measured from the direction the wind is blowing. Meteorologists use the following coordinate system indicated in Figure 1. Degree designations indicate the direction from which the wind is coming with respect to true north. Given Guam's location, magnetic north lies 1.6° east of true north in a clockwise direction.

The arrow in Figure 1 indicates the direction of where the wind is blowing to. The wind is blowing from the southwest. Therefore the wind direction is 225° or in other words, 225° with respect to true north in a clockwise direction.

7.2 Alert Wind Conditions Definition

An *Alert Wind Condition* is such that prevailing wind direction is within the following sectors:

1) sector defined to be within 20° true and 30° true in a clockwise direction

2) sector defined to be within 230° true and 240° true in a clockwise direction

See Figure 2 for an illustration.

The Fuel Switching Dispatcher shall be aware of Alert Wind Conditions. Alert Wind Conditions may evolve into an Adverse Wind Condition.

7.3 Adverse Wind Conditions Definition

An *Adverse Wind Condition* is such that prevailing wind direction persists for two consecutive fifteen minute averages between 240° true and 20° true in a clockwise direction with the meteorological monitoring source as the apex of the arc. Fuel switching from high to low sulfur fuel is predicated upon the determination of an Adverse Wind Condition.

This sector with midpoint of 315° true is designated the *Episode Sector.* Figure 2 shows the Episode Sector on the Meteorological coordinate system. The Alert Bands in Figure 2 show the regions outside the Episode Sector which indicate the winds are in an alert condition.

7.4 Calm Wind Condition

A *Calm Wind Condition* occurs whenever the wind speed falls to less than 1.0 meters per second regardless of wind direction. This condition results in the plume from the electric power generating plant stacks settling around the immediate area of the Piti-Cabras Complex.

7.5 Nominal Wind Condition

A nominal wind condition exists whenever the prevailing winds are coming from a direction outside the Episode Sector and the wind speed is above 1.0 meters per second.

