ALL-HAZARDS EMERGENCY RESPONSE PLAN
NUCLEAR THREAT ANNEX

Port Authority of Guam

PORT OF GUAM

POLICY MEMORANDUM NO. 2013-02

To: All Port Employees
Effective Date: February 28, 2014
Subject: NUCLEAR THREAT ANNEX

Approved by:
Joanne M.S. Brown, General Manager

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RECORD OF CHANGE

Change No.	Description	Change Date	Approved By
001			

This ***Nuclear Threat Annex*** is subject to information updates and changes. The use of this Record of Change helps manage plan modifications throughout the life of this document. All attempts have been made to ensure the accuracy of the information within this ***Nuclear Threat Annex*** as of the initial distribution date. Any subsequent adjustments should be logged and coordinated through the Port's Strategic Planning Division.

I. INTRODUCTION

This is the official Port Authority of Guam (PAG) plan for responding to a Nuclear Threat incident that may affect the island of Guam and more specifically the entire Commercial Port community. This Nuclear Threat Annex is one of several hazard specific Annexes that augments the PAG All Hazard Emergency Response Plan (PAGAHERP).

One of the most catastrophic incidents that could befall the island of Guam, causing enormous loss of life and property and severely damaging economic viability, is a nuclear detonation or attack. It is incumbent upon the Government of Guam and its agencies, its federal and military partners, and public and private parties to prepare for this type of incident through focused nuclear attack response planning. Nuclear explosions present substantial and immediate radiological threats to life. A coordinated local, federal, and military community preparedness to respond to a nuclear detonation could result in life-saving on the order of tens of thousands of lives.

The Nuclear Threat Annex shall be reviewed annually and after each emergency incident during which it is used. The purpose of such review will be to ensure that changes are made, if necessary, based on lessons learned and updated emergency management procedures to make sure the plan remains current.

II. PURPOSE

The Nuclear Threat Annex (hereafter referred to as Annex) to the *PAGAHERP Basic Plan* has been developed to describe the situations, assumptions, concept of operations, command and control, organization and assignment of responsibilities governing the preparation, immediate response, and short-term recovery activities for incidents involving a nuclear detonation and to address the consequences of the event. This incident may occur on Federally-owned or licensed facilities, privately-owned property, or public areas and may vary in severity from the small to the catastrophic. The incident may result from inadvertent or deliberate acts.

The purpose of this Annex is to:

- Utilizing the Incident Command System (ICS), provide Port Management and emergency response planners with nuclear detonation specific preparation and response recommendations to maximize the preservation of life and Port assets in the event of a detonation.

- Briefly address the unique effects and impacts of a nuclear detonation such as scale of destruction and evacuation and shelter strategies.

- Define the roles and responsibilities of the PAG and its tenants and stakeholders.

- Discuss the specific authorities, capabilities, and assets the PAG has for responding to nuclear incidents that are not otherwise described in the *PAGAHERP Basic Plan.*

- Discuss the integration of the concept of operations with other elements of the Guam Emergency Response Plan (GERP), including the unique organization, notification, and activation processes and specialized incident-related actions.

- Provide guidelines for notification, coordination, and leadership of PAG activities.

While it is impossible to predict the precise magnitude and impact of a nuclear detonation, this Annex provides a foundation for preparedness and planning efforts, as well as for initial response actions in the absence of specific measurements.

III. SITUATION AND ASSUMPTIONS

A. Situation:

A nuclear threat/detonation incident may result from a deliberate act, an accident, or general mismanagement including:

- Foreign attacks or incidents involving nuclear or radioactive materials.

- Terrorism related incidents involving facilities or nuclear/radiological materials, including use of RDDs or INDs.

- Commercial nuclear facilities.

- Federal nuclear weapons facilities.

- Radioactive material sources, industrial uses, or technologically enhanced, naturally occurring radioactive material.

- Transportation incidents involving nuclear/radioactive material.

- Domestic nuclear weapons accidents.

A nuclear dispersal device is any device used to spread radioactive material into the environment with malicious intent. The harm caused by an RDD is principally contamination, and denial of use of the contaminated area, perhaps for many years. The costs to the island of Guam associated with an

effective RDD could be very significant. Of greatest concern to the island's security is the potential for a roque nation or terrorist attack using a nuclear weapon. A nuclear device could originate directly from a nuclear state, be modified from preexisting weapons components, or be fashioned by terrorists from the basic fissile nuclear materials (uranium-235 or plutonium-239).

Even a small nuclear detonation on Guam could result in over 100,000 fatalities (and many more injured), massive infrastructure damage, and thousands of square meters of contaminated land.

B. Assumptions:

Similar to a major typhoon event, there will be no significant Federal response at the scene for 24 hours and the extent of Federal assets will not be available for up to 72 hours. Emergency response will initially be a local function and for the purpose of this document, no significant Federal response is assumed for 24-72 hours.

