



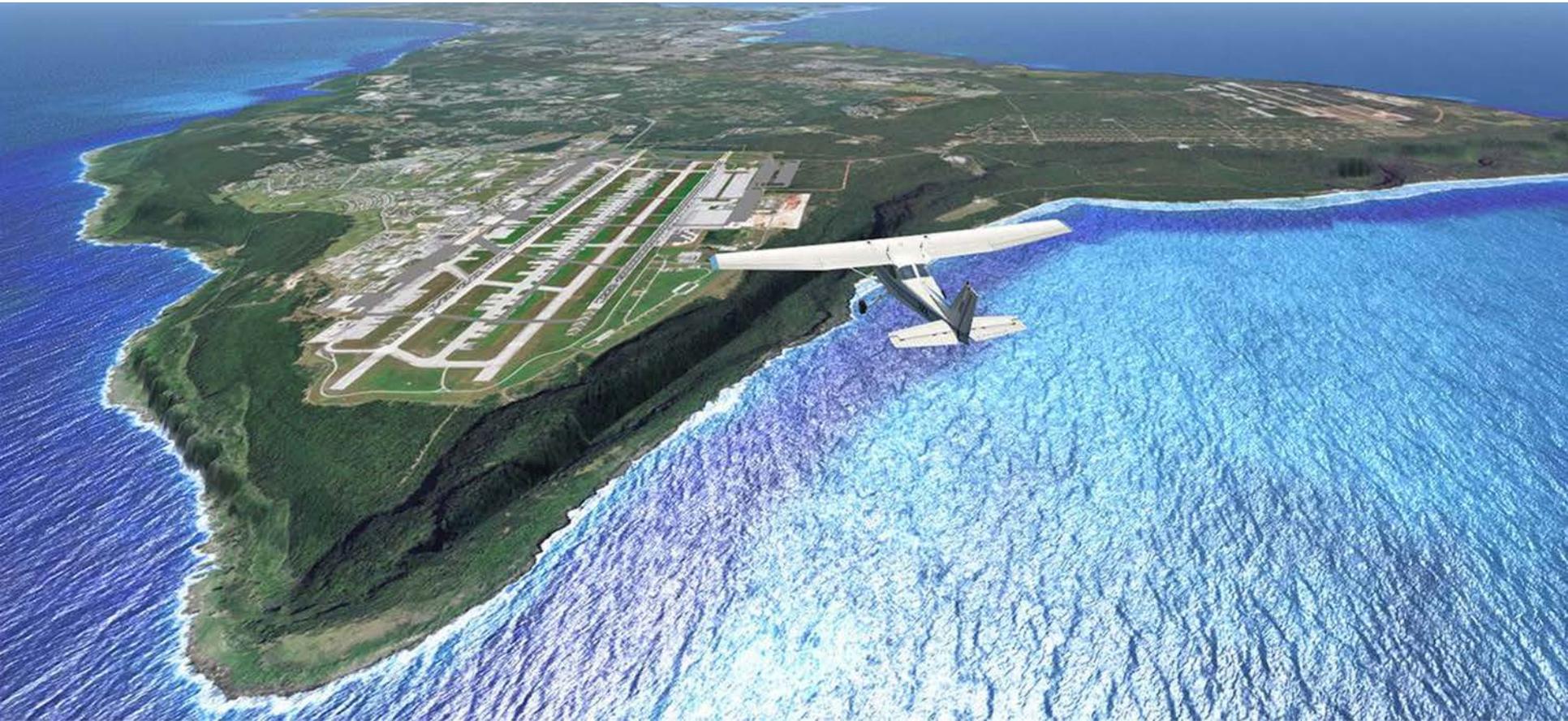
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Why Guam?

What makes Guam Unique?





**Guam is a tropical island with
clean water, land and air.**
Guam is our island and our home.





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Clean Drinking Water



Watershed Map of Guam

Priority Watersheds from Guam's Clean Water Action Plan:

- Northern Guam Sole Source Aquifer
- Ugam Water Treatment Plant
- Talofofo

Blue area indicate protected areas of significant water resources

Source: 1964 USGS Geology Map and NRCS Watershed Delineations



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Clean marine resources: *Beaches, reefs, lagoons*