Figure 1. Meteorological Wind Direction Coordinate System

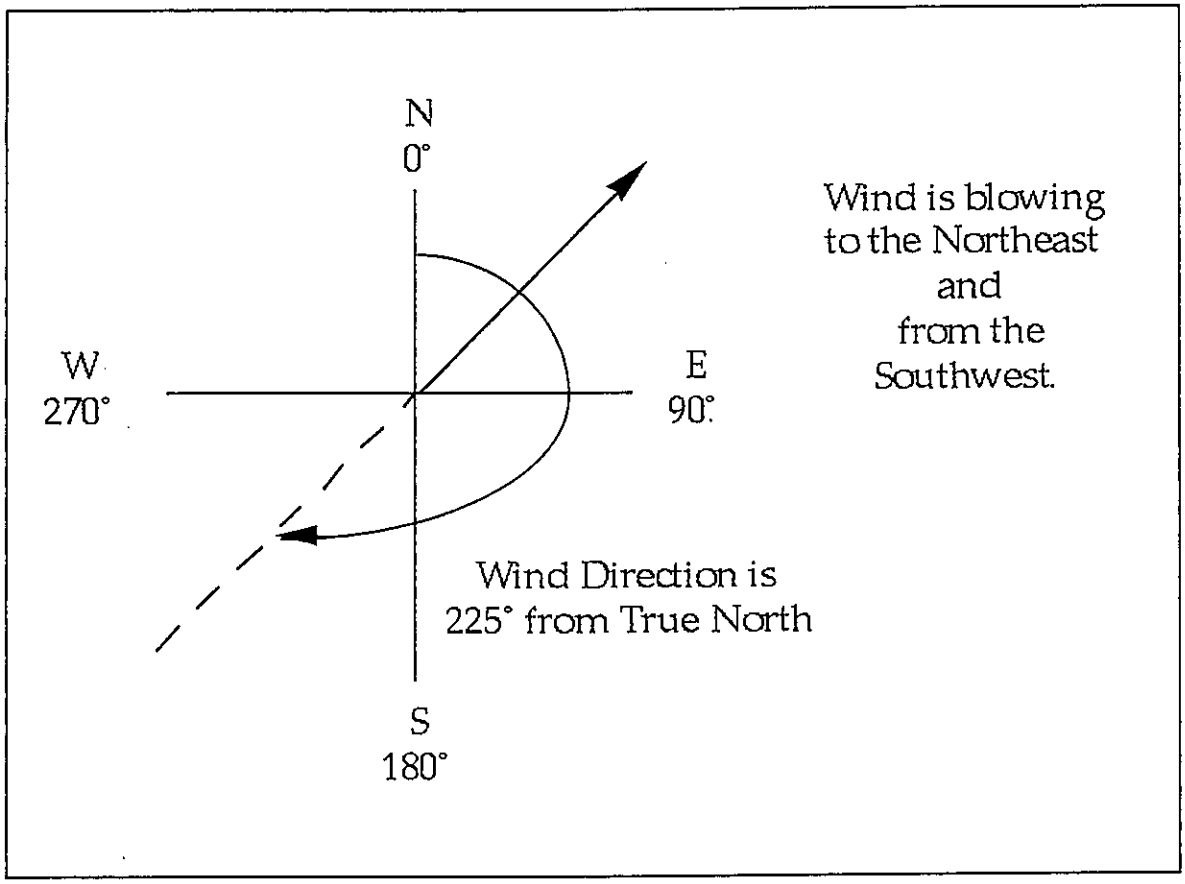
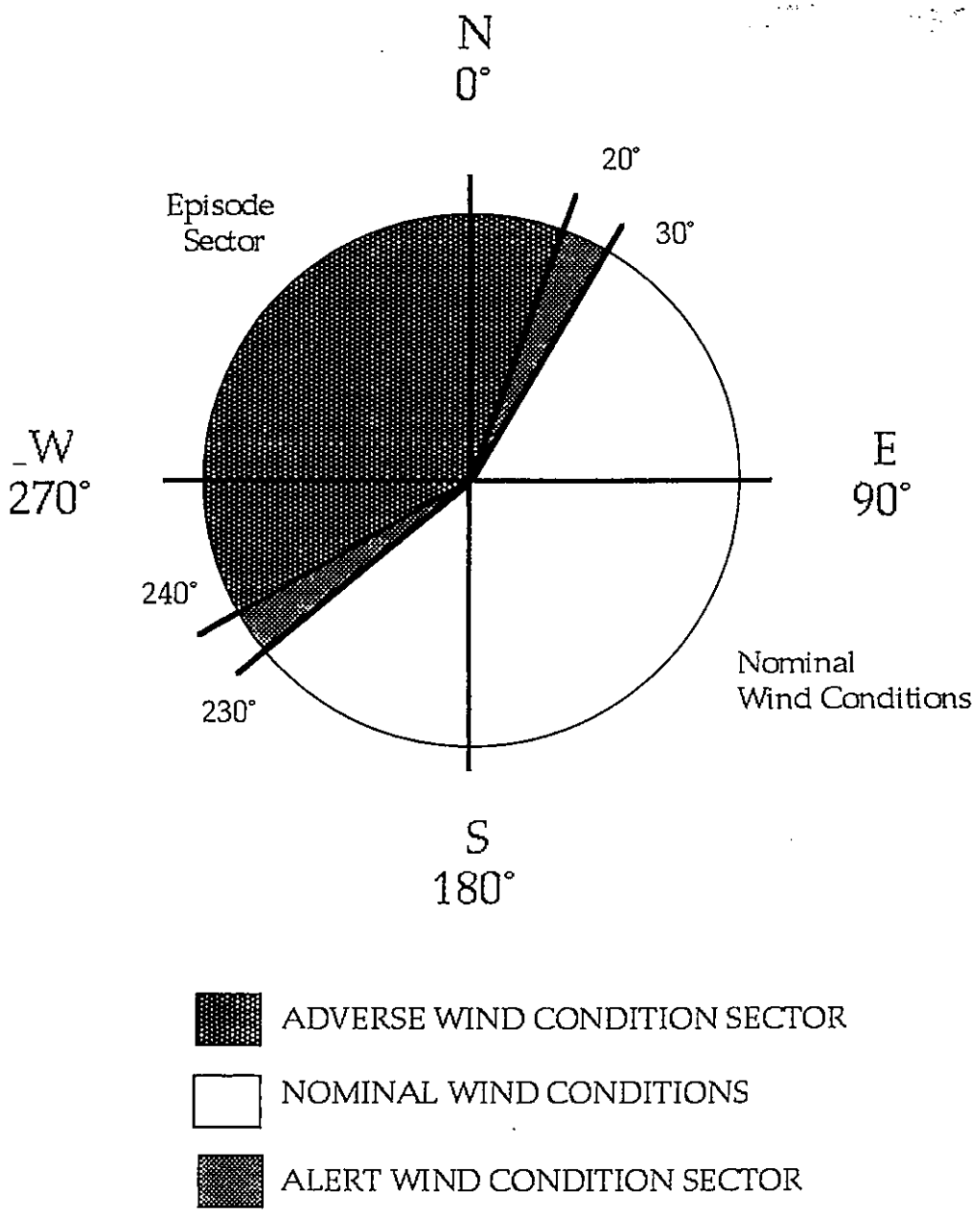