Although planning considerations for island-wide evacuation, sheltering, mass medical care, and population monitoring and decontamination falls in the responsible hands of the Guam Homeland Security/Office of Civil Defense (GHS/OCD), this guidance is focused on providing express consideration of the following topics relevant to PAG emergency preparedness, response, and recovery activities within the first few days of a nuclear detonation: 1) evacuation, 2) shelter, and 3) worker safety and health.

Critical assumptions in the development of this Annex includes:

- An act of nuclear or radiological terrorism, particularly an act directed against the island of Guam, can have major consequences that can overwhelm the capabilities of the Government of Guam and its locally stationed federal and military partners to respond, and may seriously challenge existing Federal response capabilities.

- An incident involving the potential release of radioactivity will require implementation of protective measures, such as evacuation and shelter-in-place. The PAG has primary responsibility for implementing protective measures for its employees, tenants, and stakeholders located at the Commercial Port of Guam.

- In the case of a nuclear detonation, the plume may be dispersed over a large area over time, requiring response operations to be conducted over a wide area of responsibility that may include other Pacific island region partners.

- Radiation may not be immediately recognized as such until the radioactive material is detected or the health effects of exposure are manifested in the population and identified by the Department of Public Health.

- An expeditious Federal response is required to mitigate the consequences of a nuclear/radiological incident and requires an integrated Federal Government response.

- Lessons from multi-hazard planning and response will be applicable to the response to a nuclear detonation.

IV. CONCEPT OF OPERATIONS

This concept of operations is applicable to potential and actual nuclear incidents requiring PAG Incident Command Staff coordination with the GHS/OCD Emergency Operations Center (EOC) as well as recommended response activities by all PAG Division Heads and emergency response personnel.

All Division Heads will be activated upon declaration by the General Manager in coordination with the GHS/OCD EOC and shall commence planning and preparation in accordance to their assigned responsibilities. All key personnel shall be informed of their ICS structure assignments.

Private companies leasing offices, warehouses, or open land areas from the PAG will be responsible for securing and protecting their leased properties.

All vessels berthed within the PAG's jurisdiction will make the necessary preparations to depart upon orders issued by the Harbor Master's Office.

Until such time that the Port Command Center (PCC) is operational, the Harbor Master's Office, located on the 3rd floor of the Administration Building, will be designated as the Port Command Center (PCC) where all activities will be coordinated before, during, and after the incident.

Upon emergency declaration by the Governor and coordinated with the US Coast Guard's declaration of MARSEC Level 3, all normal operations must cease. However, PAG key personnel will continue to prepare and/or respond until work has been completed. All non-essential personnel not assigned to incident preparation and/or response duties will be released from work to prepare and secure their private residences.

Concurrently at MARSEC Level 3, the Port compound and facilities will be secured and only those designated as essential personnel will remain on duty at the PCC until further advised. These personnel will also prepare for post-incident response recovery activities immediately after the US Coast Guard declares MARSEC Level 1.

A. Nuclear Detonation Effects and Impacts

The following information serves to provide an overview and quick education on several important effects that will impact the entire Port community in the event of a nuclear detonation.

The term “nuclear effects” will mean those primary outputs from the nuclear explosion; namely blast, thermal, and prompt radiation. These effects have impacts on PAG and tenant personnel, infrastructure, the environment, and they will significantly affect the ability to respond to the incident.

The term “nuclear impacts” will be used to describe the consequences to people, materials, or the environment as a result of nuclear effects such as structural damage, fire, radioactivity, and human health consequences.

A nuclear detonation produces an explosion far surpassing that of any conventional explosive. A detonation occurs when an exothermic reaction creates a rapidly expanding fireball of hot gas or plasma. The expanding fireball produces a destructive shock wave.

While energy in a chemical explosion (such as dynamite or trinitrotoluene (TNT), a common explosive) derives from reactions between molecules, the energy released in a nuclear explosion derives from the splitting (or fission) of atomic nuclei of uranium or plutonium. Pound for pound, a nuclear explosion releases approximately 10 million times more energy than a chemical explosive.

Generally, when considering nuclear explosion scenarios perpetrated by a roque nation or terrorist, experts assume a low-yield nuclear device detonated at ground level. Low-yield in the context of this planning document ranges from fractions of a kiloton (KT) to 10KT.

The effects of a nuclear explosion less than 10KT would be less; however there is no easy or direct correlation factor to use for scaling of effects.

The amount of damage to structures can be used to describe zones for use in response planning. Each zone will have health and survival implications. The purpose of establishing zones is to help plan PAG response operations and prioritize actions.

The following zones are proposed for planning response to a 10K surface burst nuclear explosion:

Light Damage (LD) Zone:

- The outer boundary of the LD Zone can be recognized by the presence of broken windows, with approximately minimum 25% damage. Shattering of windows and associated injury from flying glass will occur

to about three miles from ground zero making this distance a reasonable estimate of the outer boundary of the LD Zone. However, window breakage may occur to a lesser degree out to five miles or more from ground zero.

- Doors and window frames may be blown in.
- As a responder moves inward, windows and doors will be blown in and gutters, window shutters, roofs, and light construction will have increasing damage. Litter and rubble will increase moving towards ground zero and there will be increasing numbers of stalled and crashed automobiles, making emergency vehicle passage difficult.
- Decontamination activities will be conducted by the PAG Fire Suppression Team (FST) assisting the PAG HazMat Team (HMT).