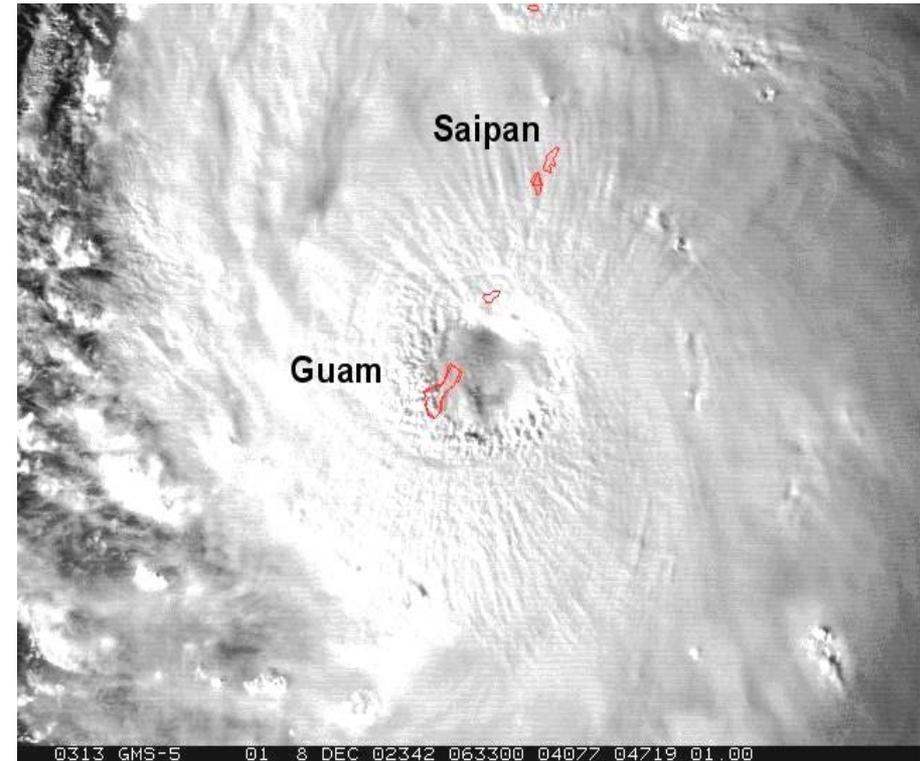




Typhoon Alley

Guam is in the busiest location for tropical cyclones on Earth

- Nonpoint Sources of Pollution
- Coral reefs and coastal waters impacted:
 - *Sedimentation and turbidity from erosion*
 - *Lowered salinity*
 - *Nutrients*
 - *Pesticides and toxic materials*





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What is planned?

Compliance, rules & regulations for the industry.

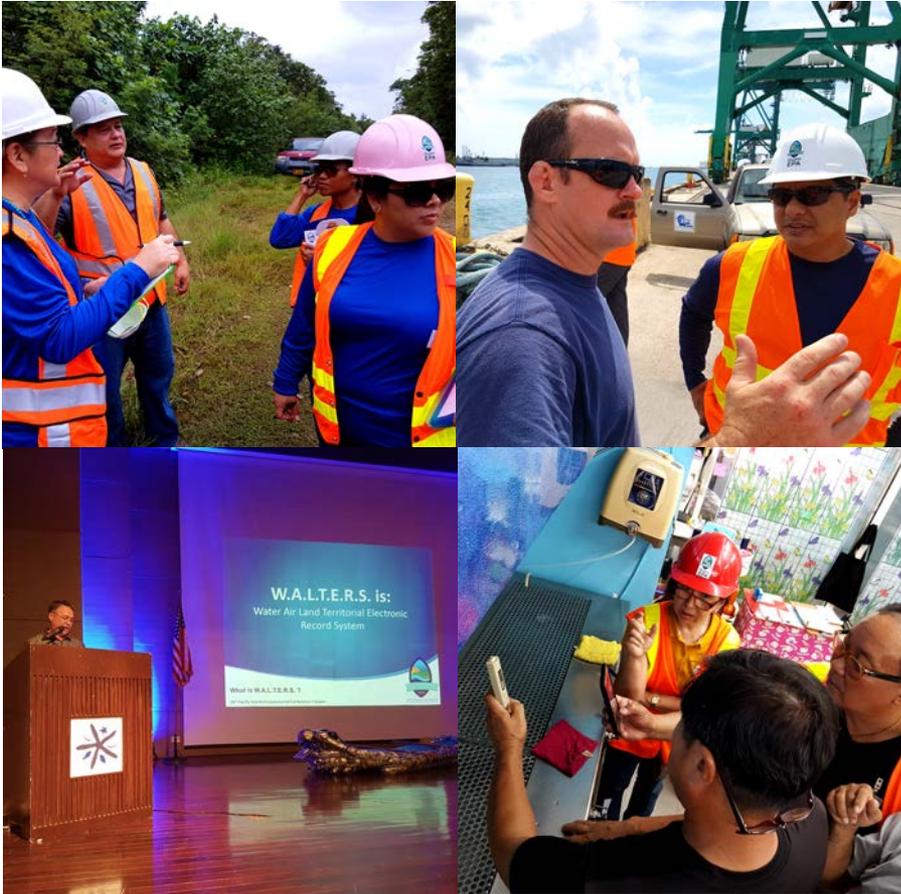
What must be done to comply with rules and regulations and operational requirements that the industry should be aware of?



