


ROATAN CRUISE TERMINAL

CONTINGENCY PLAN FOR COMPANIES WITH RISKS OF SPILLS FOR FUEL AND OTHER HARMFUL AND POTENTIALLY DANGEROUS SUBSTANCES IN OPEN WATERS OR INNER WATERS




Prepared in accordance with the provisions of the
PNCH and Resolution No. DGMM / 123/2017

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DOCUMENT No.	1	FOR:	General Manager of Roatan Cruise Terminal
REVISED:	1	APPROVED BY:	General Directorate of the Merchant Marine
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	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

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IMPLEMENTATION

This Plan has been prepared by INTERMARIS, S. de R. L., for ROATAN CRUISE TERMINAL, and its scope is part of the ROATAN CRUISE TERMINAL Cruise Ship Terminal, Roatán, Bay Islands, Honduras. Likewise, it has been submitted for review by the General Directorate of the Merchant Marine and approved for its implementation and enforcement as of the date.


JUAN CARLOS RIVERA GARCÍA
MANAGING DIRECTOR
GENERAL DIRECTORATE OF THE MERCHANT MARINE

DATE

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DISTRIBUTION

No.	EPIP copy	Assigned to:	Date of assignment	Return Date	Authorized by: Signature - Terminal Manager
1	Master Copy	General Manager of Roatan Cruise Terminal			
2	Copy No. 2	Health and Hygiene Supervision (Health & Sanitation)			

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1. INTRODUCTION

This Local Contingency Plan for Spills of Hydrocarbons and Harmful and Potentially Hazardous Substances was prepared by ROATAN CRUISE TERMINAL following the instructions issued by the DGMM.

ROATAN CRUISE TERMINAL makes every effort to implement environmental operating procedures designed to avoid activities or conditions that could negatively impact the environment. For this, it adheres to the following principles (see detail in section 3.6. and subsequent “Environmental Management System”):

- Compliance
- Prevention
- Environmental education and awareness
- Continuous improvement


This Plan reflects the work of a whole team committed to the aforementioned principles, who have taken into account: the characteristics of the facilities, the types of fuels and harmful and potentially dangerous substances that are stored exclusively for the operation and vessels that dock in their facilities. In addition, considerations have been taken for their geographical and climatic conditions and location, personnel organization and experience in the operation.

ROATAN CRUISE TERMINAL is a specialized port terminal dedicated to receiving passenger ships, specifically international cruise ships, according to an established docking schedule.

ROATAN CRUISE TERMINAL is located at Dixon Cove, on the southwest coast of Roatán, Bay Islands, Honduras and has a dock with two berthing positions.

The ships that moor at the dock belong to the company and passengers descend to tour the facilities, for a shopping, depart to tours, etc.

ROATAN CRUISE TERMINAL port terminal does not operate with loads or bulk of any kind, nor does it handle or store fuel and oil or other harmful and potentially dangerous substances for commercial purposes.

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The fuel or other harmful and potentially dangerous substances that are stored there are found only in limited quantities and are used exclusively to carry out the operations and maintenance of the areas that comprise the installation.

1.1. Purpose and Objective of the Plan

1.1.1. Purpose

The purpose of this Plan is to minimize the consequences of a spill of fuel or harmful and potentially dangerous substances, initially preventing them from reaching the aquatic spaces adjacent to ROATAN CRUISE TERMINAL port facility and, at the same time, maximizing collaboration in preparation of local response, and if required, by the competent authority within the area and at the national level for this type of event.

1.1.2. Objective


The general objective of this Plan is to define responsibilities and create a structure of preparation and immediate response both at the local level and at the higher levels if applicable, with the collaboration, cooperation, participation and coordination of the corresponding entities. This in order to apply the best possible techniques in spillage response and resource activation as the magnitude of the incident increases.

1.2. Scope and Coverage of the Plan

The scope of this Plan, because it is at local level, is limited to the containment of spills of fuel and harmful and potentially dangerous substances that exist within the facilities, including the response action of our own personnel, as well as the collaboration of the corresponding authorities and entities and as for the area, it is circumscribed within the facilities comprising ROATAN CRUISE TERMINAL.

In order to ensure a timely and effective response to spills or the threat of a fuel spill, this Plan:

- a. Establishes notification, alerts and evaluation diagrams;
- b. Identifies the organizational chain of command and related responsibilities;
- c. Establishes an incident notification procedure;
- d. Identifies risk areas and probable sources of fuel spills;

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- e. Identifies environmentally sensitive coastal and river areas, vulnerable resources at risk and protection priorities;
- f. Identifies equipment to combat hydrocarbon spills, logistic support facilities and available communication diagrams and contacts;
- g. Identify the facilities for the storage of the recovered hydrocarbon, as well as the disposal methods.

1.2.1. Updates and Reviews

The responsibility of developing, updating, reviewing, modifying and submitting this Plan to the DGMM for approval is the responsibility of ROATAN CRUISE TERMINAL. Any update or revision shall be recorded in the table indicated in Appendix I 'Record of Updates and Revisions'.


This plan should be updated whenever changes occur in organizations or key personnel responsible for the organization and response, as well as in the case of substantial modifications in the storage or storage facilities of fuel or harmful and potentially dangerous substances.

The plan must be reviewed at least once a year or when required for special reasons in order to prepare and submit it to the approval of the competent authority. It should also be reviewed based on experiences of actual incidents, drills and other exercises, or any change in risks or vulnerabilities in any area, equipment and technology available.

1.3. Regulatory Framework

Considering that through the DGMM Agreement No. 022-2015, the approval of the Regulation of Prevention and Control of Marine Pollution by Spills and Discharge of Wastes, Hydrocarbons and Harmful and Potentially Dangerous Substances took place in Honduras, this Plan is framed in the National Contingency Plan for Spills of Hydrocarbons and other Harmful and Potentially Hazardous Substances, as well as in Resolution No. DGMM / 123/2017 of the General Directorate of the Merchant Marine and in the corresponding current regulations, including, but not limited to:

- 💧 United Nations Convention on the Law of the Sea.
- 💧 Organic Law of the National Merchant Marine.
- 💧 Regulations for the Enabling, Enrollment and Re-registration of the Service Providers of the Control Service of Spills of Hydrocarbons and other Harmful Substances Potentially Hazardous in the Waters, Coasts and Shores of Honduran Jurisdiction (OSRO).
- 💧 International Maritime Code of Dangerous Goods (IMDG Code - IMO).


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The PNCH states that the first level of preparedness and response to pollution events is developed with local contingency plans and is the first level of response that is activated in the event of an incident, so human resources must be available and equipment on site for an expedited response time.


1.4. Glossary, definitions, abbreviations and units

For the purposes of this Plan, the terms and abbreviations that are expressed below have the following meanings:

- a. **Waiting Areas (E):** place where resources are concentrated while waiting to be assigned for an incident response, according to the SCI.
- b. **Base (B):** place from which the logistic functions are coordinated and managed for the response to an incident, according to the SCI.
- c. **CEE:** Incident Commander:
- d. **COE:** Emergency Operations Center. It is the pre-designated facility to locate the representatives of the State Institutions that participate in the response and coordinate the support activities. The operations of the incidence are not managed from the COE, rather it provides inter-institutional coordination for resource management and communication. Additionally, information is collected, analyzed and disseminated providing a common outline of the incident status.
- e. **Spill:** leakage of hydrocarbons, harmful and potentially dangerous substances from the medium that contains it that may impact the environment. For the purposes of this Plan there are the following types of spills and consequently their response:
 - 💧 **Level 1 - Tier I:** is a probable spill of an operational nature and affects the operator's own facilities. This type of spill should be mitigated with on-site resources.
 - 💧 **Level 2 - Tier II:** a spill less likely than Tier 1 and its impact exceeds the Tier I Level's responsiveness; therefore, its mitigation requires additional resources from those on site. The Tier II readiness level supports the Tier I response.
 - 💧 **Level 3 - Tier III:** it is a spill that can cause significant impacts in areas of public, environmental and economic interest of national importance. The level of preparation for Tier III requires resources from multiple national and possibly international sources.
- f. **DGMM:** General Directorate of Merchant Marine.
- g. **Dispersants:** specially formulated agents that are sprayed in low doses on hydrocarbon stains to improve their natural mixture and biodegradation in surface waters.
- h. **HC:** hydrocarbon or derivative.
- i. **IPIECA:** International Petroleum Industry Environmental Conservation Association - is the association of the global hydrocarbon and gas industry for environmental and social issues.

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- j. **MIAMBIENTE:** Ministry of Energy, Natural Resources, Environment and Mines of the State of Honduras.
- k. **Protection Levels:**
- 💧 **Level A:** is the highest level of protection for the respiratory system, skin, eyes and mucous membrane. It consists mainly of a fully encapsulated dress, a self-contained respiratory protection equipment (SCBA), chemical protection boots and double gloves.
 - 💧 **Level B:** the equipment with high respiratory protection and limited skin protection, only for splashes. It consists of a self-contained breathing apparatus (SCBA), chemical protection boots, double chemical gloves, among others.
 - 💧 **Level C:** is the level with limited respiratory protection and limited skin protection. It consists of a full face respirator, chemical protective suit, double chemical resistant gloves and chemical resistant boots.
 - 💧 **Level D:** It is primarily the work uniform (boots and helmet).
- l. **OMI - IMO:** International Maritime Organization.
- m. **ONU (number ONU – UN number):** of the United Nations Organization, are four-digit numbers established to identify hazardous substances or materials internationally, especially for transport and storage.
- n. **OPIP:** Port Facility Security Officer (PFSO).
- o. **OSRO:** Organization for the Attention of Spills of Hydrocarbons and Pollutants.
- p. **PNCH:** National Contingency Plan for Spills of Hydrocarbons and other Harmful and Potentially Hazardous Substances.
- q. **Command Post (CP):** place from which the function of Command of an Incident is exercised, according to the SCI.
- r. **SCI:** Incident Command System (**ICS**). It is a structure that organizes and facilitates incident response activities in five main functional areas: command, operations, planning, logistics and finance.
- s. **SNPP:** harmful and potentially dangerous substances that pose a serious potential risk to both people and the environment.
- t. **Protection zones:**
- 💧 **Hot Zone (red, exclusion):** it is the area with the highest concentration and risk of exposure in a spill or leak of a harmful and potentially dangerous substance.
 - 💧 **Warm Zone (yellow, reduction of pollution):** in an emergency of a harmful or potentially dangerous substance is the area used for decontamination.
 - 💧 **Cold Zone (green, support):** in an emergency of a harmful or potentially dangerous substance, it is the pollution-free zone and allows the location of emergency support personnel.