Moderate Damage (MD) Zone:

- Responders may expect transitioning into the MD Zone when building damage becomes substantial. This damage may correspond to a distance of about one mile from ground zero for a 10 KT nuclear explosion.
- Observations in the MD Zone include significant structural damage, blown out building interiors, and fires. In the MD Zone, sturdier buildings (reinforced concrete) will remain standing. Light commercial and multi-residential buildings may be fallen or structurally unstable, and most single-family houses will be destroyed.
- Substantial rubble and damaged vehicles in streets are expected, making evacuation and passage of rescue vehicles difficult or impossible without street clearing. Moving towards ground zero in the MD Zone, rubble will completely block streets and require heavy equipment to clear.
- Within the MD Zone, broken water and utility lines are expected and fires will be encountered.
- Many casualties in the MD Zone will survive and these survivors, in comparison to survivors in other zones, will benefit most from urgent medical care.
- A number of hazards should be expected, including elevated radiation levels, potentially live, downed power lines, ruptured gas lines, sharp metal object and broken glass, ruptured vehicle fuel tanks, and other hazards.
- Visibility may be limited for an hour or more after the explosion because of dust raised by the shock wave and from collapsed buildings. Smoke from fires will also obscure visibility.
- Decontamination activities will be conducted by the PAG Fire Suppression Team (FST) assisting the PAG HazMat Team (HMT).

No-Go (NG) Zone:

- Will be determined by the PAG HazMat Team.
- Few, if any buildings are expected to be structurally sound or even standing in the NG Zone, and very few people would survive. However, some people protected within stable structures (examples: bunkers or underground parking garages) at the time of the explosion may survive the initial blast.
- Very high radiation levels and other hazards are expected in the NG Zone making this zone gravely dangerous to survivors and responders; therefore, the NG Zone should be considered a no-go zone during the early days following the explosion.
- Rubble in streets is estimated to be impassable in the NG Zone making timely response impossible. Approaching ground zero, all buildings will be rubble and rubble may be 30 feet deep or more.

◙ *Extracted from the US DHS "Planning Guidance for Response to a Nuclear Detonation" (1st Edition, 2009)*

B. Shelter and Evacuation

One of the greatest threats to the life and health of people in the vicinity of a nuclear explosion is exposure to radioactive fallout. People may be exposed to dangerous levels of fallout in the MD and LD Zones, and further out to 10 or 20 miles.

There are two immediate actions that should be taken to protect PAG personnel, tenants, and stakeholders from fallout: taking shelter and evacuation. These protective actions will be communicated and orchestrated by PAG response officials prior to and during the incident. Timely decisions about shelter and evacuation procedures are critical to saving lives and reducing radiation injuries. The effective implementation of protective actions during an incident is largely dependent on pre-event preparedness and dissemination of guidance to the entire Commercial Port community.

The following information provides an overview of PAG sheltering and evacuation and describes protective actions and planning considerations by PAG Management and emergency responders.

PAG Shelter Recommendations:

Sheltering in the most accessible building or structure is the best initial action immediately following a nuclear explosion. **This includes "shelter-in-place", which means staying inside, or going immediately indoors to any readily available concrete structure**. People should remain sheltered and listen for instructions from authorities. Even in areas where fallout has not yet arrived, sheltering is advised until fallout areas have been identified. Otherwise, evacuees could be caught outside when the fallout arrives or flee unaffected areas and unknowingly enter into a fallout area.

The best initial action immediately following a nuclear explosion is to take shelter in the nearest building or structure and listen for further instructions from the PAG Command Staff.

"Adequate shelter" is defined as a shelter that protects against acute radiation effects and significantly reduces radiation dose to occupants during an extended period. The adequacy of a shelter is a function of initial radiation dose rates when fallout arrives, and the dose rate reduction afforded by the shelter and its shielding capacity. Good shielding materials include concrete, brick, or stone while wood, drywall, and sheet metal provide minimal shielding. Basements and large concrete structures are good examples of adequate shelter. Large buildings with thick concrete walls offer refraction from a blast and provide the benefit of increased distance from deposited fallout materials when people gather away from exterior walls.

Protective measures to secure the shelter from radiation fallout should be carried out immediately to include: sealing of doors, windows, and ventilated areas.

PAG Designated Shelters:

- Admin Building
- Warehouse 1
- CFS Building
- EQMR Building

PAG Evacuation:

Sheltering should be followed by staged and facilitated evacuation for those in fallout-impacted areas. Evacuations should be prioritized based on the fallout pattern and radiation intensity, adequacy of shelter, impending hazards, medical and special needs, sustenance resources (example: food and water), and response and logistical considerations. Evacuations should be planned so as not to obstruct access to transportation routes that are critical for ongoing life-saving missions.

If ground zero is far from the Commercial Port, PAG emergency responders may be able to implement an orderly evacuation before arrival of fallout, and implement plans to communicate and carry out a rapid and orderly evacuation. If closer to ground zero where fallout arrives quickly, evacuations should take place after a period of sheltering.