Figure 2. Wind Condition Bands



8.0 FUEL SWITCHING DISPATCHING DATA SOURCES

There are five Data Sources available for Fuel Switching Dispatching for the Piti-Cabras Complex. In addition, there is an established pecking order or preference for which data Source shall be used. Table 2 provides a list of Fuel Switching Dispatching Data Sources for the Piti-Cabras Complex in the order of most preferred for the source of meteorological data (wind direction).

Table 2. Fuel Switching Dispatching Data Sources for the Piti-Cabras Complex

ORDER OF PREFERENCE	DATA SOURCE NAME	MONITORING HEIGHT ABOVE GROUND (feet)
1	GPA Meteorological Monitoring Station	196.8
2	GPA Cabras Power Plant Wind Direction Monitoring Equipment	120
3	Naval Weather Station (Nimitz)	---
4	GPA Meteorological Monitoring Station	32.8
5	Navy Piti Power Plant Wind Direction Monitoring Equipment	45

The governing rationale behind the order of preference among the different Fuel Switching Dispatching Data Sources is the proximity of the Data Source to the Piti-Cabras Complex and the wind direction monitoring height.

Friction near the earth's surface causes both wind speed and wind direction to vary with height above ground. Since EPA recommends using wind speed and direction at the stack height for pollution transport, the GPA Meteorological Monitoring Station is the best Data Source because of both proximity and wind monitoring height.[1]

The GPA Meteorological Monitoring Source at 32.8 feet (10 meters) was chosen over the Piti Power Plant source which is about 12.2 feet higher. This selection was made for two reasons. First, there exists direct communications between the GPA equipment and the GPA PSCC. Second, the calibration and set-up of the GPA equipment has been made within the past six (6) months and along EPA recommended procedures: *"On Site Meteorological Program Guidance for Regulatory Modelling Applications (EPA 450/4-87-013)."*

If the most preferred Data Sources are unavailable, the next most preferred which is available shall be used.

9.0 MANUAL OPERATION OF FUEL VALVES

The following sections outline the manual operation of the fuel switching valves at Cabras Power Plant. Section 9.1 outlines the operating procedures for high sulfur to low sulfur fuel switching. Section 9.2 outlines the operating procedures for low sulfur to high sulfur fuel switching.

9.1 Fuel Valve Operation when switching from High Sulfur Fuel to Low Sulfur Fuel

When fuel switching from high sulfur to low sulfur fuel, the following steps must be adhered to:

1. Verify Low Sulfur fuel oil tank level. Record Low Sulfur fuel oil tank level.

2. Open Low Sulfur fuel oil supply valve.

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1 Correspondence between Mark D. Miller, meteorologist, of Trinity Consultants Incorporated and John J. Cruz of Guam Power Authority.

3. Close High Sulfur fuel supply valve.

4. Open Low Sulfur fuel return valve.

5. Close High Sulfur fuel return valve. Record High Sulfur fuel oil tank level.

9.2 FUEL VALVE OPERATION WHEN SWITCHING FROM LOW SULFUR FUEL TO HIGH SULFUR FUEL

1. Verify High Sulfur fuel oil tank level. Record High Sulfur fuel oil tank level.

2. Open High Sulfur fuel supply valve.

3. Close Low Sulfur fuel supply valve.

4. Open High Sulfur fuel return valve.

5. Close Low Sulfur fuel return valve. Record Low Sulfur fuel tank level.

10.0 HIGH SULFUR TO LOW SULFUR FUEL SWITCHING PROTOCOL

The following protocol describes the duties of the Guam Power Authority and the U.S. Navy Public Works Center (PWC) whenever a need to switch from high to low sulfur fuel is determined.

The Guam Power Authority (GPA) and the U.S. Navy Public Works Center (PWC) will initiate the following course of action when an Adverse Wind Condition is determined for the Piti-Cabras Complex.