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Guam EPA's Responsibilities

Clean air, land and water.



Clean Air

- Power Plants
- Vehicles
- Radon

Clean Land

- Hazardous Waste
- Solid Waste

Clean Water

- Fresh water
- Marine water
- Drinking water

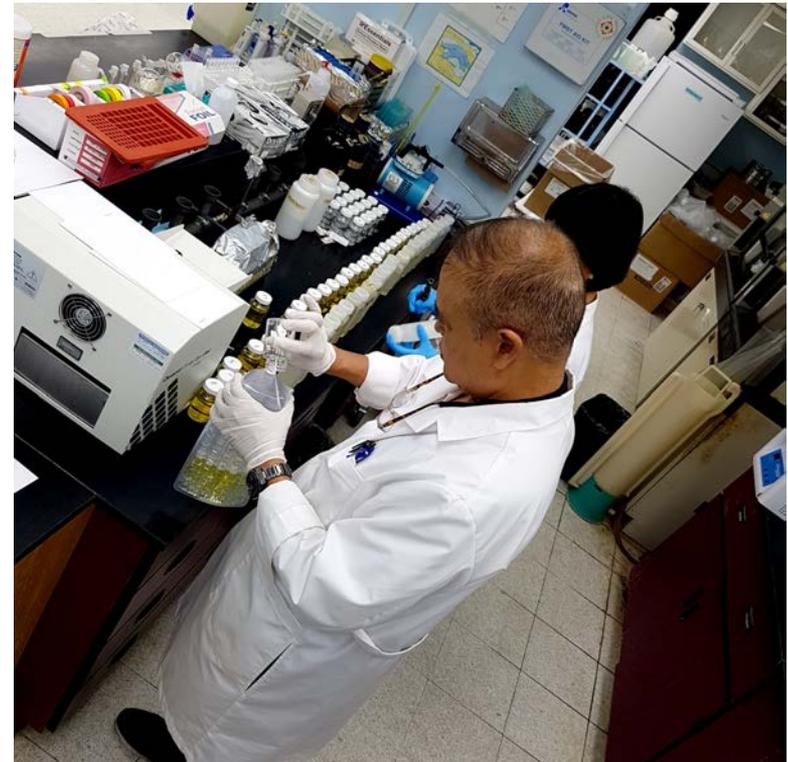


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Agency Divisions

Programs within Guam EPA

- Permit Section
- Environmental Monitoring and Analytical Services (EMAS)
- Air and Land Programs (CERCLA)
- Water Programs
- Green Parcels (Brownfields 128a) and DSMOA (RCRA)
- Administrative Services





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Common Division Functions

For programs within Guam EPA

- Authorization and Rulemaking
- Permitting, licensing and certification
- Inspections, compliance monitoring and enforcement
- Emergency release response and planning
- Public outreach and education
- Technical assistance
- Assessment and compliance review



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Air & Land Program Division

Overall objective for the division

To provide the highest quality of public service through outreach and partnerships, compliance, enforcement, permitting and rulemaking in the areas of:

- Air quality
- Hazardous waste management
- Pesticides management
- Solid waste management

These objectives are carried out for the community in order to ensure the protection of human health and the environment.



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Air Pollution Control Program

Activities

- NESHAPS
- Stationary Emission Sources
- Cabras-Piti Redesignation
- Ambient Air Monitoring
- Vehicle Emission
- Radon
- Radiation
- Freon (CFC)



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Hazardous Waste Management Program

Goal



- Enforce *Guam's Hazardous Waste Management Regulations* and monitor all underground storage tanks, leaking underground storage tanks, corrective actions, polychlorinated biphenyls, and emergency response activities.