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1.5. Operations of the terminal in relation to the environment

Operations and actions that ROATAN CRUISE TERMINAL takes in favor of environmental care are described as established in its “Environmental Management System”, see point 3.6.2.

1.5.1. Sewage treatment plant

The sanitary sewage originating from the installation is treated at the CROMAGLASS CA-120 Treatment Plant that is installed in the Terminal. It has a pre-equalization tank with a capacity of 5,800 gallons and a capacity to treat 10,000 gallons of water per day.

After going through the treatment at the Cromaglass Treatment Plant, the effluent from the Plant is used to irrigate the surrounding green areas, using an infiltration field, making a final treatment in the soil. Upon leaving the Plant, the effluent passes through a Sym / Tec filter that removes sediments and two chlorinators and then discharges into the infiltration system.

It should be noted that ROATAN CRUISE TERMINAL performs a periodic sampling of these treated wastewater to confirm that the process is being carried out properly. The samples are sent to a certified laboratory in the mainland of Honduras, in the city of San Pedro Sula.


Monitoring and control of the operational parameters of the wastewater treatment plant (COD, BOD, Total Solids, Sedimentable Solids, Turbidity, Color, Odor, Nitrates, Ammoniacal Nitrogen, Phosphates, Total Phosphate, pH, Oils and Fats and Fecal Coliforms) is carried out on a monthly basis and the results are presented to the Ministry of Natural Resources and Environment in its annual ICMA report.

1.5.2. Water storage tanks

Both sanitary water and drinking water come from two possible sources: on the one hand, there is a well located outside the facility, with a pumping system and on the other hand rainwater is collected from the main buildings.

Appropriate solid separation / filtering systems have been implemented, as well as disinfection systems. Rain filters have been placed along the drains of the Plaza that properly separate the organic substances from the water collected in the cistern.

The water storage capacity in the facility is 48,000 gallons (Main Cistern: 31,000 gal and Secondary Cistern: 17,000 gal).

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1.5.3.Pump Room

The following are found in this room: the fire network pump, the filtration equipment and ultraviolet lamps in addition to an automated water chlorination system from the storage tanks, to be used in the potable water system of the facilities. Here, well or rainwater is filtered and treated. See point 3.6.2. Procedures of the Environmental Management System, (c.) WATER ADMINISTRATION subsection 12.

In this sector there are two small plastic tanks with Chlorine and Muriatic Acid of 25 gallons each. Both are positioned on separate anti-spill pad platforms.

The place is equipped with:

- 💧 Eye Wash.
- 💧 Safety Sheet for stored products.
- 💧 Personal Protective Equipment for handling substances that are operated there.

1.5.4.Reverse Osmosis Potabilization Plant


This room consists of a reverse osmosis purification system for water consumption. The source of the water has already been through the filtration system. In addition, there is an in-house laboratory where water quality is controlled for all lots produced of 5 gallon water bottles. All these bottles are used for internal consumption by the facility personnel. See point 3.6.2. Procedures of the Environmental Management System, (c.) WATER ADMINISTRATION subsection 12.

1.5.5.Fuel room

The fuel room consists of 3 storage tanks of fuel for internal use consisting of:

- a. Main Diesel Tank: 6000 Gallons.
- b. Secondary Diesel Tank: 1500 Gallons.
- c. Gasoline Tank: 500 Gallons.

Company's vehicles and drums and other smaller containers are filled here. There is a procedure for the supply of vehicles that indicates that at least 4 people must be present while the operation is being carried out, including Maintenance and Warehouse personnel. This in order to ensure that all safety measures are complied with and avoid spillage while the operation is being carried out.

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This room has a concrete containment berm with a capacity for 180% of the total capacity of the sum of the tanks.

Also, stored within the Fuel Room, are wastes of used oils from vehicles in the terminal, which are periodically removed by a local supplier that recycles, reuses or disposes of them in the mainland of Honduras.

These wastes, contained in PVC drums of approximately 205 liters in capacity, and are placed on plastic anti-spill trays.

The place is equipped with:

- 💧 Eye wash.
- 💧 Fire extinguishers.
- 💧 Safety Sheet for stored products.
- 💧 Personal Protective Equipment for the handling of hydrocarbons.

1.5.6. Flammable Compartment

There is a small compartment that is used for the storage of small amounts of fuel for minor equipment such as scythes and tools that run on diesel or gasoline.


The approximate amounts of fuel that are usually stored are the following:

- 💧 Diesel: 15 gallons, divided into 3 drums of 5 gallons each.
- 💧 Gasoline: 48 gallons, distributed as follows: 6 drums of 5 gal (30 gal), 6 drums of 2 gal (12 gal), 6 drums of 1 gal (6 gal).

1.5.7. Electric Power Generator Room

ROATAN CRUISE TERMINAL has a 750 KW power plant, powered by a diesel engine, through which the entire Plaza area is supplied as a secondary or backup station.

This generator has a 1,000-gallon diesel tank.

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The generator room has a containment curb in case of spillage, constructed of concrete with a berm area of approximately 150% of the volume of the tank and is equipped with fire extinguishers.

1.5.8.Transformers

In the port facility there are three electric power transformers, two of them are cooled by oil in a closed circuit.

1.5.9.Paint Room

Paint room contains:

- a. Chlorine: 110 gallons in two drums of 55 gallons each (maximum total 205 liters x 2 = 410 liters).
- b. Muriatic acid: 25 gallons maximum, in 1 gallon containers.
- c. Paints: spray and 5 gallon pails.
- d. Silicone base sealants and adhesives in 300 ml containers.
- e. Rust remover: in 1 gallon (3.8 liter) containers.
- f. Solvent: in 1 gallon containers (3.8 liters).
- g. Lubricants: in 1 gallon (3.8 liter), 1 liter and smaller containers.
- h. Insecticides, fertilizers and pesticides: limited quantities in packages of 1 liter and smaller.


The place is equipped with:

- Eye wash.
- Fire extinguishers.
- Safety Sheet for stored products.
- Personal Protective Equipment for handling stored products.

1.5.10. Tasks on ships operating in the terminal

ROATAN CRUISE TERMINAL does not allow supply fuel to the ships that dock there so there is no risk of oil spills in this type of maneuver. See points 3.6.2. Procedures of the Environmental Management System, (e.) MANAGEMENT OF THE COASTAL AND MARINE ENVIRONMENTS, subsection 32 and subsequent.

¹ Measurement and calculations made in situ

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Nor is it permissible for ships to carry out major repairs, maintenance or large-scale painting tasks; since in addition to not being a designated port facility for these purposes, the time spent in the installation of ships is only that of a few hours.

The work that can be done by ships is reduced to minimal washing of the hull and exceptionally some minor painting tasks and repairs.

In the case of hull washing tasks, ships use a water-based solution and a product called DECK CLEAN NP, classified under UN number 3265 whose legend shows: "Does not present danger to the environment". See Appendix III Safety sheet (original version) of DECK CLEAN NP.

In the case of paint works, all of the works carried out are always in small scale or dimensions. The ships take all preventive measures before the possibility of a spill or dripping of paint by placing containment barriers in the marine mirror and they count on the spill containment team for any incident.

All minor maintenance activities, such as painting and cleaning, must be authorized by the General Directorate of the Merchant Marine, through the Department of Marine Environment Protection and the Captaincy of the Port of Roatan.


1.6. Response team

1.6.1. Inventory of anti-spill equipment

As for the equipment for the response to a spill of fuel or harmful and potentially dangerous substances, ROATAN CRUISE TERMINAL has the equipment described in Appendix IV Stock of the contingency equipment for fuel spills in the Terminal. See point 4.9. Containment and Recovery.

In addition, a stock is maintained in the Warehouse of: absorbent paper, shovels, brooms, swabs, mops, buckets, hand brushes, rakes, detergent and liquid soap, waste bags, PVC barrels to store waste, etc.

There are also two submersible pumps, hoses, clamps, connections and PCV pipes and all the tools to make the connections and put them into operation.

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The Terminal also has all the necessary Personal Protective Equipment (PPE): boots, gloves, protective glasses, and masks for the gases emitted by the substances with which it works.

For the deployment and handling of the anti-spill equipment, ROATAN CRUISE TERMINAL has a vessel for the purpose called “MBCC 2”, type Steel Raft, for Cargo Transport, 23 feet in length, 9.3 feet in width, 2.0 strut and 1.5 feet of draft. This boat has a 40 HP outboard motor. See Appendix II Barge MBCC 2.

1.6.2. Fight against fire

ROATAN CRUISE TERMINAL has a Fire Fighting Plan which was approved by the Roatán Fire Department. See Annex 9, Inspection Certificate of the Emergency and Contingency Plan by the Fire Department.