The procedures listed below and in the following pages will be taken in the order given and as required to respond to the air episode conditions.

10.1 Change over Piti-Cabras to Low Sulfur Fuel

The following procedures shall be taken to switch from high to low sulfur fuel in response to the air episode conditions.

10.1.1 Initial Actions

Take initial action (I), (II), (III) and (IV)

(I) The GPA Power Dispatchers shall be responsible for notifying Navy Load Dispatchers for the IWPS within ten (10) minutes of the development of the meteorological conditions stated in this plan. The GPA's Power Dispatchers must log the time of notification and the person receiving the information.

(II) The GPA Power dispatchers will notify the Cabras Power Plant's Control Board Operator or Shift Supervisor of the requirement to switch fuels. The Cabras Power Plant must be switched to low sulfur fuel within fifteen (15) minutes of notification. The GPA Power Dispatchers shall also log and keep these complete records:

a. date and time of when fuel switching instructions are sent to the Navy Load Dispatcher,

b. date and time of when fuel switching actually occurs at the Cabras Power Plant,

c. names and titles of the immediate GPA Power Dispatcher above and the Navy Load Dispatcher notified.

(III) The Navy Load Dispatcher will notify the Piti Power Plant's Watch Supervisor of the requirement to switch fuels. The Piti Power Plant must be switched to low sulfur fuel with ten (10) but no more than fifteen (15) minutes of notification. The Navy Load Dispatchers shall also log and keep these complete records:

a. date and time of when fuel switching actually occurs at the Piti Power Plant,

b. names and titles of the Navy Load Dispatcher above and the GPA Power Dispatcher sending notification of fuel switch.

(IV) The Cabras Power Plant Control Board Operator I or Shift Supervisor and the Piti Power Plant Watch supervisor shall also log and keep these complete records:

a. date and time notification is received from their respective power/load dispatcher,

b. date and time when fuel switching actually occurs,

c. names and titles of the persons logging the information above.

10.1.2 **Notification of GEPA**

The Guam Environmental Protection Agency (GEPA) shall be notified within twenty (20) minutes of all fuel switches by facsimile from the Piti and/or Cabras Power Plants by their respective responsible personnel as noted in this plan. In addition, GEPA should be notified by phone during GEPA business hours within twenty (20) minutes of all fuel switches. Outside of GEPA business hours, notifying GEPA by phone should be followed immediately upon the first normal working - Monday through Friday including Holidays and weekends.

The facsimile machine shall provide a hard copy confirmation of the successful fax transmission. This hard copy confirmation and the original notification document shall be filed as per section 12.0.

Notifying GEPA is the responsibility of the GPA Power Dispatchers.

11.0 SWITCHING BACK TO HIGH SULFUR FUEL FROM LOW SULFUR FUEL

Stop burning lower sulfur fuel by (I), (II), (III) and (IV):

(I) At any time after two consecutive wind direction readings indicate that the wind direction is 10° outside the air episode wind sector of 240° true and 20° true in a clockwise direction and the wind speed is greater than 1.0 meters per second the GPA Power Dispatcher shall notify the Navy Load Dispatchers and the Cabras Power Plant Watch Board Operator I or Shift Supervisors within fifteen (15) minutes of the stated environment conditions to discontinue burning low sulfur fuel.

(II) The Navy Load Dispatcher shall notify the Piti Power Plant Watch Supervisor to discontinue burning low sulfur fuel.

(III) Switching from low sulfur fuel to high sulfur fuel use in the Piti and/or Cabras Power Plants shall occur within twenty (20) minutes after notification from their respective load dispatchers.

(IV) Logging procedures to record the switch from low sulfur fuel to high sulfur fuel are as follows in this document:

i. The GPA Dispatchers shall also log and keep these complete records:

   a. date and time of when fuel switching instructions are sent to the Navy Load Dispatchers,

   b. date and time when the Cabras Power Plant Board Operator of Shift Supervisor is notified to discontinue burning low sulfur fuel,

   c. date and time of when fuel switching actually occurs at the Cabras Power Plant,

   d. names and titles of the GPA Power Dispatcher above and the agents notified of fuel switch requirement.

ii. The Navy Load Dispatchers shall also log and keep these complete records:

a. date and time of when fuel switching instructions are received from the GPA Power Dispatchers,

b. date and time of when the Piti Power Plant Watch Supervisor was notified to discontinue burning low sulfur fuel,

c. date and time of when fuel switching actually occurs at the Piti Power Plant,

d. names and titles of the Navy Load Dispatcher above and the Piti Power Plant Watch Supervisor notified.

iii. The Cabras Power Plant Control Board Operator I or Shift Supervisor and the Piti Power Plant Watch Supervisor shall also log and keep these complete records:

a. date and time notification is received from their respective power/load dispatcher,

b. date and time when fuel switching actually occurs,

c. names and titles of the persons initiating and receiving the notification to switch fuels.