Staged or Phased Evacuation:

- Early evacuation may be needed to protect people shortly following sheltering
- Staging of evacuations should be driven by the hazards to the Commercial Port community and logistical considerations.

- No evacuation should be attempted until basic information is available regarding fallout distribution and radiation dose rates.
- Once the hazard area is defined and has been communicated to responders and the public, evacuations may proceed.
- In conducting evacuation procedures, responders should possess radiation measurement equipment, personal protective equipment, and should consider route conditions such as rubble and debris on the streets, traffic delays, uncontrolled fires, collapsed buildings, and other obstacles to mobility.
- Attempting to evacuate everyone in too large an area could divert key resources from the zones of highest dose where radiation exposure control is more essential.
- Responders should assess the status of the transportation infrastructure as one of the top priorities in the first hours after a nuclear explosion.
- A poorly planned evacuation could result in unnecessary fatalities from radiation exposure, or other hazards that were unforeseen.

C. Planning Considerations for Sheltering and Evacuations

Planning considerations are key factors to consider in planning for and ultimately implementing public sheltering and evacuations. The following activities are in priority order and can be expanded depending on need.

- ***Situation Assessment***
  The following information should be obtained and are key pieces for early shelter and evacuation decision making:
  - Path of fallout transport and deposition
  - Weather information
  - Computer models
  - Visual observations
  - Standard emergency response tools
  - Radiation detection equipment

- ***Adequacy of Shelter***
  Because radiation protection properties of potential shelter structures are of significant importance, the Command Staff should evaluate the types of PAG shelters that will potentially be used. Pre-event protective measures should be considered and required materials should be readily available when needed.

- ***Time***
  For all protective actions, and especially for immediate activities required after a nuclear explosion has occurred, the speed with which protective measures recommendations are issued and implemented is of primary importance. Delays could result in a large number of unnecessary

fatalities. The following guidelines are designed to assist emergency managers and first responders:

- Initial projections of fallout deposition should be communicated to responders as rapidly as possible; within the first hour and updated every hour.
- Initial self-protection recommendations should be communicated to all PAG personnel, tenants, and stakeholders as rapidly as possible; within the first hour.
- Early evacuations, if appropriate, should begin as soon as possible and be completed within four hours.
- Staged or phased evacuations should begin, where appropriate within 48 hours, depending on estimated radiation exposure, logistical, and other factors.

- ***Communications/Notifications***
  The effectiveness of protective action recommendations depend on the ability to communicate with emergency managers, responders, and the public. The Command Staff should specifically consider communications challenges that will be caused by a nuclear explosion and recognize in their planning that normal means of communication may not be available.

  As part of preparedness activities, notification procedures will be conducted by the Port Police utilizing their sirens and public address systems communicated throughout the entire Commercial Port. General public guidance on developing an emergency kit may include stocking of battery powered radios for communication use immediately after the incident.

V. COMMAND AND CONTROL

The General Manager has overall authority and control in any emergency situation affecting the Port Authority and its assets. The Deputy General Manager, Harbor Master, and Chief of Port Police will assist the General Manager at the Port ECC. Additionally, the General Manager will be supported by an Advisory Group composed of the Operations Manager, PAGAHERP Liaison Officer and the Captain of the Port (or his designee).

VI. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization:

All Division Heads and Superintendents have assignments and responsibilities to prepare and secure PAG assets from damage or loss due to a nuclear threat.

Upon declaration of MARSEC Level 2, the General Manager can activate the PCC, comprised of all Division Heads and relevant stakeholders to receive

initial instructions. In the event the condition is declared on a weekend, holiday or after working hours, Division Heads should immediately contact the General Manager or his designee for instructions.

Attached checklists to this Annex will be used by the Division Heads to verify the tasks outlined for immediate preparation. Upon completion, the checklists shall be submitted to the Safety Administrator, who will be responsible for the maintenance of such files, for final inspection.

Once final inspection has been completed and briefing has been provided, the General Manager will designate an alternate, normally the Deputy General Manager, to coordinate all assignments before, during, and after the incident before he proceeds to the GHS/OCD EOC.

In addition to the Command Staff, the following PAG management personnel shall report to the PCC. It is important to note that many of the following individuals may be designated as a member of the Command Staff.