Hazardous Waste Management Program

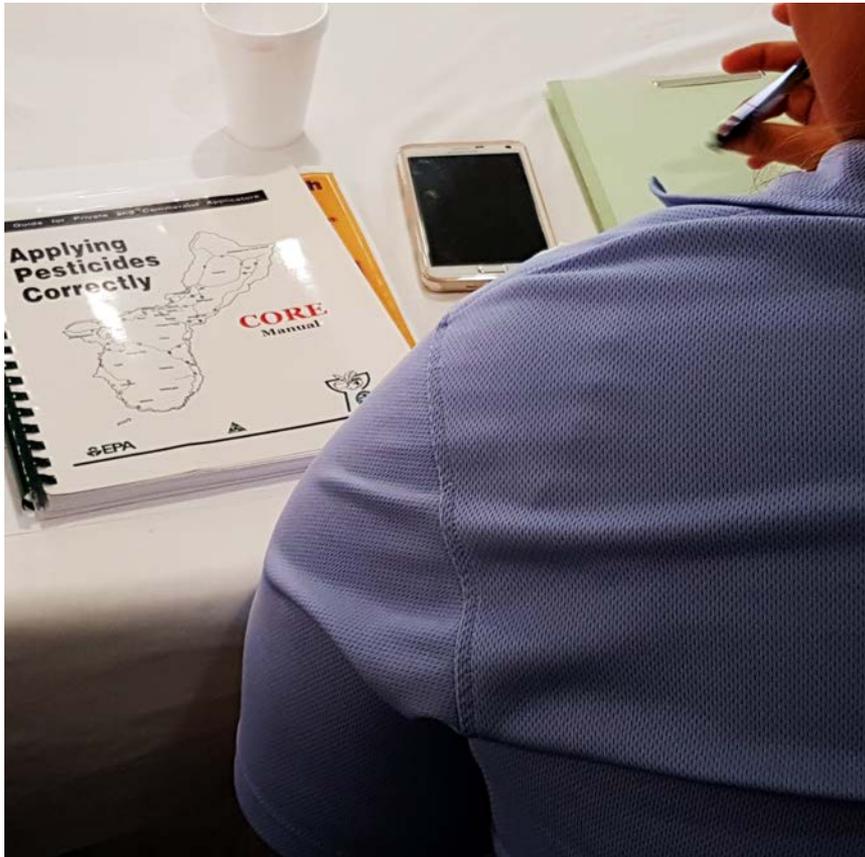
Activities

- Treatment, Storage & Disposal Facilities
- Hazardous Waste Generators
- Transporters
- Corrective Action
- CERCLA
- Underground Storage Tanks
- Leaking Underground Storage Tanks
- Polychlorinated Biphenyls (PCB)



Pesticides Enforcement Program

Goal



- Enforce *Guam's Pesticide Act* and monitor activities that may be inconsistent with the *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*.



Pesticides Enforcement Program

Activities

- Pesticides use, storage and disposal
- Marketplace surveillance
- Pesticides importation compliance
- Worker Protection Standard
- Pesticides Applicator surveillance
- Pesticides Applicator Certification Program



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Solid Waste Management Program

Goal



- Enforce *Guam's Solid Waste Disposal Rules and Regulations, Solid Waste Collection Regulations and Guam Beverage Container Regulations.*



Solid Waste Management Program

Activities

- Solid Waste Management Facilities
- Solid Waste Collection
- Litter enforcement
- Integrated Solid Waste Management Plan
- Beverage Containers
- Cleanup projects



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Environmental Monitoring and Analytical Services Division





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Environmental Monitoring Program

Goal



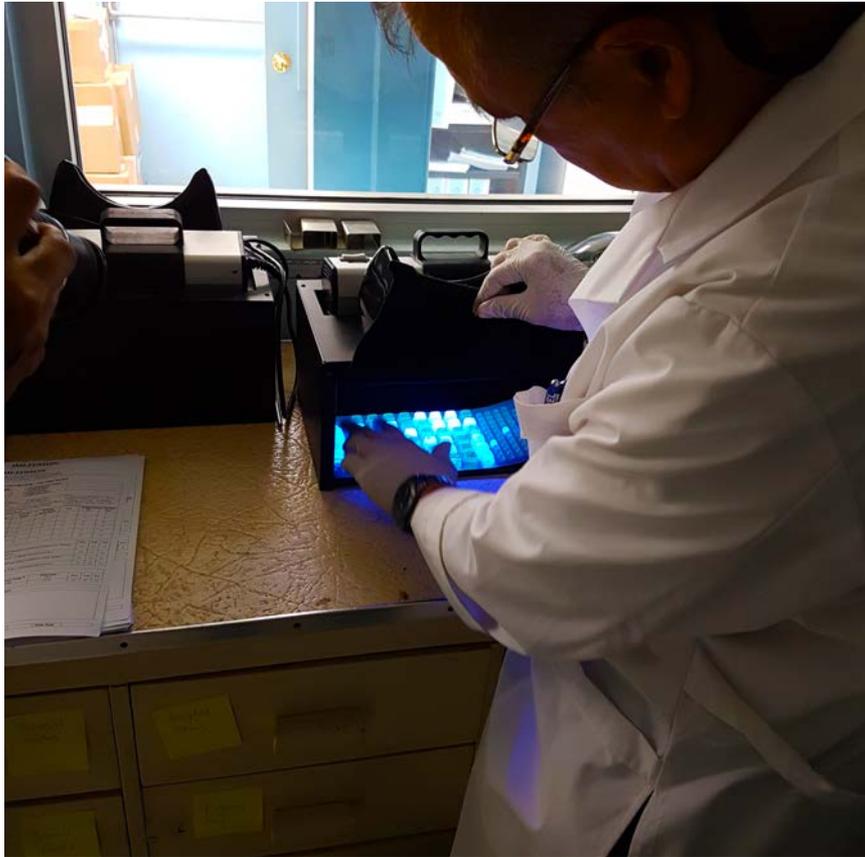
- Implement the Guam Water Quality Monitoring Plan
- Provide technical support to Water and Planning Divisions