In addition, and in accordance with the provisions of this Fire Fighting Plan, the company has firefighting equipment, mainly composed of:


- 💧 6 Full suits (helmets, boots, gloves).
- 💧 1 Fixed pump of 30 HP of power located in the administration parking lot that provides water to the fire stations.
- 💧 6 Fire stations each with 25 meters of hose.
- 💧 4 Fire hydrants for filling of fire truck with 50 meters of hose.

2. RESPONSE ORGANIZATION

Based on the PNCH, the Policy established for the response to any spill event will be carried out considering the following priorities, in the order that follows:

- a. The human life.
- b. Environment.
- c. The integrity of the navigation and transport routes.
- d. The integrity of terminals and ports.
- e. The tourist resources.
- f. The property.

Any person who is part of an employee or collaborator of ROATAN CRUISE TERMINAL, has the duty to report any incident that involves or may generate a spill or discharge of fuel and other harmful and

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potentially dangerous substances within ROATAN CRUISE TERMINAL facilities or in the water mirror adjacent to the Terminal.

These reports must be made both in working hours and non-working hours to their immediate Supervisors, Manager or OPIP of the terminal, by the fastest way available, either by: Radio, Cellular, landline or the nearest means available.

For this, Security, Operations and Maintenance personnel have appropriate communication equipment while they are inside the terminal facilities.

All reports will be quickly analyzed by Management, OPIP or Environmental Regent to promptly establish immediate response measures, as well as preventive, corrective measures and will then be recorded in the respective novelty book of the Terminal.


In case of being necessary and if the spill into the sea has taken place effectively, the OPIP, in coordination with the Environmental Regent, will inform and request external help from all the entities in charge for the event that is being presented at the Port Facility and will notify the General Manager, so that he does the same to the DGMM.

The OPIP, according to the information provided by the person who reported the incident, will order the deployment of the spill control teams and the activation of this Plan.

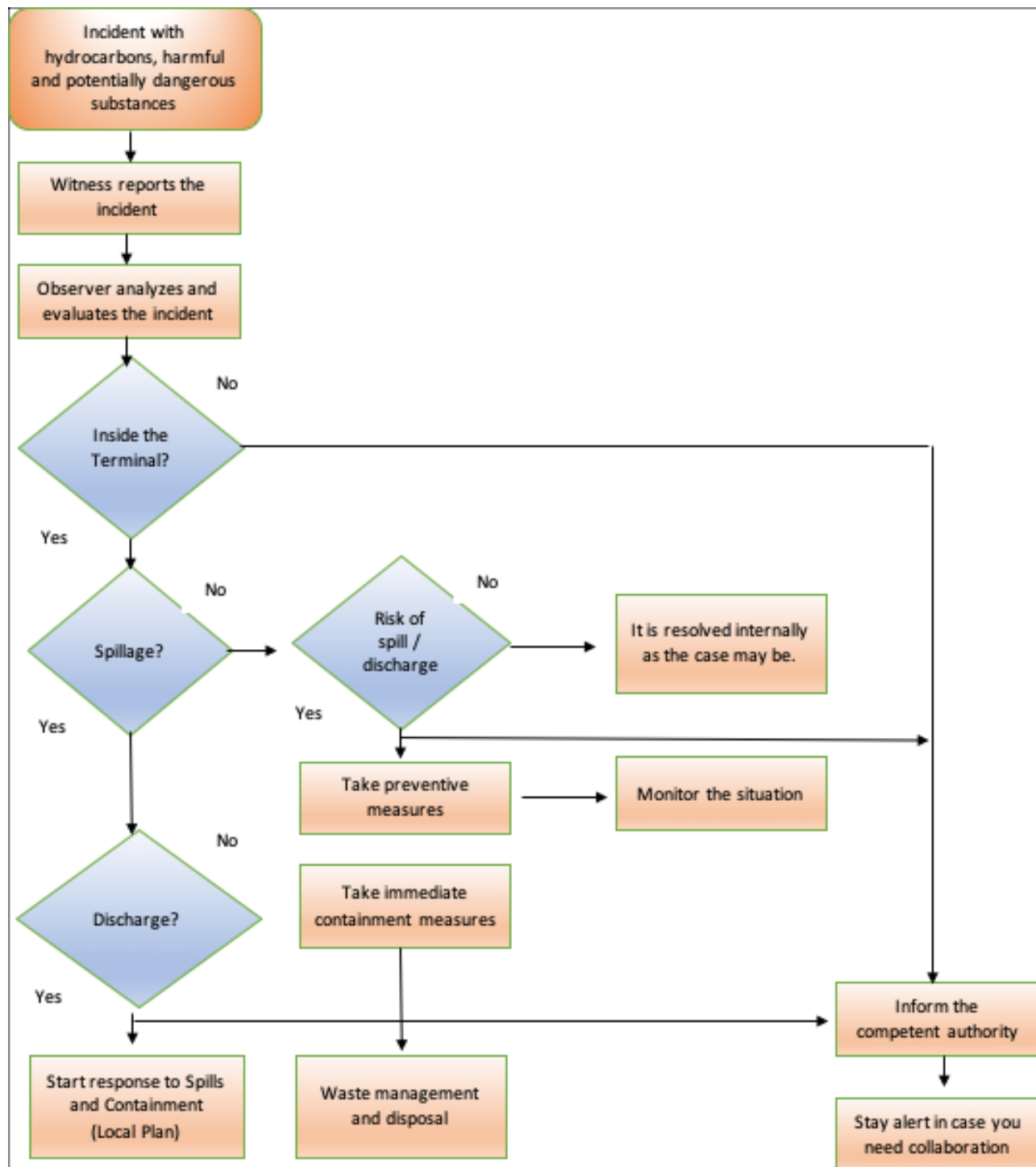
When an incident occurs that affects the environment, the Environmental Committee will meet, which is foreseen in subsection 53 of section 3.6.2. Procedures of the Environmental Management System. This Committee will be responsible for issuing the indications, orders and actions to be carried out in the different stages of response.


2.1. Company response organization diagram

ROATAN CRUISE TERMINAL has the following diagram of organization of response to an incident with the possibility of spilling or dumping of fuel or harmful substances and potentially dangerous to the aquatic environment.

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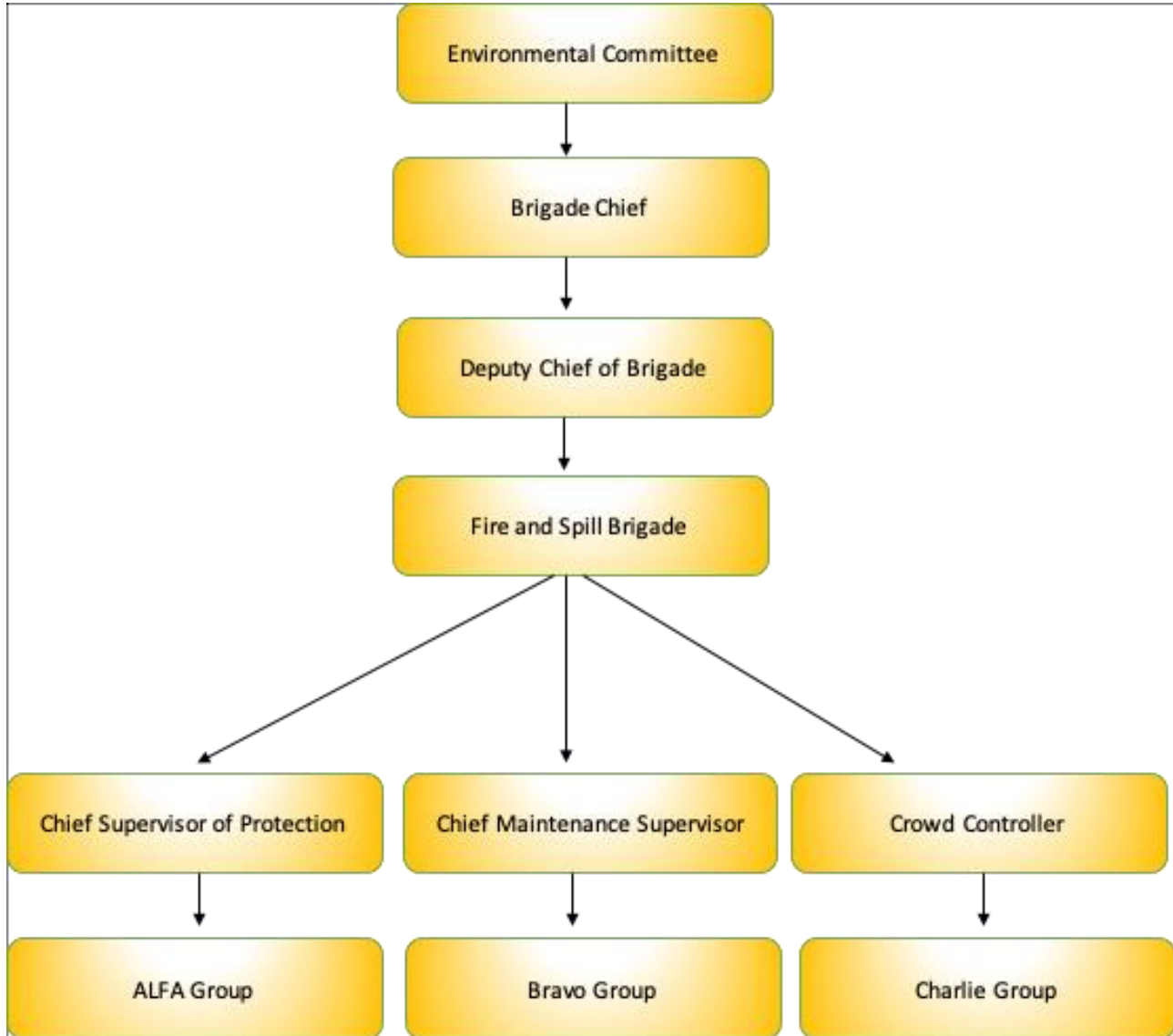
Response Organization Diagram



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2.1.1. Brigades

Regarding the organization of the response personnel, the contingency response brigades are established in ROATAN CRUISE TERMINAL, as described below:




2.1.1.1. Functions within the Brigades

Brigade chief

Immediately notify senior management and the Environmental Committee of the occurrence of an emergency.