Deputy General Manager, Operations
Deputy General Manager, Administration
Harbor Master
Port Police Chief
Operations Manager
Maintenance Manager
Safety Administrator
Commercial Manager
Human Resources Administrator
Financial Affairs Controller
General Accounting Supervisor
Procurement & Supply Manager
Systems Manager
Engineering Manager
Chief Planner
PAGAHERP Liaison Officer
Public Information Officer
Stevedoring Superintendent
Terminal Superintendent
Transportation Superintendent
Equipment Maintenance Superintendent
Building Maintenance Superintendent

B. Pre-Incident Activities - Assignment of Responsibilities:

The following MARSEC Levels outline specific assignments and responsibilities to be performed by key management personnel:

1. **MARSEC Level 2**
   a. Once the designation of MARSEC Level 2 and an emergency declaration by the Governor is made, normal Port operations may continue. However, Port personnel, tenants, and stakeholders should begin to secure and store all loose materials in their respective areas.

   b. The PCC may be activated by the General Manager. Division Heads will prepare and secure work areas and equipment not required for emergency operations.

   c. The General Manager may stop receipt or delivery of cargo from the Port any time during MARSEC Level 2, after sufficient notice has been provided to shipping agents. All efforts will be made to allow adequate time for the agents to notify their customers of this impending move.

   d. The Harbor Master will advise all vessels berthed at the Port, F-1, Kaiser, Hotel, and Golf Piers to begin preparations for getting underway to sea.

   e. The Commercial Manager will notify all tenants to prepare and secure their work areas and store all equipment and loose materials in a safe location. Notification will also be provided to marina tenants to secure, remove, or relocate their vessels from the marinas to the Harbor of Refuge.

   f. All vessels under 200 feet in length will be instructed to get underway as soon as possible. Vessels will be given ample time to get needed bunkers and supplies.

   g. No vessel will be allowed to stay in port without authorization from the Captain of the Port and the Harbor Master.

   h. Shipping Agents with special requirements, such as container securing or shifting to other areas, will consult with the General Manager.

   i. Port Police and Harbor Master personnel will test and prepare all hand-held radios and other communications equipment for emergency use.

   j. The General Manager, or his designee, will prepare the situation status reports from the GHS/OCD EOC.

   k. If required and as needed, the PAG Fire Suppression Team and HazMat Team may be activated.

2. MARSEC Level 3

a. Upon declaration of MARSEC Level 3 by the Captain of the Port, all normal operations will cease. Division Heads will continue to prepare for the nuclear incident until all tasks outlined in the checklists have been completed.

b. The Deputy General Manager or his designee will release all non-essential PAG personnel or personnel not specifically assigned to nuclear incident preparation tasks once emergency status instructions have been received by the General Manager from the GHS/OCD EOC.

c. Emergency response personnel, supplies, materials and equipment should be identified and readily available. Potable water should be stocked at the PCC and other designated locations.

d. All non-Port personnel within the Port premises not engaged in emergency securing operations will be required to leave the area.

e. All vessels over 200 feet in length will be required to depart the harbor as per U.S. Coast Guard requirements. All vessels authorized to remain in the Port will be offered a berth or an area to moor by the Harbor Master. Mooring lines, wires, cables will be provided by the vessel or agent and securing of such vessels will be performed by its crew.

f. All emergency vehicles will be deployed to pre-designated locations. Emergency road and debris cleaning equipment should be identified and deployed to their pre-designated locations. Water tankers should also be made available for emergency use.

g. All essential personnel will remain on duty unless authorized to leave the premises of the PCC.

C. Post-Incident Activities - Assignment of Responsibilities:

MARSEC Level 1

a. Upon declaration of a back-to-normal condition by the Governor, the General Manager will activate the Port Damage Assessment Team. The Team will comprise of the following personnel:

1. Engineering Manager
2. Maintenance Manager
3. Procurement & Supply Manager
4. Supply Supervisor
5. Building Maintenance Superintendent
6. Equipment Maintenance Superintendent

7. Property Control Officer
8. Claims Officer
9. Representatives from:
    i. Commercial Division
    ii. Strategic Planning Division
10. PAG Fire Suppression and HazMat Team Leaders

The Team will assess, document, and photograph all damages to Port assets as a result of the incident. The Team will be responsible for receiving damage reports from all Divisions. Upon completion of Team's assessment, the General Manager will initiate response and recovery activities.

b. Division Heads will survey and assess damages to their respective work areas – using the Damage Assessment form attached to this Annex. A copy of the Damage Assessment form, along with estimated damage costs, will be submitted to the Damage Assessment Team.

c. The Infrastructure Damage Assessment form will be used to document all damages, including personnel attendance before, during, and after the incident for claim/reimbursement purposes on its submission to FEMA via the GHS/OCD. Division Heads will be responsible for completing this form.

d. Respective Division Heads will begin coordinating with the appropriate Government of Guam agencies via the GHS/OCD EOC for immediate road clearance and debris management and removal activities.

e. Port Police personnel will conduct their own security assessment of the physical infrastructure damages and prepare, if necessary, the amendment letter process to the U.S. Coast Guard identifying security deficiencies and how the Port will mitigate it until materials and supplies are obtained to repair and replace.

f. If back-to-normal condition is declared on a weekday, depending on the severity of the damages, all Port employees will be required to report to work. However, if back-to-normal condition is declared on a weekend, only those essential personnel contacted by their Division Heads are required to report to work. All areas of the Port will return to normal operations.

g. Division Heads will be required to submit time management reports to the Finance Division for payroll and FEMA justification purposes.

h. The Port Police Chief or his designee will submit all receipts substantiating petty cash expenditures to the Finance Division.