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Analytical Services Program

Goal



- Enforce Laboratory Certification Program
- Monitor the Quality of Surface Waters
- Compliance Monitoring Investigation
- Monitor the Quality of the Drinking Water Network
- Maintain Quality Assurance/Quality control in Laboratory
- Provide Data Review and Technical Support to Other Agency Divisions
- Provide Community Education and Public Outreach



Water Program Division

Overall objective for the division

To provide the highest quality of public service through outreach and partnerships, compliance and enforcement, permitting, and rulemaking in:

- Water pollution control management
- Safe drinking water management
- Water resources management

for the community in order to ensure the protection of human health and the environment.



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Water Resources Program

Goal

- Implement and Enforce Water Resources Conservation Act
- Implement and Enforce Underground Injection Control Regulations
- Implement and Enforce Water Resources Development and Operating Regulations



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Safe Drinking Water Program

Goal

- Implement and Enforce Guam's Safe Drinking Water Act
- Implement and Enforce Guam's Lead and Copper Ban Act
- Implement and Enforce Guam's Water and Wastewater Operator's mandatory Certification Act
- Implement and Enforce Guam's Primary Safe Drinking Water Regulations
- Implement and Enforce Guam's Water & Wastewater Operator Certification Regulation



Water Pollution Control Program

Goal

- Implement and Enforce the Individual Wastewater disposal System Regulations
- Implement and Enforce the Water Pollution Control Act
- Implement and Enforce the Connection to Public Sewer Regulations
- Implement and Enforce the Guam Soil Erosion and Sediment Control Regulation
- Implement and Enforce the Guam Feedlot Waste Management Regulations
- Implement and Enforce the Toilet facilities and Sewage Disposal Act
- Implement and Enforce 2006 CNMI and Guam Stormwater Management Manual
- Implement and Enforce Supplement to 2006 CNMI & Guam Stormwater Design Manual



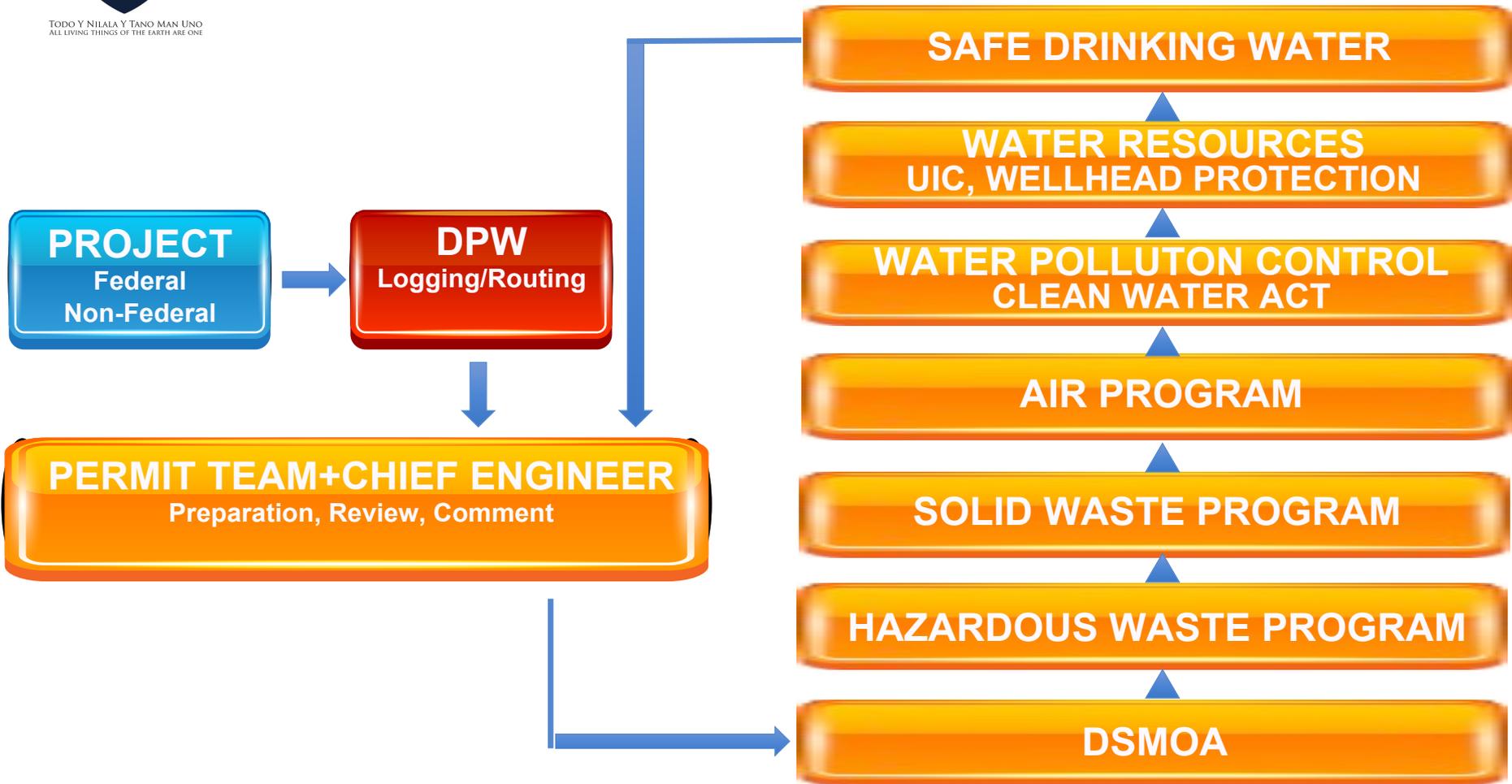
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Permit Application Process