Check if the brigade members are sufficiently capable and trained to face emergencies.

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Be in charge of the operations in compliance with the directives entrusted by the Directorate or the Environmental Committee.

Deputy Chief of Brigade

Replace the Head of Brigade in case of absence and assume the same established functions.

Responsibilities of the Spill Brigade

1. Immediately notify the Brigade Chief of the occurrence of a leak or spill.
2. Act immediately using the containment equipment: sand boats, absorbent cloths, etc.
3. Be sufficiently capable and trained to act in case of leakage or spillage of fuel or other harmful and potentially dangerous substance.
4. Activate and instruct in the handling of alarms within the installation, where appropriate.
5. Once the alarm is received, the brigade personnel will be urgently constituted in the area of occurrence.
6. Once the spill is produced, the situation will be evaluated. If it is critical, he will inform the assembled Environmental Committee so that the evacuation actions are taken if applicable.
7. Adopt response, containment and recovery measures to combat leakage or spillage.
8. They will properly use personal protective equipment for members who perform spill response tasks.

Guidelines for personnel in the contingency area


All ROATAN CRUISE TERMINAL staff must know the general directives of this Plan.

Personnel who observe an irregular situation in their jobs must urgently notify their superior or the OPIP.

Always keep your superior informed of the developments that occur.

2.1.2. Operations center

The Emergency Operations Center (COE) is the physical place where inter-institutional coordination is established with the purpose of managing, optimizing and making viable the resources destined to respond to the spill.

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According to the PNCH for incidents LEVEL I, in Roatán, the Municipality is designated as the incident command post headquarter, located in Coxen Hole, Roatán, Honduras and as an alternate center, the Immigration headquarters of the Airport, located in Roatán, Honduras.

In the case of small and easy-to-solve daily incidents, other facilities are established according to the SCI. To facilitate the response to an incident at the local level, some of the facilities that will be implemented in ROATAN CRUISE TERMINAL are the following:

Command post (CP): CENCOM, this is located in the **main offices** and there is a person in charge of this area and all communications in case of emergency.

Base (B): it is located in the **Conference Room** and constitutes the logistics center where activities will be coordinated in case of an emergency.

Waiting Areas (E): it is established in the **Meeting Point** area located in the administrative parking lot of ROATAN CRUISE TERMINAL.

All these locations are located in the facilities of the port terminal.

2.2. Roles and responsibilities of assigned personnel


According to the PNCH, the functions and responsibilities of the Competent Authority in charge of the administration of the response are detailed, being that this Competent Authority is responsible for appointing the corresponding personnel to fulfill the functions and responsibilities within the incident command system, namely:

Stage Commander (CEE): is the person in charge of the global administration of all incident response activities and determining priorities and objectives of the incident. According to the incident levels, this charge will be distributed as follows:

The Commander of a Local Incident (Level 1) is the **Port State Supervisory Officer (OSERP)** of the DGMM. In the absence of an OSERP at the scene of the incident, it will be the Port Captain of the DGMM;

The Commander of a Regional Incident (Level 2) will be the **Head of Marine Environment Protection and Prevention of Marine Pollution** of the DGMM;

The National Incident Commander (Level 3) will be the **General Director of the Merchant Marine** or the person designated by him.

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Incidence Sub-Commander (CEE): Collaborates and supports the Incidence Commander (CEE) in the administration of the response to the incident.

Security Officer: Maintain security on site. He will collaborate with the evacuation and redirection of traffic. Likewise, he will manage the collaboration with the Port Facility Security Officer (OPIP), when the incident has occurred within the port area.

Information Officer: Collect and disseminate information. He provides data related to the incident, as well as any other information about it. If it is a large spill, a Public Affairs Coordinator may act as a contact on the site to arrange visits, gather information and disseminate information to agencies, the public and the media.

Liaison Officer: Coordinates and summons support from support agencies, and facilitates and processes international assistance, in accordance with the provisions of this PNCH in coordination with COPECO.


Industrial Health and Safety Officer: A safety specialist is usually appointed to ensure that the site where the spill is located and the initial containment site are safe for workers. This Officer also advises the Incidence Commander (CEE) and chief of operations regarding any special safety requirement and ensures that all work is done safely and that all accidents are properly documented.

Legal Affairs Officer: Adviser on insurance and liability issues. Ensures that an analytical sampling is carried out, as necessary, and that photographic, video and written documentation of all spill response activities is obtained.

Chief of the Operations Section: The Chief of the Operations Section is responsible for managing all tactical operations in an incident, such as:

- 💧 Control
- 💧 Containment
- 💧 Recovery
- 💧 Elimination
- 💧 Storage and control measures

The Head of Operations may require a **Cleaning Supervisor** to coordinate response activities in the event of a large spill. For marine spills, a Marine Cleaning Supervisor and a Coastal Cleaning Supervisor may be needed, who will ensure that sufficient personnel and equipment are assigned to land or water recovery sites, and supervises access, site preparation and the elimination.

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Chief of the Planning Section: The Chief of the Planning Section is responsible for collecting information on the situation and status of resources; which is evaluated and processed for use in the development of the incident action plan (PAI). The dissemination of the information can occur in written form, in formal sessions, or through maps and displays on the board of the incident status.

Leader of the Environment Unit: Manages environmental issues, including confirmation that mandatory notification has been made to the regulatory body and that the necessary technical experts in the Environment are available. Controls the effectiveness of the response to the spill.

Head of the Logistics Section: Coordinates communications and movements of equipment, personnel and supplies in a large spill. Activate a mobile command center and ensure that the operational needs are met. His tasks also include:

- Spill Access
- Streamline equipment transfer
- Accommodation
- Foods
- Evacuation
- Field coordination (procurement of equipment, maintenance of field communications equipment, coordination of logistics support)
- Provide technical and repair services.


Head of the Finance Section: Facilitates financial resources and other resources, arranges payments and controls billing. Ensures cost accounting and cost recovery on the site, as well as maintaining a chronological record of events related to spill control.

The person in charge will be determined according to the responsibility of the origin of the spill.

2.3. Relationship with other public and private actors

Despite not having written agreements with other entities and institutions, ROATAN CRUISE TERMINAL has verbal assistance agreements, as well as a contact, communication and cooperation relationship with:

- COPECO / CODEM
- Fire brigade
- Red Cross

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- 💧 Roatán hospital
- 💧 Port Captaincy, DGMM
- 💧 Municipality of Roatán
- 💧 Municipal police
- 💧 National Police
- 💧 Municipality of Santos Guardiola.
- 💧 Armed Forces, Roatán Naval Base.

It also maintains a relationship with private actors, such as:

- 💧 Fuel supplier
- 💧 Nelson Rittenhouse - service provider for collecting used oils and contaminated waste.
- 💧 Woods Medical Center Private Hospital
- 💧 Esperanza Clinic


2.4. Response levels

Based on the PNCH, the principle of Level or Step Response (TIER) is applied, according to:

LEVEL ONE (TIER ONE): is an accidental discharge that occurs in or near an installation as a result of routine operations. The impacts are low and the capacity for response is obtained with local resources, through the guidelines of a Local Contingency Plan, so that PNCH is not activated at this level.

LEVEL TWO (TIER TWO): These are medium spills that occur in the vicinity of an installation as a result of a non-routine occurrence. There may be significant impacts and external (regional) support may be required to respond appropriately to the spill. The response capacity is obtained with resources from the region of the country or from neighboring countries, through the guidelines of an Area Contingency Plan. If this is not enough, you must go to the next level.

LEVEL THREE (TIERTHREE): these are large spills that occur near or far from an installation as a result of a non-routine event and that require significant resources and support from cooperation of Local Contingency Plans, national area and international cooperation, duly coordinated by PNCH guidelines to mitigate effects that are perceived as wide-ranging, that is, of national or international importance.

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The following Table graphically relates the step response system.

MAJOR SPILL	LEVEL THREE	LEVEL THREE	LEVEL THREE
MEDIUM SPILL	LEVEL TWO	LEVEL TWO	LEVEL TWO
MINOR SPILL	LEVEL ONE	LEVEL ONE	LEVEL ONE
	LOCAL	AREA	NATIONAL

2.5. Agreed external support

In addition to the actors mentioned in 2.3., there is a relationship with external support in case of contingency with:

- 💧 Roatán Marine Park.
- 💧 ANACARIBE Maritime Agency.
- 💧 Authorities of official visits (Customs, Public Health, Migration, OIRSA).
- 💧 Air Evac.
- 💧 Roatán Electric Company, RECO.
- 💧 Hondutel
- 💧 Town Center, Port of Roatán.


It should be noted that there is no authorized OSRO base in the vicinity of Roatán and the Bay Islands and the closest base is that of OCEAN POLLUTION CONTROL HONDURAS in Puerto Cortés.

3. PREPARATION AND POLICIES

3.1. Company risk scenarios

Taking into account everything detailed in 1.5. and based on paragraphs 6, 7 and 8 of point 1., the following spill or discharge scenarios are established within the ROATAN CRUISE TERMINAL facilities:

1. Damage, breakage or breakdown of one or more of the three diesel or gasoline tanks inside the Fuel Room, with damage to the concrete wall of the anti-spill pan.