VII. MANAGEMENT CHECKLIST

Upon declaration of MARSEC Level 2, the respective Division Heads will complete the checklist (attached to this Annex). Completed lists shall be submitted to the Safety Administrator and will be utilized as reference at the PCC.

VIII. AUTHORITY AND REFERENCES

Guam Code Annotated, Title, Section 85.8515 (Public Law 1-21)
PAG Policy Memorandum No. 2013-01, PAGAHERP Basic Plan
Guam Emergency Response Plan
National Response Plan
Planning Guidance for Response to a Nuclear Detonation, 1st Edition 2009
Federal Nuclear/Radiological Incident Annex

MANAGEMENT PRE-NUCLEAR INCIDENT PREPARATION CHECKLIST

GENERAL MANAGER:

	TASK	COMPLETED YES	NO
1.	Evaluate status report received from GHS/OCD EOC.		
2.	Activate the PCC and meet with Division Heads		
3.	Brief management personnel of potential nuclear threat and proceed with preparation and securing activities of Port facilities.		
4.	Decide status on cargo movement after due notice has been provided to all shipping agents.		
5.	Upon completion of briefing, designate Deputy General Manager, Operations to manage the PCC. Brief Damage Assessment Team members of their post-incident duties.		
6.	If required, report to GHS/OCD EOC.		

DIVISION HEADS:

	TASK	COMPLETED YES	NO
1.	Report to the PCC, for briefing by the General Manager.		
2.	Brief employees of the potential nuclear threat; prepare and secure work areas. Cover and secure with plastic sheets all computers, filing cabinets, office equipment and loose documents. Turn off all lights and unplug all office equipment and appliances.		
3.	Upon declaration of MARSEC Level 3, Division Heads will secure all non-essential personnel.		

HARBOR MASTER:

	TASK	COMPLETED YES	NO
1.	Order all vessels under 200 feet in length to get underway as soon as possible and all vessels over 200 feet in length to prepare to get underway to sea.		
2.	Once instructions from the U.S. Coast Guard have been received, order all vessels over 200 feet in length to depart the Apra Harbor area.		
3.	Ensure all loose wiring, antennae, masts, etc. are property secured and tied down to the Port Administration Building roof.		
4.	Remove and secure all Harbor Master UHF and VHF antennas.		
5.	Prepare back-up radio for communication with vessels.		
6.	Secure Harbor Master Office and report to the PCC.		

PORT POLICE CHIEF:

	TASK	COMPLETED YES	NO
1.	Report to PCC for the General Manager's briefing.		
2.	Test and prepare all hand-held radios and other emergency communication equipment for emergency use.		
3.	Brief all Port Police personnel on their nuclear incident assignments in accordance with the Division's nuclear/radiological incident response and operations standard operating procedures.		
4.	Top off emergency response vehicles and patrol Port facilities for security purposes.		
5.	Prepare petty cash form and submit to Finance Division to purchase provisions for personnel who are required to remain at the Port during the incident.		
6.	Upon declaration back-to-normal condition, restoration of MARSEC Level 1,and after all damage and security assessments have been conducted and submitted, coordinate with US Coast Guard on any security deficiencies and work on mitigation initiatives, if needed.		

PROCUREMENT AND SUPPLY:

	TASK	COMPLETED YES	NO
1.	Ensure all necessary emergency supplies (such as batteries, flashlights, radios, communication equipment, and potable water) are adequately stocked and ready for distribution,		
2.	Procure equipment rental services (dump truck, backhoe, and other necessary equipment) for post-incident recovery activities.		
3.	Upon declaration of MARSEC Level 3, Division Heads will secure all non-essential personnel.		

FINANCE:

	TASK	COMPLETED YES	NO
1.	Brief Division Heads on the detailed time management reporting (including timekeeping) for payroll and FEMA justification purposes.		
2.	Require Division Heads to complete documentation prior to approval of reimbursable expenditures.		
3.	Maintain complete manual records until such time the accounting computerized system is back in operation.		
4.	Distribute forms and documents to timekeepers and Division Heads involved with incident-related activities before, during, and after the event.		
5.	Ensure all manual documentation (such as cash receipts, checks, and other forms) are sufficient and kept secured.		
6.	Assign Finance personnel to monitor, maintain, and follow-up on all documentation to be submitted by Division Heads.		

OCCUPATIONAL HEALTH & SAFETY:

	TASK	COMPLETED YES	NO
1.	Brief Division Heads on safety and health coverage before and after the incident.		
2.	Review and check all areas and equipment in accordance with the checklists.		
3.	Ensure Port personnel, facilities, equipment, and other materials are safe and secured.		
4.	Responsible for the updates of the Annex in coordination with the Strategic Planning Division.		

MARKETING & PUBLIC RELATIONS:

	TASK	COMPLETED YES	NO
1.	Report to the PCC for briefing.		
2.	Upon declaration of MARSEC Level 2, Marketing personnel will take “before the event” photographs of PAG facilities and equipment after preparations have been completed.		
3.	Once declaration of back-to-normal condition and restoration to MARSEC Level 1 has been made, Marketing personnel will take “after the event” pictures of PAG facilities and equipment for damages.		
4.	Marketing personnel will also take pictures of PAG facilities and equipment during the recovery stage.		