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Guam EPA Permit Process Flowchart





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Guam EPA Permitting Process Review

Depending on the type of activity of a particular project permit application may need to be reviewed by different Permitting Review Sections as indicated in the **flow chart** (shown in the previous slides)

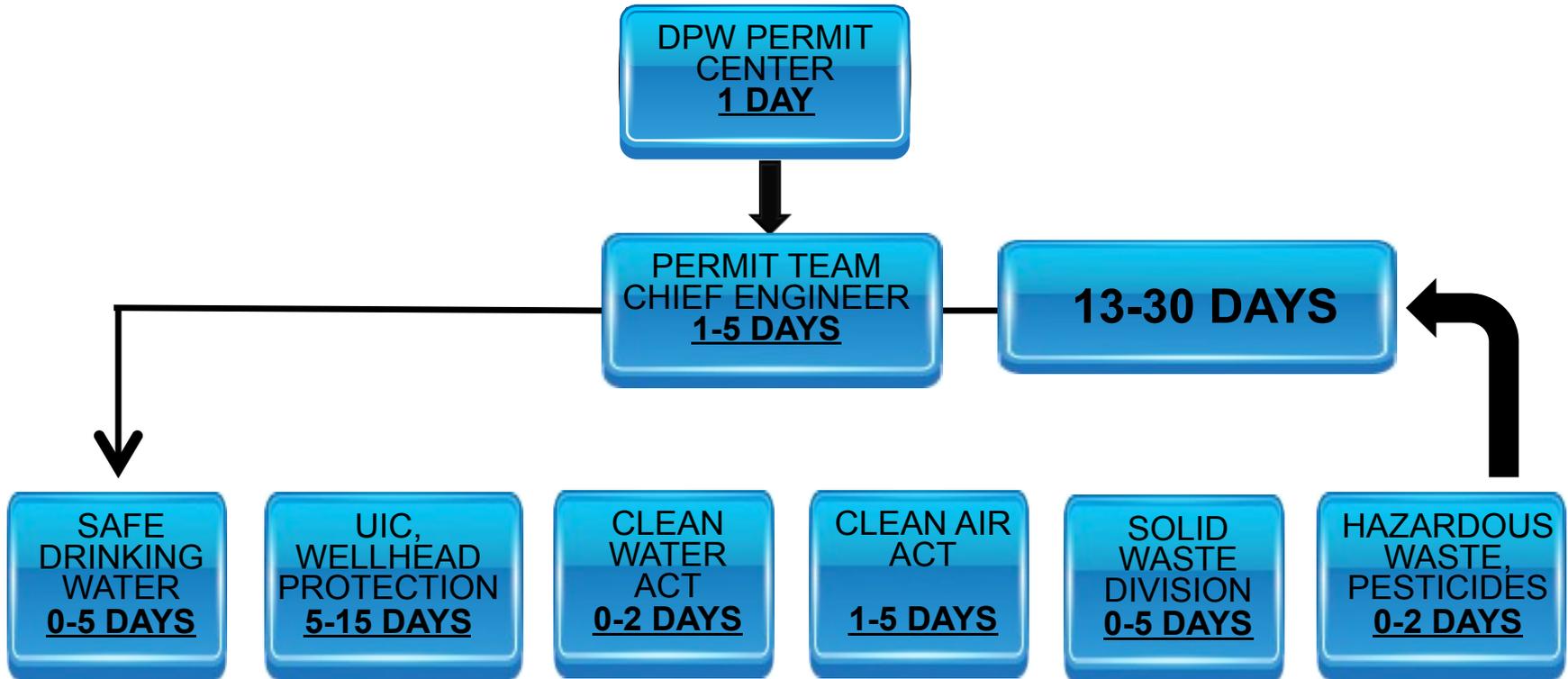
- Water Pollution
- Safe Drinking Water
- Monitoring
- Air Pollution
- Solid Waste
- Hydro Geologists
- Water Resources
- Individual Waste Water
- Environmental Review
- Pesticide
- Hazardous Waste