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2. Damage of containers or drums in the storage room of Inflammables.
3. Damage to the container barrels (55 gal.) of chlorine inside the Paint Room.
4. Damage to the plastic tank (25 gal.) of chlorine inside the Pump Room.
5. Damage to the plastic tank (25 gal.) of muriatic acid inside the Pump Room.
6. Damage of the containers (01 gal.) of muriatic acid inside the Paint Room.

3.2. Worst Case Scenario

It is established according to the risk scenarios determined and detailed in section 3.1., that the worst scenario would be:

1. Damage, breakage or breakdown of one or more of the three diesel or gasoline tanks inside the Fuel Room, together with the damage of the concrete wall of the berm.

This scenario, which is considered the worst in the facilities of ROATAN CRUISE TERMINAL, is of a probability: NOT PROBABLE. Based on Standard UNE 150008. See Annex 8.

This is reasoned since the area where the fuel tanks are located has a concrete wall and for a spill to occur, both damages should occur in one of the tanks and with the wall.

Even if this occurs, the discharge to the waters would be punctual and of a relatively simple containment.

2. Risk of oil spills from a ship (very unlikely scenario). The vessel must activate the provisions of its SOPEP Manual, and manage through its channels the services of an OSRO. The Terminal may support the organizational structure and equipment detailed in this plan.

3.3. Probability and Consequence

ROATAN CRUISE TERMINAL has carried out an Analysis and Evaluation of Environmental Risk for the different spill risk scenarios specified in section 3.1., In accordance with Standard UNE 150008. See Annex 8 - UNE 150008 "Analysis and evaluation of environmental risk", obtaining the results that follow.

Taking into account the probability of occurrence, the consequence and the severity of the environment, the 6 scenarios in the environments were considered: Natural, Human and Socioeconomic. All scenarios resulted in a Low Risk in the ROATAN CRUISE TERMINAL, as can be seen in the three tables below.

Although the result of the environmental risk was low in all scenarios and environments, ROATAN CRUISE TERMINAL has taken concrete actions to mitigate the risk, both environmentally and in occupational safety.



Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas

**ROATAN CRUISE
TERMINAL**

Elaborado por	Revisado por	Aprobado por	Fecha	Revisión
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MATRIZ DE ESTIMACION DE RIESGO NATURAL


No.	ESCENARIO DE RIESGO	CANTIDAD	PELIGROSIDAD	EXTENSION	CALIDAD DEL MEDIO	VALOR PROMEDIO DE CONSECUENCIA	PROBABILIDAD	RIESGO AMBIENTAL	ACCION
1	Daño de uno o varios de los tanques HC, con daño del muro de concreto de la batea anti-derrames.	2	3	1	4	3	1	3	Documentar en Plan de Contingencia, estableciendo gestión de respuesta y comunicaciones.
2	Daño de los botes o bidones de Pañol de Inflamables.	1	3	1	4	2	2	4	Se instalará un Kit para contención de derrames menores en el área.
3	Daño de los barriles contenedores (55 gal.) de cloro dentro del Cuarto de Pinturas.	1	4	1	4	3	1	3	Se mantienen los barriles sobre bateas de contención de derrame.
4	Daño del tanque plástico (25 gal.) de cloro dentro del Cuarto de Bomba.	1	4	1	4	3	1	3	Se mantienen el tanque sobre batea de contención de derrame.
5	Daño del tanque plástico (25 gal.) de ácido muriático dentro del Cuarto de Bomba.	1	2	1	4	2	2	4	Se mantienen el tanque sobre batea de contención de derrame.
6	Daño de los botes (01 gal.) de ácido muriático dentro del Cuarto de Pinturas.	1	2	1	4	2	2	4	Se mantienen los botes sobre bateas de contención de derrame.
7	Derrame de hidrocarburos proveniente de un buque	3	3	3	4	3	1	4	El buque debe activar lo estipulado en su SOPEP, incluyendo gestiones para atención por parte de un OSRO

MATRIZ DE ESTIMACION DE RIESGO HUMANO

No.	ESCENARIO DE RIESGO	CANTIDAD	PELIGROSIDAD	EXTENSION	POBLACION AFECTADA	VALOR PROMEDIO DE CONSECUENCIA	PROBABILIDAD	RIESGO AMBIENTAL	ACCION
1	Daño de uno o varios de los tanques HC, con daño del muro de concreto de la batea anti-derrames.	2	1	1	4	2	1	2	Documentar en Plan de Contingencia, estableciendo gestión de respuesta y comunicaciones.
2	Daño de los botes o bidones de Pañol de Inflamables.	1	1	1	4	2	2	4	Se instalará un Kit para contención de derrames menores en el área.
3	Daño de los barriles contenedores (55 gal.) de cloro dentro del Cuarto de Pinturas.	1	3	1	4	2	1	2	Se mantienen los barriles sobre bateas de contención de derrame.
4	Daño del tanque plástico (25 gal.) de cloro dentro del Cuarto de Bomba.	1	3	1	4	2	1	2	Se mantienen el tanque sobre batea de contención de derrame.
5	Daño del tanque plástico (25 gal.) de ácido muriático dentro del Cuarto de Bomba.	1	3	1	4	2	2	4	Se mantienen el tanque sobre batea de contención de derrame.
6	Daño de los botes (01 gal.) de ácido muriático dentro del Cuarto de Pinturas.	1	3	1	4	2	2	4	Se mantienen los botes sobre bateas de contención de derrame.
7	Derrame de hidrocarburos proveniente de un buque	3	2	3	4	3	1	3	El buque debe activar lo estipulado en su SOPEP, incluyendo gestiones para atención por parte de un OSRO

MATRIZ DE ESTIMACION DE RIESGO SOCIOECONOMICO

No.	ESCENARIO DE RIESGO	CANTIDAD	PELIGROSIDAD	EXTENSION	PATRIMONIO Y CAPITAL PRODUCTIVO	VALOR PROMEDIO DE CONSECUENCIA	PROBABILIDAD	RIESGO AMBIENTAL	ACCION
1	Daño de uno o varios de los tanques HC, con daño del muro de concreto de la batea anti-derrames.	2	1	1	3	2	1	2	Documentar en Plan de Contingencia, estableciendo gestión de respuesta y comunicaciones.
2	Daño de los botes o bidones de Pañol de Inflamables.	1	1	1	3	2	2	4	Se instalará un Kit para contención de derrames menores en el área.
3	Daño de los barriles contenedores (55 gal.) de cloro dentro del Cuarto de Pinturas.	1	3	1	3	2	1	2	Se mantienen los barriles sobre bateas de contención de derrame.
4	Daño del tanque plástico (25 gal.) de cloro dentro del Cuarto de Bomba.	1	3	1	3	2	1	2	Se mantienen el tanque sobre batea de contención de derrame.
5	Daño del tanque plástico (25 gal.) de ácido muriático dentro del Cuarto de Bomba.	1	3	1	3	2	2	4	Se mantienen el tanque sobre batea de contención de derrame.
6	Daño de los botes (01 gal.) de ácido muriático dentro del Cuarto de Pinturas.	1	3	1	3	2	2	4	Se mantienen los botes sobre bateas de contención de derrame.
7	Derrame de hidrocarburos proveniente de un buque	3	4	3	4	4	1	4	El buque debe activar lo estipulado en su SOPEP, incluyendo gestiones para atención por parte de un OSRO

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3.4. Type and characteristics of spilled potentially hazardous fuel or harmful substances

- ◆ **Diesel:** toxic to aquatic life with long lasting effects. This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. See Appendix V: Safety Data Sheet.

Diesel Persistence and degradability¹

It is not anticipated that this substance is readily biodegradable. When released into the environment, the lighter components of diesel fuel will generally evaporate, but depending on local environmental conditions (temperature, wind, mixing or wave action, soil type, etc.), the rest could eventually disperse in the water column or be absorbed in the soil or sediment. It would not be expected that diesel fuel would be easily biodegradable. In a modified Sturm test (OECD 301B method) approximately 40% biodegradation was recorded for 28 days. However, it has been shown that almost all hydrocarbon components of diesel fuel degrade in the soil in the presence of oxygen. Under anaerobic conditions, such as those found in anoxic sediments, biodegradation rates are negligible.

The product has not been tested. The declaration is derived from products of similar composition and structure.


- ◆ **Premium Gasoline:** Toxic to aquatic life with long lasting effects. This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. See Appendix VI Safety Data Sheet

Gasoline Persistence and degradability²

It is anticipated that this substance is easily biodegradable. After a spill, the most volatile components of gasoline are lost quickly, with the concurrent dissolution of these and other constituents in the water. Factors such as local environmental conditions (temperature, wind, mixing or wave action, type of soils, etc.), photo oxidation, biodegradation and adsorption to suspended sediments can contribute to the weathering of spilled gasoline. The aqueous solubility of non-oxygenated unleaded gasoline, based on the analysis of benzene, toluene, ethylbenzene + xylenes and naphthalene, has been reported to be 112 mg / l. There are also available solubility data on gasoline components considered individually.

¹ Source: <https://cglapps.chevron.com/msdspds/SDSDetailPage.aspx?docDataId=431749&docFormat=PDF>

² Source: http://www.ridsso.com/documentos/muro/1868_1486402967_5898b597bb4e5.pdf

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Of the products cited in 1.5.9., those that could suffer a spill will be mentioned even though these are of smaller and limited quantities.

- ◆ **Sodium hypochlorite** (Chlorine). See Appendix VII with Safety Data Sheet. Do not allow concentrated entry to water sources because, due to its high alkalinity, it could be harmful to aquatic life. Ventilate the area. Wash with plenty of water.