12.0 RECORDS

The Guam Power Authority and the United States Navy shall maintain files of quarterly reports, fuel switching logs, fuel oil sulfur analyses, continuously recorded wind speed and direction, 15 minute averages of wind speed and direction and all other supporting documentation showing conformance and non-conformance with this SOP. The files shall be in a permanent reproducible form suitable for inspection. The files shall be retained for at least five (5) years following the date of such report, log, measurement, or analysis.

12.1 **Records Responsibility**

The Guam Power Authority Manager of Generation shall be responsible for compiling and maintaining the files of quarterly report, fuel switching logs, fuel oil sulfur analyses, continuously recorded wind speed and direction, 15 minute averages of wind speed and direction and all other supporting documentation showing conformance and non-conformance with this SOP. The GPA Manager of Generations shall assign a member of his staff to perform this task but retains the responsibility for the integrity and completeness of these records. All records supporting this SOP whether of GPA or United States Navy derivation shall be sent to the GPA Manager of Generation.

13.0 **REPORTS**

For each calendar quarter, GPA shall submit a written report to the USEPA Region 9 and the GEPA Administrator. The report shall be sent by certified mail and postmarked within thirty (30) days of the end of the calendar quarter and a return receipt requested. The report shall include the following:

a. The date, time and duration of all adverse and calm wind conditions as defined in this SOP.

b. The date, time and duration of the use of low sulfur fuel oil in any unit co vered under this SOP and the identity of those units.

c. If no adverse or calm wind condition occurred during the calendar quarter, the report shall note and document that fact. A scatterplot of the 15 minute averages as a function of recorded time shall be generated as supportive evidence. The time scale of the scatterplot shall be such that consecutive fifteen minute averages can be resolved as different points.

d. If no low sulfur fuel was burned for the calendar quarter, the report shall state the fact and provide the reason why this was so.

e. The chemical analysis reports shall include the date on which the fuel sample was taken. In addition, the reason for the fuel sampling and testing shall be documented.

f. The delivery of fuel to the bulk storage tanks supplying the fuel to the generator units covered under this SOP shall be documented. The information that shall be recorded is the amount and type of fuel in the receiving tank and of fuel delivered.

g. The chemical analysis reports as per section 6.2 and subsections for all fuel fired at the Cabras-Piti Complex shall also be submitted for the calendar quarter.

h. The dates(s), time(s) identity of each unit for which the fuel switching procedures required by this SOP were not met shall be submitted.

i. Any change in the name, business address, rank and business telephone number of the following:

1) General Manager, Guam Power Authority

2) Commanding Officer, USN Public Works Center

3) Chief Power Dispatcher, Guam Power Authority

4) Plant Manager, Piti Power Plant

5) Plant Manager, Cabras Power Plant

j. Any change in the detailed description of the methods or procedures used to switch fuels at the Cabras and Piti Power Plants.

k. Any change in the fuel storage facilities at the Cabras and Piti Power Plants. This is to include the fuel storage capacity in gallons, the number of fuel tanks used to store both high and low sulfur fuel and schematic diagrams for the storage facilities including valve operation for each unit under this SOP.

l. Any change in the designation, rated capacity and construction commencement or completion status. The rated capacity for each unit shall be reported in tabular or graph form showing the heat input in million-British Thermal Units (MBTU) per hour as a function of net and gross power output (Megawatts (MW)).