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Permitting Process Review

Flow Chart on Length of Review Process





Guam EPA Permits Project Briefing

- A Permit is required for and applicable to:
 - All construction activities in land and water areas of Guam
 - Project activities by private individuals
 - Project activities by Government of Guam Agencies
 - Project activities by Federal Agencies on Guam



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Federal Project Permit Application

GUAM ENVIRONMENTAL PROTECTION AGENCY

PERMIT APPLICATION



1. APPLICANT: Name: _____
(If the applicant is not the property owner, a lease agreement or written authorization from the owner is required or an NTP for federal projects)

Mailing Address: _____

Contact Person: _____

Telephone No.: _____

2. CONTRACTOR: Company Name: _____
Address: _____

Contractor's License No.: _____ Phone No.: _____ Project Name: _____

Expiration Date: _____ Email: _____ Plan Prepared By: _____

3. TYPE OF PERMIT:

- Clearing Permit Grubbing Permit Grading Permit Stockpiling Permit

4. PROJECT SITE INFORMATION:

Village (non-federal projects)			Lot No. (non-federal projects)			Block No. (non-federal projects)			Tract No. (non-federal projects)		
Actual Lot Area						Actual Lot Area to be Disturbed					
Area (ft ²)		Area (Acre)		Overall Dimensions (ft)		Area (ft ²)		Area (Acre)		Overall Dimensions (ft)	
Stockpiling Data						Grading/Fill Data					
Volume (ft ³)			Maximum Height (ft)			Grading Volume (ft ³)			Fill Volume (ft ³)		

Linear distance(s) (ft.) between site and all of the nearest water(s) of Guam: _____

Anticipated Start Date: _____ Anticipated Completion Date: _____

Does the project include any in-water work in any of the waters of Guam? Yes No
If yes, submit a U.S. Army Corps of Engineer (USACOE) permit and a GEPA-approved 401 Water Quality Certification (WQC).

Does the project have a sinkhole within the clearing, grubbing, grading or stockpiling footprint? Yes No
If yes, no clearing, grubbing, grading or stockpiling shall be performed within close proximity without prior approval.

Does the project include the use of a detention basin during the clearing, grubbing and/or grading? Yes No
If yes, attach a detention basin basic plan indicating type & location of basin and direction of runoff flow.

5. GEPA-REQUIRED DOCUMENTS ATTACHED TO THIS APPLICATION: *(Please check all applicable boxes)*

- | | |
|--|--|
| <input type="checkbox"/> Clearing, Grubbing, Grading, and/or Stockpiling Plan | <input type="checkbox"/> Solid Waste Disposal Plan |
| <input type="checkbox"/> Environmental Protection Plan/Erosion Control Plan | <input type="checkbox"/> Engineer Soils Report |
| <input type="checkbox"/> GEPA-approved 401 WQC Permit | <input type="checkbox"/> Wetland Delineation |
| <input type="checkbox"/> USEPA receipt acknowledgement of NOI | <input type="checkbox"/> Storm Water Pollution Prevention Plan |
| <input type="checkbox"/> Site & Topographic Plan showing all waters of Guam and existing/proposed storm drains and culverts within the project footprint or drainage area | <input type="checkbox"/> Lease Agreement or written authorization from property owner <i>(Notice to Proceed for federal projects)</i> |
| <input type="checkbox"/> For stockpiling permit only: a site plan showing property boundaries; easement; type & source of stockpile material; & stockpile's height, setbacks & location(s) | <input type="checkbox"/> Storm water runoff drainage system plan with design calculation based on actual percolation rate that shows type & location of detention basin and the direction of runoff flow |
| <input type="checkbox"/> Maps signed by a registered land surveyor and approved by the Department of Land Management <i>(non-federal projects only)</i> | <input type="checkbox"/> Guam Land Use Commission Notice of Action via the Dept. of Land Management <i>(non-federal projects only)</i> |
| <input type="checkbox"/> Environmental Impact Assessment <i>(or NEPA documentation)</i> | <input type="checkbox"/> Utilities Clearance <i>(non-federal projects only)</i> |

6. NON-GEPA DOCUMENTS: *(The following documents may be required for this project, but are independent of this permit application)*

- | | |
|--|---|
| <input type="checkbox"/> USACOE 404 or Nationwide Permit | <input type="checkbox"/> State Historic Preservation Office Clearance |
| <input type="checkbox"/> U.S. Fish & Wildlife Consultation or Department of Agriculture's Division Aquatic & Wildlife Resources Approval/Clearance | <input type="checkbox"/> Other: <i>(Please specify)</i> |

7. SIGNATURE OF APPLICANT:

I, the undersigned, hereby declare under penalty of perjury that I am an authorized signatory for the above contractor and this permit.