- ◆ **Muriatic acid** (hydrochloric acid). See Appendix VIII with Safety Data Sheet. It is fatal to aquatic life. Do not allow it to enter public drains and water sources.

The other substances are in containers and limited quantities of 1 gallon or less and a spill or discharge that cannot be contained at the site and reach the aquatic environment is not considered possible.

3.5. Event location and conditions

The event mentioned in 3.2. It is located in the Fuel Room, located in the internal access street of the ROATAN CRUISE TERMINAL. See Annex 1.2.

3.6. Company environmental policies


At this point, a brief reference is made to the points of the ROATAN CRUISE TERMINAL *Environmental Management System* that are considered important to mention in this Plan.

You may have access to the document in its original version, which will be attached when presenting this Plan as Appendix IX, ROATAN CRUISE TERMINAL Environmental Management System. It should be noted that this document is currently under review and will be updated soon.

3.6.1. Introduction to the Environmental Management System

The following is an excerpt from Roatan Cruise Terminal Environmental Management System:

“ . . . ROATAN CRUISE TERMINAL is committed to sustainable environmental management. The cruise port will contribute to meet the needs of the current generation, preserving the environment for future generations to come, by carrying out its operations by making every effort to avoid disruption or harm to the existing ecosystems. If, despite all these efforts, the operations of the Roatán Cruise Terminal itself cause damage to the environment or to any infrastructure in the area of influence of the

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port, Roatán Cruise Terminal would be responsible for remedying the damages under its charge. Roatan Cruise Terminal adheres to the following principles:

“Compliance

ROATAN CRUISE TERMINAL will make every effort to comply with all current and relevant environmental laws and regulations that apply to it and will apply environmental operating procedures to help ensure compliance. These procedures will be based on the conditions imposed by all the Environmental Licenses granted to Roatán Cruise Terminal that are current and valid. (See Annex EP-1 for a list of the environmental operating conditions and procedures that implement them).

Prevention

ROATAN CRUISE TERMINAL makes every effort to implement environmental operating procedures designed to avoid activities and / or conditions that could negatively impact the environment.


Education and environmental awareness

ROATAN CRUISE TERMINAL promotes an environmental education and awareness program. The general objective of this program is to underline the importance of the ecosystems and resources of the Bay Islands. The objective of this program is to continue improving the environmental behavior of both cruise ship visitors (including crew members) and the local population.

ROATAN CRUISE TERMINAL has launched an environmental training program using the conditions of environmental licenses as the basis in order to allow each employee to carry out these environmental operational procedures for which they are responsible for carrying out.

Continuous improvement

ROATAN CRUISE TERMINAL has established a system to control the implementation of all environmental operating procedures. ROATAN CRUISE TERMINAL Environmental Management System will be updated periodically.”

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3.6.2. Environmental Management System Procedures

The following is an excerpt from Roatan Cruise Terminal Environmental Management System (Sections: Water Administration, Coastal and Marine Environment Management, Fire Contingency Plan, Hydrocarbon Spill Contingency Plan, and Other Environmental Aspects):

" . . . The Environmental Management System (EMS) of ROATAN CRUISE TERMINAL (RCT) is composed of a set of environmental operating procedures designed to implement the RCT Environmental Policy. Detailed semi-annual work plans will be developed for each environmental operating procedure. The environmental operating procedures that make up the EMS of the RCT are mentioned below:

WATER ADMINISTRATION

10. Rainwater collection should be used to conserve water. See reference in section 1.5.2. Water storage tanks.


10.2 Roofs, gutters and rainwater collection pipes are cleaned regularly as part of the maintenance of the facilities, especially before the rainy season.

11. In all bathrooms and other points of public use of water, signs have been installed indicating that the water is not suitable for drinking.

12. ROATAN CRUISE TERMINAL has developed and implemented an effective preventive and corrective maintenance program for the drinking water system. The purification system includes a 10 micron filter, a 5 micron filter, 2 UV lamps and an automated chlorination system to purify water in ROATAN CRUISE TERMINAL facilities. Water storage tanks are maintained and cleaned with detergents that do not affect the organoleptic characteristics of water. In addition, these tanks are coated with an NSF61 certified product for drinking water and their physical conditions are also verified.

13. Personnel working during the operation stage of the project must have access to water for human consumption that meets the quality standards established in the National Technical Standard for the Quality of Drinking Water.

14. If drilling of a well is required within the project area, ROATAN CRUISE TERMINAL must request permission for the exploitation of groundwater resources from the General Office of Water Resources through MIAMBIENTE. In addition, ROATAN CRUISE TERMINAL must submit the pump test data and

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water quality tests performed by a qualified laboratory to MIAMBIENTE. Currently, ROATAN CRUISE TERMINAL has no plans to drill a well and is currently buying the water used in its facilities.

15. The storm water system is properly managed. A preventive and corrective maintenance program has been established by implementing the following operational procedures:

15.1 Measures have been established to prevent discharges into the rainwater collection system of liquids and solid wastes that could contaminate storm water and / or create bad odors when rainwater collectors are dry.

15.2 Performs periodic cleaning of sediments and other organic materials that accumulate in rainwater ditches and drainage pipes. Maintenance records are saved by a record. Any organic material removed is transformed into compost.

16. ROATAN CRUISE TERMINAL cleans and maintains the sewers located below the access road to the terminal.

COASTAL AND MARINE ENVIRONMENT MANAGEMENT

22. The destruction of mangroves in the wetland near the bay will not be allowed under any circumstances. The mangrove restoration project of ROATAN CRUISE TERMINAL has already been implemented and is managed and supervised properly. The new mangroves are planted continuously throughout the year and a follow-up is presented to MIAMBIENTE.


23. It is not allowed to disturb, damage and / or exploit species of aquatic flora and / or fauna present in the area. Those species classified as endangered must be specially controlled to avoid these activities.

24. Fishing from the dock and from ships moored at the dock is not allowed.

25. Only duly authorized small paint jobs should be performed on Cruises while they are moored at the dock. These works must strictly follow the environmental operating procedures established in Annex PS.

26. When washing a ship that is authorized by ROATAN CRUISE TERMINAL, only clean water should be used for this purpose.

27. The dock lighting must always be in operation.

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28. ROATAN CRUISE TERMINAL has requested and authorized the permission of the General Directorate of Merchant Marine to install buoys and operate the dock, ensuring that all the stipulations or recommendations that this institution requested are met.

29. It is strictly forbidden to contaminate water bodies within the area of influence of ROATAN CRUISE TERMINAL with household solid waste, oils, machinery grease or other contaminants generated by ROATAN CRUISE TERMINAL.

30. Systematic cleaning of the coastal area of ROATAN CRUISE TERMINAL, especially in the immediate area of influence of ROATAN CRUISE TERMINAL, is carried out. The staff participates in these monthly cleanings. Special days such as Earth Day should be used as motivation to involve crew members, if applicable.

31. Underwater cleaning in the area of influence of the dock must be carried out at least twice a year: at the end of the high season and before the high season. Voluntary divers should / could be involved.

32. In general, no service will be allowed to ships moored at the dock. More specifically:

32.1 No provision of any kind, including the use of containers or trailers.

32.2 No waste of any kind should be removed, either from the dock side or from the water side to a barge.

32.3 No type of garbage should be removed from the dock side or the water side to a barge.

32.4 Gray water cannot be extracted from the dock side or from the water side to a barge.


32.5 There is no disposal of sewage or wastewater from the dock side or from the water side to a barge.

32.6 Oily substances are not removed from the dock side or from the water side to a barge.

32.7 Refueling is not allowed, either by the dock side or by a boat or barge on the water side.

32.8 Vehicles of any kind should not be allowed to access the dock, unless specifically authorized by the General Manager.

32.9 No water service is allowed while moored at the dock.

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33. ROATAN CRUISE TERMINAL has assigned a pilot ship to supervise the maneuvers of cruise ships within Dixon Cove Bay to avoid accidents or collisions capable of damaging the ecosystem in the vicinity of the bay.

34. ROATAN CRUISE TERMINAL has established and maintained the approved navigation aid system for incoming and outgoing cruises.

...

FIRE CONTINGENCY PLAN

36. The Contingency Plan has been approved by the Fire Department in Roatán. It reflects the strategies and activities that should be executed in case of an eventuality.

Consider possible disasters:

- a. Fires,
- b. Hurricanes and floods,
- c. Earthquakes,
- d. Petroleum spills,
- e. Landslides.

The Roatán Fire Department has carried out the following activities:


- a. Review and approve the Contingency Plan prepared by ROATAN CRUISE TERMINAL.
- b. Inspection of the facilities in order to guarantee the existence of the equipment and materials for the prevention of contingencies and firefighting.
- c. ROATAN CRUISE TERMINAL annually requests a registration from the Fire Department that establishes compliance with all requested measures.

HYDROCARBON SPILL CONTINGENCY PLAN

For the Facilities

37. If temporary storage of machinery fuel is required, the following guidelines will be followed:

- a. The fuel is stored in containment tanks equipped with berms, walls or containment layers. These crates or retaining walls must be waterproof and their walls must be high enough to contain 110% of the volume of the storage tank.

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b. *The absorbent material is kept handy for use in case of spillage or leakage. Any used absorbent material containing fuel must be disposed of in a place approved by the Municipality of Roatán.*

38. *It is strictly forbidden to intentionally spill fuel on the ground (dock area or near the beach) or in bodies of water.*

The Ships

All cruises comply with the discharge limits established by MARPOL for bilge waters and have equipment to prevent contamination of machinery bilges and approved ships in accordance with the guidelines and specifications of the International Maritime Organization for equipment of pollution prevention of machinery vessels. Therefore, petroleum and oily waters cannot be discharged in port. Accidental oil spills could only occur from a Cruise Ship while it is moored at the dock.