These calendar quarter reports and any submittal or correspondence concerning this SOP must be sent via certified mail with return receipt requested. All pertinent reports and submittal shall be addressed to the following individuals:

1) Director Air & Toxics Division (Attention: A-3-3)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

2) Administrator, Air & Land Programs
Guam Environmental Protection Agency
D-107 Harmon Plaza
130 Rojas Street
Harmon, Guam 96911

APPENDIX A:

NOTIFICATION OF GEPA FORMS

APPENDIX 'A' CONTENTS **PAGE**

<DATE>

NOTIFICATION OF FUEL SWITCH FROM HIGH SULFUR TO LOW SULFUR FUEL

To: Administrator
Guam Environmental Protection Agency

From: Guam Power Authority - Power System Control Center

Gentlemen:

Please be advised that the Piti-Cabras Power Plant Complex switched from burning **high sulfur to low sulfur fuel** at **<TIME1> <DATE>.**

The wind had been blowing in the region of the episode sector and/or the wind speed was below 1.0 m/s for a duration of **<#MINUTES>** minutes before the order was given by **<PSCC DISPATCHER NAME1>** to switch from high sulfur to low sulfur fuel.

The **<NAVY LOAD DISPATCHER1>** was notified to switch to low sulfur fuel at **<TIME2>.** The Cabras Control Center was notified to switch to low sulfur fuel at **<TIME3>.**

Confirmation from the Navy that the switch had been made to low sulfur fuel was received from **<NAVY LOAD DISPATCHER2>** by **<PSCC DISPATCHER NAME2)** at time **<TIME4>.** Confirmation from Cabras Control Center that the switch had been made to low sulfur fuel was received from **<CABRAS CONTROL CENTER PERSONNEL>** by **<PSCC DISPATCHER NAME3>** at time **<TIME5>.**

The reference identification number for this fuel switching event is **<REFERENCE ID CODE>.** When wind conditions merit a return to burning high sulfur fuel, a notification of fuel switch will be issued.

Sincerely,

<PSCC DISPATCHER NAME1>
PSCC Fuel Switching Dispatcher

cc: General Manager, Special Projects Engineer, Manager of Generation, Manager of T & D, Superintendent of PSCC, GPA Engineering - MET

Appendix A: Manual Entry Form Key for
NOTIFICATION OF FUEL SWITCH FROM LOW SULFUR TO HIGH SULFUR FUEL

NOTIFICATION OF FUEL SWITCH FROM HIGH SULFUR TO LOW SULFUR FUEL

To: Administrator
Guam Environmental Protection Agency

From: Guam Power Authority - Power System Control Center

Gentlemen:

Please be advised that the Piti-Cabras Power Plant Complex switched from burning **high sulfur to low sulfur fuel** at _____.

The wind had been blowing in the region of the episode sector and/or the wind speed was below 1.0 m/s for a duration of _____ minutes before the order was given by _____ to switch from high sulfur to low sulfur fuel.

The _____ was notified to switch to low sulfur fuel at _____. The Cabras Control Center was notified to switch to low sulfur fuel at _____.

confirmation from the Navy that the switch had been made to low sulfur fuel was received from _____ by _____ at time _____. Confirmation from Cabras Control Center that the switch had been made low sulfur fuel was received from _____ by _____ at time _____.

The reference identification number for this fuel switching event is _____. When wind conditions merit a return to burning high sulfur fuel, a notification of fuel switch will be issued.

Sincerely,

PSCC Fuel Switching Dispatcher

cc: General Manager, Special Projects Engineer, Manager of Generation, Manager of T & D, Superintendent of PSCC, GPA Engineering - MET

Appendix A: Manual Entry Form Key for
NOTIFICATION OF FUEL SWITCH FROM LOW SULFUR TO HIGH SULFUR FUEL

NOTIFICATION OF FUEL SWITCH FROM HIGH SULFUR TO LOW SULFUR FUEL

To: Administrator
Guam Environmental Protection Agency

From: Guam Power Authority - Power System Control Center

Gentlemen:

Please be advised that the Piti-Cabras Power Plant Complex switched from burning **low sulfur to high sulfur fuel** at **<TIME1> <DATE>.**

The wind had been blowing in the region of the episode sector and /or the wind speed was below 1.0 m/s for a duration of **<#MINUTES>** minutes before the order was given by **<PSCC DISPATCHER NAME1>** to switch from low sulfur to high sulfur fuel.