Date Signed: _____

Print Name: _____

Title of Signatory: _____

Signature of Authorized Representative



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Guam EPA Permitting Process Requirements for Construction Projects

- Guam EPA regulates disturbances of construction sites regardless of size
- Construction Plans (clearing, grading, grubbing, stockpiling, utilities, and building plans)
- Permit Application Form (GEPA new form), as shown in the previous slide
- Site and Topographic Plan
- Proof of ownership (i.e. lease agreement, authorization from owner, contract agreement and notice to proceed especially for federal projects)



Guam EPA Permitting Process Requirements for Construction Projects

- EIA (projects located within environmentally sensitive areas)
- Wetland Delineation map (if wetland exist in the property).
- No work are allowed within the wetland unless there is a valid:
 - Guam Wetland Development Permit
 - US Army Corps of Engineers (ACOE) Section 404 permits
- 401 Certification if activities in water
- Soil Engineer's Report (when the cut & fill exceeded what required in the regulations)



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Guam EPA Permitting Process Requirements for Construction Projects

- Solid Waste Disposal Plan
- Fugitive Dust Control Plan
- For demolition works and construction debris or excess soil from excavation
- Construction plans must conform with Guam Soil Erosion and Sediment Control Regulations and Guam Water Quality Standards requirements



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Guam EPA Permitting Process Requirements for Construction Projects

All projects that involve clearing and grading activities on land one acre or more, are required to apply for Guam EPA permits

- EPP/ECP documents or submittal of USEPA NOI/SWPPP
- All permit applications are subject to site inspection for GEPA to assess/evaluate the existing site conditions.



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Guam EPA Design Approval

- THE FOLLOWING PROJECTS REQUIRES A DESIGN APPROVAL
- DPW ROAD CONSTRUCTION AND RELATED PROJECT.
- PROJECT THAT ENTAILS WATER SYSTEM WITH 6-INCH PIPE (200' OR LONGER).
- NEW OR SUBSTANTIAL ALTERATIONS OF EXISTING WATER SYSTEM & APPURTENANCES.



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Required Submittal for Design Approval

- ✓ 30/60% DESIGN SUBMITTAL
- ✓ BASIS OF DESIGN, GENERAL CONCEPT, SOIL ANALYSIS
- ✓ 90% DESIGN SUBMITTAL
- ✓ RESPOND TO 30/60% DESIGN SUBMITTAL
- ✓ 100% DESIGN SUBMITTAL
 - ✓ RESPOND TO 90% DESIGN SUBMITTALS AND
 - ✓ APPROVAL FOR CONSTRUCTION OR BIDDING.



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Guam EPA Governing Rules and References

- Guam Water Pollution Control
- Guam Soil Erosion and Sediment Control Regulations
- Guam Water Quality Standards
- Underground Injection Control Regulations
- Onsite Wastewater Treatment or Individual Wastewater System Regulations
- Guam Animal Feedlot Regulations
- Guam Lead Ban Act Regulations
- Guam Water Resources Regulations



Guam EPA Governing Rules and References (continued)

- List of Governing Regulations and References
 - Guam Pesticide Regulations
 - Guam Storm Drainage Manual
 - Guidebook to Development Requirements to Guam
 - GEPA EPP Preparation Guidebook (blue book)
 - Hazardous Waste Management Regulations
 - Guam Air Pollution Standards and Regulations



Federal vs. Non-Federal Projects

- For Federal projects:
 - Submittals of all permit applications must be directly to Guam EPA Personnel located at DPW Permit Center with Guam EPA required documents.
- For Non-Federal Projects:
 - Submittals of all permit applications must be turned into DPW Permit Center
 - Submit permit application to GEPA Personnel together with DPW application form with assigned permit number and GEPA required documents



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How to move forward

What's the **expectation** of the Government of Guam in regards to these issues and what **businesses** can expect from the Government of Guam?

SUSTAINABLE DEVELOPMENT:

The balance between growth and preserving Cultural and Natural Resources, the ultimate approach is to wisely plan and cautiously implement now for the future.

We encourage Sustainable Development





Agency Contact Information

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