To deal with accidental hydrocarbon spills, all Cruises have their own Emergency Plan for Contamination of Hydrocarbons on board (SOPEP), approved in accordance with the requirements of Rule 37 of Annex I of the International Convention for the Prevention of Contamination of Ships, modified by the 1978 Protocol in relation thereto.

These Emergency Plans include contacting and coordinating with the IMO National Operational Contact Points when a fuel spill occurs. (See Annex O-1)

Role of the cruise port in case of accidental petroleum spills of a ship moored at the dock:


39. *Report immediately to the vessel any sign of fuel spill if the ship has not yet detected it.*

40. *Monitor / record the spill with surveillance cameras and security personnel.*

41. *Help the ship communicate with the IMO national operational contact points and local authorities.*

42. *Support the ship with personnel if necessary.*

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OTHER ENVIRONMENTAL ASPECTS

52. ROATAN CRUISE TERMINAL will keep a copy of all documents that demonstrate compliance with environmental measures and legal operating requirements, including a record of all environmental monitoring activities.

53. An Environmental Committee composed of the General Manager, the Maintenance Manager, OPIP and the Environmental Regent will be established. This committee will develop a detailed work plan; it will review the progress in the implementation of the Environmental Management System twice a year.

54. It is the responsibility of ROATAN CRUISE TERMINAL that all its employees implement the provisions of the Environmental Control Measures, for this reason, all personnel involved in the operation must have knowledge of all obligations.

55. Any environmental damage caused to surrounding areas or to nearby project facilities due to operational activities will be the responsibility of ROATAN CRUISE TERMINAL. ROATAN CRUISE TERMINAL will be responsible for all repairs due.

56. ROATAN CRUISE TERMINAL Environmental Management System will be updated once a year.


4. DEVELOPMENT OF THE RESPONSE

4.1. Response management

Upon becoming aware of the situation, after having quickly analyzed that there is no risk of fire or explosion, the OPIP or the one designated by the Environmental Committee, will highlight the first response front (BRAVO Group) that should, if possible, stop leaks, spills, discharges, or separate containers that could still spill, without risking or endangering one's own or third parties' integrity, as well as the facilities or infrastructure that could cause a greater evil.

Almost at the same time, the company's internal communications will be carried out (see section 4.4 Alert and Notification Scheme), in order to inform those who are responsible for taking intervention and collaboration in the different response stages.

Simultaneously, if possible, with the labor front (ALFA Group) work will be done to contain the spill in the smallest possible area. The anti-spill equipment detailed in section 1.6.1 is available (Inventory of anti-spill equipment).

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The CHARLIE Group will be responsible for keeping tourists, visitors and internal staff calm if there is a cruise on the pier, making tours of the facility to ensure that there are no commotions of groups of people.

4.2. Operations Command

4.2.1. Incident Command System

However, to the detailed response organization at the national level (see Section 2.2), the PNCH establishes for Local Plans in subsections 2.2.4.6 and subsequent of APPENDIX Y, that each company uses the Incident Command System (SCI), in turn appointing an Incident Commander (CI), responsible for the functions for organizing the Response in a Level One Incident. It is cited below:


“2.2.4.8 The Commander of a Level One Incident (Tier I) is the person designated for this position by the company, facility or port, in which the event of contamination occurs. This person must have the necessary experience and training to deal with this type of spillage. The Competent Authority shall supervise the response and cleaning operation of the affected areas so that the best available techniques in mitigation and response are applied.”

The Incident Command System is based on eight functions:

- 💧 Incident Command,
- 💧 Planning,
- 💧 Operations,
- 💧 Logistics,
- 💧 Administration and finance,
- 💧 Security,
- 💧 Public information,
- 💧 Link.

In small and easy-to-solve everyday incidents, all these functions can be assumed by a single person, the **Commander of the Incident**.

In the case of incidents that demand a greater workload or specialized resources in some or all of the mentioned functions, the Sections will be established as necessary.

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4.3. Stages of the response

4.3.1. Description of containment techniques and spill response³

The following are the different containment and response techniques for a hydrocarbon spill that serve as a reference in the event of a contingency of spillage or discharge.

Deviation berms

Low barriers are constructed with available materials (earth, gravel, sandbags, etc.) to divert hydrocarbon flows to a recovery point or around a vulnerable area. They are used primarily in areas with a slight to moderate decline.

Containment Berms

Low barriers are constructed of available materials (earth, gravel, sandbags, etc.), absorbents are used to contain the flow of hydrocarbon on relatively flat or low decline areas.

Interception ditches

Excavated trenches or trails are used to intercept or divert surface or underground hydrocarbon flows to recovery points around vulnerable areas.

Sewer lock

Planks, sandbags, gravel or sediments are the materials used to block sewers as a means of containing the flow of hydrocarbon to trenches, streams or other drains that feed the sewers.


Blocking dikes

The dikes are built across the riverbed, ditches or other drainage courses of little or no water flow, to block and contain any hydrocarbon flow.

Water flow dikes

Dikes are constructed through sewers, ditches, flat ravines, etc. to contain the hydrocarbon flow without obstructing the water flow.

³ Mining Security <http://www.revistaseguridadminera.com/emergencias/derrame-de-hidrocarburos-tecnicas-para-su-control-y-contencion/>

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Absorbent barriers

Absorbent barriers constructed with absorbent materials are used to contain and recover fuel in drainage routes, streams or small rivers. Useful for trapping fuel at lower levels of dikes and conventional barriers, etc.

Placement of containment barriers in rivers

Angled barriers are placed through a watercourse to contain the fuel flow that is directed downstream for subsequent recovery.


River barriers to divert hydrocarbon

Angled barriers can be placed in rivers to divert the hydrocarbon from environmentally sensitive or vulnerable areas or to divert the fuel to side channels, or to the banks where it can be contained and recovered. Barriers are also placed to divert fuel in rivers to lateral channels where the currents are lower or access is easier.


4.3.2. Response planning scenarios

Examples of planning scenarios, response strategies and what ABAN considerations may be applicable in different circumstances of land spills.⁴


⁴ IMO/IPIECA (1996). Development of sensitivity maps for hydrocarbon spill response. [http://www.cleancaribbean.org/download_pdf.cfm?cF=IPIECA%20Oil%20Spill%20Report%20Series%20\(Spanish\)&fN=Vol_10_NEBA_Spanish_final_734.25KB.pdf](http://www.cleancaribbean.org/download_pdf.cfm?cF=IPIECA%20Oil%20Spill%20Report%20Series%20(Spanish)&fN=Vol_10_NEBA_Spanish_final_734.25KB.pdf)

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Contexto operativo: instalaciones de tanques de almacenamiento de crudo en tierra	
Escenario de planificación 1:	El hidrocarburo se derrama en una zona aislada y es contenido.
Estrategia de respuesta:	La estrategia se define de manera clara y sencilla, abarcando todo el calendario de la situación de planificación. Requiere técnicas limitadas, por ejemplo, bombear y almacenar temporalmente con recursos <i>in situ</i> para la remoción mecánica/física y el comando del impacto.
Consideraciones del ABAN:	Los grupos de interés se limitan al personal de las instalaciones; las sensibilidades son mínimas y conocidas. Hay un alcance limitado para consideraciones adicionales del ABAN durante una respuesta, comparadas con las ya efectuadas en la fase de preparación.
Contexto operativo: oleoducto de crudo por tierra que atraviesa fronteras nacionales	
Situación de planificación 2:	El derrame inunda una zona aislada, alcanza una zona circundante más allá de los límites del sitio e ingresa a un curso de agua.
Estrategia de respuesta:	La estrategia implica una combinación de técnicas de respuesta en tierra, por ejemplo, colocación de barreras para minimizar la distribución adicional, bombeado del hidrocarburo libre flotante y la remoción física cuidadosa de la superficie del suelo y la orillas del río.
Consideraciones del ABAN:	Será necesaria la participación de una amplia gama de grupos de interés, incluidos los organismos normativos y las comunidades locales. Puede ser necesaria la consideración de una variedad de recursos medioambientales y las sensibilidades más importantes desde el punto de vista socioeconómico para la protección prioritaria y la limpieza adecuada.
Escenarios de planificación:	Participan varios escenarios representativos, que incluyen estaciones de bombeo del oleoducto, área de almacenamiento intermedio, terminales, etc. y eventos de derrames de hidrocarburos que podrían afectar ríos y cuerpos de agua, zonas urbana/industrial y zonas agrícolas, de recreación y de importancia ecológica.
Estrategia de respuesta:	Estrategia de respuesta global de alto nivel para el oleoducto con planificación genérica para diferentes situaciones y planificación de respuesta adicional específica al sitio y estrategias para las áreas de prioridad identificadas. Incluye una serie de técnicas de respuesta adecuadas para entornos terrestres y acuáticos.
Consideraciones del ABAN:	Hay grandes sensibilidades socioeconómicas y medioambientales. Hay una necesidad potencial de una serie particularmente alta de participación de los grupos de interés, dirigiendo las consideraciones del ABAN a apoyar las decisiones de respuesta adecuadas para el oleoducto en general y para ubicaciones específicas al sitio.