OPERATIONS:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Oversee incident preparation and recovery activities of the Operations Division.		

TERMINAL:

	TASK	COMPLETED YES	NO
1.	Report to the PCC for briefing.		
2.	Complete incident preparation checklist and submit to Occupational Health & Safety.		
3.	Maintain an accurate account of Terminal employees’ time and attendance – including those who were secured upon declaration of MARSEC Level 2 and those who were recalled for recovery activities upon the declaration of MARSEC Level 1.		
4.	Remain at PCC for incident manning.		

STEVEDORING:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Complete incident preparation checklist and submit to Occupational Health & Safety.		
3.	Maintain an accurate account of Stevedoring employees' time and attendance – including those who were secured upon declaration of MARSEC Level 2 and those who were recalled for recovery activities upon the declaration of MARSEC Level 1.		
4.	Provide personnel, if requested, to assist other divisions in securing Port facilities and equipment.		
5.	Remain at PCC for incident manning.		

TRANSPORTATION:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Complete incident preparation checklist and submit to Occupational Health & Safety.		
3.	Maintain an accurate account of Transportation employees' time and attendance – including those who were secured upon declaration of MARSEC Level 2 and those who were recalled for recovery activities upon the declaration of MARSEC Level 1.		
4.	Remain at PCC for incident manning.		

EQUIPMENT MAINTENANCE:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Complete incident preparation checklist and submit to Occupational Health & Safety.		
3.	Maintain an accurate account of Equipment Maintenance employees' time and attendance – including those who were secured upon declaration of MARSEC Level 2 and those who were recalled for recovery activities upon the declaration of MARSEC Level 1.		
5.	Remain at PCC for incident manning.		

FACILITY MAINTENANCE:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Complete incident preparation checklist and submit to Occupational Health & Safety.		
3.	Maintain an accurate account of Facility Maintenance employees' time and attendance – including those who were secured upon declaration of MARSEC Level 2 and those who were recalled for recovery activities upon the declaration of MARSEC Level 1.		
4.	Provide personnel, if requested, to assist other divisions in securing Port facilities and equipment.		
5.	Remain at PCC for incident manning.		

COMMERCIAL:

	TASK	COMPLETED YES	NO
1.	Report to PCC for briefing.		
2.	Ensure all tenants are notified to secure work areas and equipment and store all loose materials in their respective areas. Inspection of such lease areas shall be conducted.		
3.	Notify all marina tenants to begin to secure, remove or relocate their boats from the marinas to the Harbor of Refuge.		

DIVISIONAL PRE-NUCLEAR INCIDENT PREPARATION CHECKLIST

TERMINAL DIVISION:

	TASK	COMPLETED YES	NO
1.	Remove all automobiles from POV lot and transfer into designated staging areas within the warehouse or compound.		
2.	Stage all loose break-bulk cargoes within the warehouse.		
3.	Identify and properly secure all hazardous break-bulk cargoes (cylinders, drums, etc.)		
4.	Identify and consolidate all hazardous material containers. Submit hazardous materials report to PCC.		
5.	Place all flat racks with heavy lift cargoes between dry containers with wheels. Submit pre-incident Container Yard Report.		
6.	Pick up loose debris and secure loose materials around work areas and container yard.		
7.	Consolidate in chassis stalls all bare and stuff containers on wheels.		
8.	Trim all grounded empty and import containers to two (2) high.		
9.	Clear all fire exits and lanes in container yard of obstruction.		
10.	Charge all hand-held and I-Connect radios and submit to PCC for emergency use.		
11.	Fuel all official vehicles and turn in keys to PCC for emergency use.		
12.	Offices: Secure and cover with plastic all computers, filing cabinets, office equipment and loose documents. Secure all doors, windows and fire escapes. Turn off lights and unplug office equipment and appliances.		

I acknowledge that the above incident preparation have been completed on:

Date: _____ Time: (From: _____ To: _____)

Terminal Superintendent: _____

I certify completion of the above incident preparation.

Date: _____ Time: _____

Operations Manager: _____

I certify all actions taken are appropriate in preparation for a nuclear threat incident:

Date: _____ Time: _____

Safety Administrator: _____

COMMENTS:

TRANSPORTATION DIVISION:

	TASK	COMPLETED YES	NO
1.	Fuel all official vehicles and equipment and ensure its operational readiness.		
2.	Assist Equipment Maintenance Division in securing cargo handling equipment.		
3.	Secure all equipment and official vehicles under the wings of the warehouse.		
4.	Assist other Divisions requiring assistance in the securing of cargo handling equipment.		

I acknowledge that the above incident preparation have been completed on:

Date: _____ Time: (From: _____ To: _____)

Transportation Superintendent: _____

I certify completion of the above incident preparation.