The **<NAVY LOAD DISPATCHER1>** was notified to switch to high sulfur fuel at **<TIME2>.** The Cabras Control Center was notified to switch to high sulfur fuel at **<TIME3>.**

Confirmation from the Navy that the switch had been made to high sulfur fuel was received form **<NAVY LOAD DISPATCHER2>** by **<PSCC DISPATCHER NAME2>** at time **<TIME4>.** Confirmation form Cabras Control Center that the switch had been made to high sulfur fuel was received from **<CABRAS CONTROL CENTER PERSONNEL>** by **<PSCC DISPATCHER NAME3>** at time **<TIME5>.**

The reference identification number for this fuel switching event is **<REFERENCE ID CODE1>.** This notification of fuel switch from high to low fuel reference identification number **<REFERENCE ID CODE2>.**

Sincerely,

<PSCC DISPATCHER NAME1>
PSCC Fuel Switching Dispatcher

cc: General Manager, Special Projects Engineer, Manager of Generation, Manager of T & D, Superintendent of PSCC, GPA Engineering - MET

Appendix A: Manual Entry Form Key for
NOTIFICATION OF FUEL SWITCH FROM LOW SULFUR TO HIGH SULFUR FUEL

NOTIFICATION OF FUEL SWITCH FROM LOW SULFUR TO HIGH SULFUR FUEL

To: Administrator
Guam Environmental Protection Agency

From: Guam Power Authority - Power System Control System

Gentlemen:

Please be advised that the Piti-Cabras Power Plant Complex switched from burning **low sulfur to high sulfur fuel** at _____.

The wind had been blowing in the region of the episode sector and/or the wind speed was below 1.0 m/s for a duration of _____ minutes before the order was given by _____ to switch from high sulfur to low sulfur fuel.

The _____ was notified to switch to low sulfur fuel at _____. The Cabras Control Center was notified to switch to low sulfur fuel at _____. Confirmation from the Navy that the switch had been made to low sulfur fuel was received from _____ by _____ at time _____. Confirmation from Cabras Control that the switch had been made to low sulfur fuel was received from _____ by _____ at time _____. The reference identification number for this fuel switching event is _____. When wind conditions merit a return to burning high sulfur, a notification of fuel switch will be issued.

Sincerely,

PSCC Fuel Switching Dispatcher

cc: General Manager
Special Projects Engineer
Manager of Generation
Manager of T & D
Superintendent of PSCC
GPA Engineering - MET

Appendix A: Manual Entry Form Key for
NOTIFICATION OF FUEL SWITCH FROM LOW SULFUR TO HIGH SULFUR FUEL

APPENDIX B:

MONTHLY LOW SULFUR FUEL USAGE AND INVENTORY REPORT FORM

The following is a detailed explanation of the Monthly Low Sulfur Fuel Usage and Inventory Report Form.

Report Preparation:

The Monthly Low Sulfur Fuel Usage and Inventory Report shall be the responsibility of the US Navy as per section 6.1 of this SOP.

Report Transmittal:

A copy of the Monthly Low Sulfur Fuel Usage and Inventory Report Form must be transmitted to the following individuals:

1) GPA General Manager

2) GPA Special Projects Engineer

3) GPA Manager of Generation

4) Commanding Officer, USN Public Works Center

MONTHLY LOW SULFUR FUEL USAGE AND INVENTORY REPORT FORM LEGEND

Form Item	Description
Day	The Day of the Month.
Load (MW)	Peak Plant Output during the Low Sulfur Fuel Use.
Fuel Fired(bbls)	Low Sulfur Fuel Fired at each Power Plant at the Cabras-Piti Complex during the Incidence of Adverse or Calm Wind Conditions.
Time *Start*	The Time in Military Format at the Start of Low Sulfur Fuel Firing at the Cabras-Piti complex. The start time shall be determined by the Power Plant which switched latest after a request to switch from High Sulfur to Low Sulfur Fuel has been issued
Time *End*	The time in Military format at the End of Low Sulfur Fuel Firing at the Cabras-Piti complex. The End time shall be determined by the Power Plant which switched latest after a request to switch from Low Sulfur to High Sulfur Fuel has been issued
Wind *Direction (Deg)*	The wind direction in degrees at the onset of Low Sulfur Fuel Firing.
Wind *Speed (mph)*	The wind speed in miles per hour at the Onset of Low Sulfur Fuel Firing.
Low Sulfur Fuel (bbls) *Remaining on hand*	Amount of Low Sulfur Fuel at the Cabras-Piti complex Fuel Storage facility.
Low Sulfur Fuel (bbls) *Inventory*	Amount of Low Sulfur Fuel at the Fuel Storage facilities other than the Cabras-Piti complex Fuel Storage facility.
Fuel Received (bbls)	The amount of Low Sulfur Fuel delivered to each Power Plant at the Cabras-Piti complex.