Date: _____ Time: _____

Operations Manager:
_____

I certify all actions taken are appropriate in preparation for a nuclear threat incident:

Date: _____ Time: _____

Safety Administrator: _____

COMMENTS:

STEVEDORING DIVISION:

	TASK	COMPLETED YES	NO
1.	Identify Stevedoring personnel to report to the Operations Manager to stand-by or assist in securing building, equipment and/or cargoes.		
2.	Provide necessary personnel to assist other Divisions in securing the Port's buildings, container yard, loose cargoes and materials, and automobiles.		
3.	Secure dockside. Tie down loose objects, metals, pallets, dunnage and drums.		
4.	Provide messenger services for the PCC.		
5.	Assist Operations and Maintenance Divisions, as needed, in securing entrances to warehouses.		

I acknowledge that the above incident preparation have been completed on:

Date: _____ Time: (From: _____ To: _____)

Stevedoring Superintendent: _____

I certify completion of the above incident preparation.

Date: _____ Time: _____

Operations Manager:
_____

I certify all actions taken are appropriate in preparation for a nuclear threat incident:

Date: _____ Time: _____

Safety Administrator: _____

COMMENTS:

EQUIPMENT MAINTENANCE DIVISION:

	TASK	COMPLETED YES	NO
1.	Secure all Gantry Cranes as follows: • Travel to stowage area • Pin down and secure all tie-down turnbuckles to designated anchorage • Secure boom forestays • Secure spreader to 25-30 ton container on ground level • Secure operator's cab, machinery house, windows, vents, and doors • Top off cranes with fuel		
2.	Although already surveyed, ensure that RTGs are securely tied down		
3.	Secure Mobile Harbor Crane as follows: • Travel to stowage area • Fully extend outriggers • Lower boom to ground level • Secure crane to truck (pin down) • Secure windows on upper and lower cab to include all doors • Top off mobile harbor crane with fuel		
4.	Top off, test, and monitor all emergency generators from LC1 through LC4.		
5.	Service all major equipment and top off all administrative official vehicles.		
6.	Secure equipment, materials, and loose debris around shop areas.		

I acknowledge that the above incident preparation have been completed on:

Date: _____ Time: (From: _____ To: _____)

Equipment Maintenance Superintendent: _____

I certify completion of the above incident preparation.

Date: _____ Time: _____

Maintenance Manager: _____

I certify all actions taken are appropriate in preparation for a nuclear threat incident:

Date: _____ Time: _____

Safety Administrator: _____

COMMENTS:

FACILITY MAINTENANCE DIVISION:

	TASK	COMPLETED YES	NO

1.	Install and secure shutters at the following locations:
	• Administration Building (1st, 2nd, and 3rd floors)
	• Horizon Building
	  ○ Operations Office
	  ○ Board Room
	• Checkpoint
	• High Tower
	• Low Tower
	• Port Police Building		

2.	Ensure all generators are tested, fueled, and ready for emergency use.		
3.	Clear all storm drains of any debris.		
4.	Secure equipment, materials, and loose debris around shop area.		

I acknowledge that the above incident preparation have been completed on:

Date: _____ Time: (From: _____ To: _____)

Building Maintenance Superintendent:
_____

I certify completion of the above incident preparation.

Date: _____ Time: _____

Maintenance Manager: _____

I certify all actions taken are appropriate in preparation for a nuclear threat incident:

Date: _____ Time: _____

Safety Administrator: _____

COMMENTS:

DIVISION HEADS DAMAGE ASSESSMENT

DATE: _____

DAMAGE FACILITY/EQUIPMENT:

_____
_____
_____
_____
_____

LOCATION:

_____
_____

OVERALL EXTERIOR DAMAGE DESCRIPTION AND DIMENSIONS:

_____
_____
_____
_____
_____
_____
_____

INTERIOR/EQUIPMENT DAMAGE:

_____
_____
_____
_____
_____
_____
_____

ESTIMATED COST OF RESTORATION: _____

PREPARED BY:

POSITION/TITLE: _____

BUSINESS:

_____
_____

BUSINESS TELEPHONE: _____

INFRASTRUCTURE DAMAGE ASSESSMENT

I. BUILDINGS AND FACILITIES AFFECTED:

	Number
A. Destroyed:	
B. Major Damage (over 50%)	
C. Minor Damage (Repairable)	
D. Affected (Minimal Repair)	

II. JOBS LOST OR BUSINESS INTERRUPTION DUE TO DISASTER:

Agency	Number

III. OTHER SIGNIFICANT CHALLENGES:

A. Impact on Port Authority of Guam
B. Road Closures
C. Economic Impact – Private Sector

IV. IMPACT ON PUBLIC FACILITIES:

Emergency Work	Documented Amount Spent
Category A – Debris Clearance	$
Category B – Protective Measures/ Permanent Restorative Work	$
Category C – Road Systems	$
Category D – Water Control Facilities	$
Category E – Public Buildings	$
Category G – Other	$
TOTAL:	$

Note:
All submitted damage assessment forms will be reviewed by the Strategic Planning and Engineering Divisions. In addition to compiling and quantifying the incident's impact to the Port for submission to the GHS/COD, an After Action Report will be generated to assist the PAG in future preparedness, response, and recovery planning that will support funding requests through FEMA's Public Assistance and Mitigation grant programs.