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Opción de respuesta	Beneficios		Inconvenientes	
Eliminación natural	<ul style="list-style-type: none"> Ninguna técnica de eliminación o limpieza que pudiera dañar adicionalmente al medio ambiente. Complementa otras técnicas de respuesta. Las observaciones y los datos obtenidos del monitoreo informan las decisiones de la respuesta y la selección de la herramienta. Puede ser la mejor opción si hay poca o ninguna amenaza al bienestar de las personas o el medio ambiente. Al utilizarse en ciertas zonas y condiciones, el medio ambiente se puede recuperar de un derrame de manera más eficaz que utilizando otras herramientas de respuesta. 		<ul style="list-style-type: none"> El hidrocarburo no se puede eliminar. Los vientos y la corrientes pueden cambiar, enviando el derrame de hidrocarburos hacia zonas sensibles. El hidrocarburo residual puede impactar la ecología, la fauna y los recursos de importancia económica de la costa. La percepción pública de que el personal de respuesta no hace nada. 	
Dispersante: aplicación en superficie	<ul style="list-style-type: none"> Menor mano de obra y requisitos logísticos que otras técnicas de respuesta. Se pueden aplicar en una amplia gama de condiciones climáticas. Mayor tasa de encuentro comparado con otras opciones en superficie. 	<ul style="list-style-type: none"> Alcanza y trata una cantidad significativamente mayor de hidrocarburos que otras técnicas de respuesta. Acelera la eliminación del hidrocarburo de la columna de agua al mejorar la biodegradación natural. 	<ul style="list-style-type: none"> Es posible que no funcione en hidrocarburos combustibles de alta viscosidad en mares tranquilos y fríos. Puede tener una "ventana de oportunidad" limitada para su uso. 	<ul style="list-style-type: none"> No recolecta el hidrocarburo directamente del medio ambiente, sino que lo dispersa en la columna de agua donde se puede biodegradar. Efectos potenciales del hidrocarburo dispersado en la columna de agua - vida marina residente (se prevén exposiciones breves y localizadas). Impacto potencial en la industria pesquera si la población malinterpreta los efectos potenciales del dispersante en los mariscos. Generalmente se requiere aprobación reglamentaria antes de aplicar el dispersante.
Dispersantes: aplicación bajo la superficie del mar	<ul style="list-style-type: none"> Operaciones continuas, de día y noche, de ser posible. Se puede aplicar en todas las condiciones climáticas, excepto en condiciones severas. Es posible una alta tasa de encuentro. 	<ul style="list-style-type: none"> Elimina o evita el hidrocarburo en la superficie, mitigando el daño a las aves marinas, mamíferos y otra fauna silvestre. Reduce la cantidad de hidrocarburo que se esparce a la costa, reduciendo el riesgo para las costas sensibles. Reduce el impacto en los recursos de la comunidad y la industria local. Ningún requisito para el almacenamiento del hidrocarburo recuperado. Menos vapores en la superficie del agua mejoran la seguridad del personal de respuesta. 	<ul style="list-style-type: none"> Tiempo de movilización más lento comparado con la aplicación en superficie. 	<p style="text-align: right;"><i>continúa...</i></p>

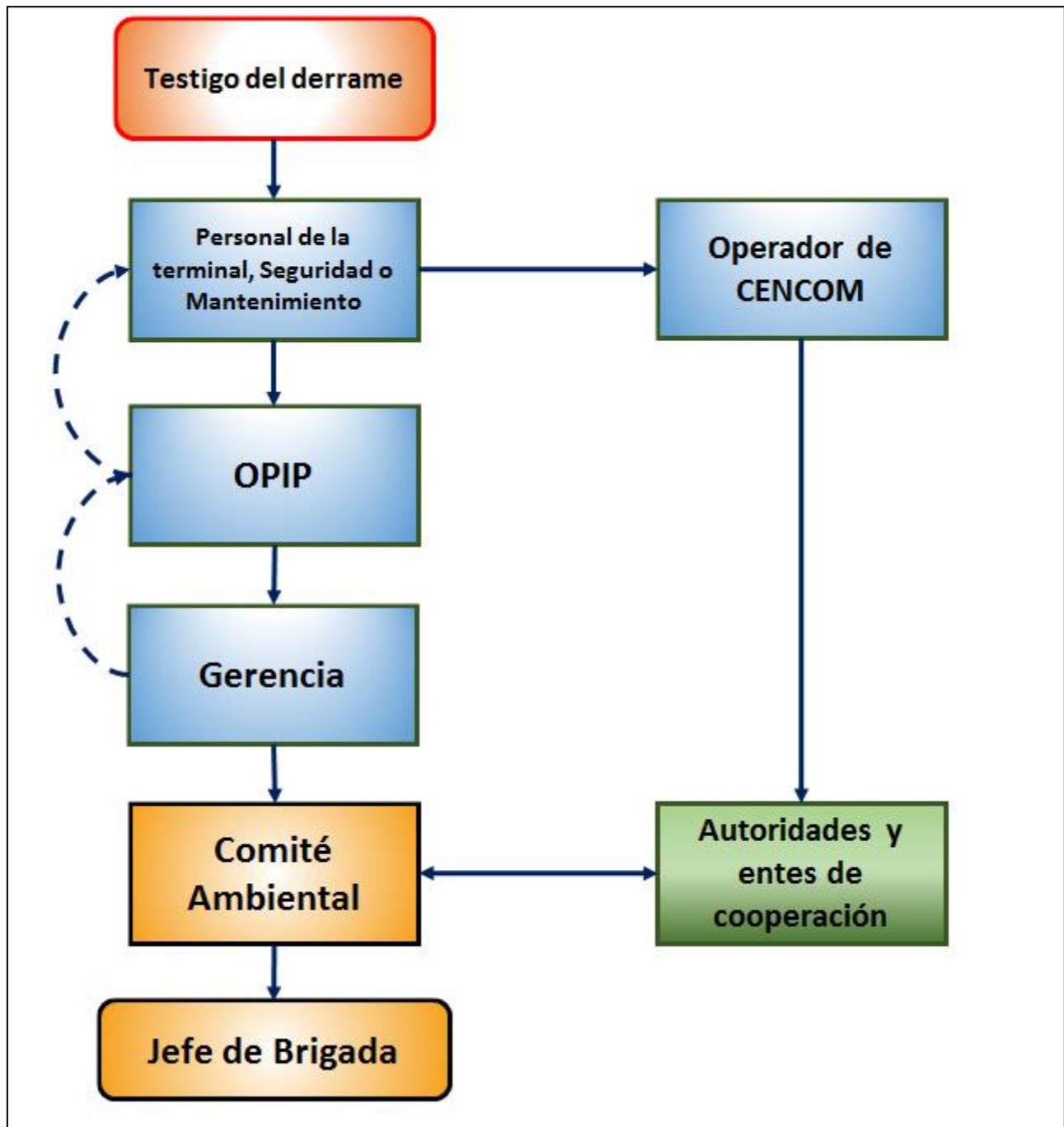
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Opción de respuesta	Beneficios	Inconvenientes
Combustión controlada <i>in situ</i>	<ul style="list-style-type: none"> Eliminación rápida de grandes cantidades de hidrocarburos. Deja mucho menos hidrocarburo para eliminación. Altas tasas de eficacia (de hasta 98 a 99%). Se requiere menos equipo y mano de obra; el equipo especializado (barreras) se puede transportar por aire. Puede ser la única opción viable (por ejemplo, en marismas o hielo). Ningún requisito para el almacenamiento del hidrocarburo (excepto para los posibles residuos de la combustión). Eficaz en una amplia gama de tipos de hidrocarburos y condiciones. Mínimo impacto medioambiental. Menos vapores de hidrocarburo en la superficie del agua mejoran la seguridad del personal de respuesta. 	<ul style="list-style-type: none"> Humo negro se percibe como un impacto significativo en las personas y la atmósfera. "Ventana de oportunidad" limitada para derrames en aguas abiertas (los hidrocarburos emulsionados no se queman). Se necesita captar y contener suficiente volumen de hidrocarburo y espesor de la mancha para que la quema <i>in situ</i> sea eficaz. La eficacia disminuye para hidrocarburos pesados a medida que el hidrocarburo envejece. La quema plantea un riesgo potencial a la salud. La quema plantea un riesgo potencial a la fauna costera fuera que se debe tratar. Los residuos de la quema pueden ser difíciles de recuperar (pueden hundirse de las quemaduras de hidrocarburos muy pesados). Se requieren aprobaciones especiales. Reducción localizada de la calidad del aire. Potencial de incendios secundarios durante uso en tierra. Ineficaz en inclemencias del tiempo o alta mar.
Contención y recuperación en el mar	<ul style="list-style-type: none"> Elimina el hidrocarburo con el mínimo impacto medioambiental. Bien aceptado, no se requieren aprobaciones especiales. Eficaz para recuperación en una amplia gama de productos derramados. Gran "ventana de oportunidad". Mínimos efectos colaterales. La mayor disponibilidad de equipo y conocimientos. El producto recuperado se puede volver a procesar. 	<ul style="list-style-type: none"> Inherentemente ineficaz y a menudo muy lento. A menudo no se puede recuperar suficiente hidrocarburo para evitar el impacto en la costa. Es más difícil recuperar una gran cantidad de hidrocarburo en casos de derrames mayores. Ineficaz e impráctico en manchas delgadas. Ineficaz en inclemencias del tiempo o alta mar. Requiere capacidad de almacenamiento. Normalmente no recupera más del 10 al 20% del hidrocarburo derramado. Requiere mucho equipo y mano de obra.
Eliminación física en la costa	<ul style="list-style-type: none"> Elimina el hidrocarburo. Reduce el potencial de esparcimiento adicional del hidrocarburo. Reducción de los impactos secundarios en animales que utilizan las costas. Evita la removilización del hidrocarburo. Los métodos no agresivos pueden tener un impacto mínimo en la estructura de la costa y los organismos costeros. Útil para la limpieza detallada del medio ambiente cerca de la costa en zonas específicas o sensibles. 	<ul style="list-style-type: none"> Potencial de daño adicional al medio ambiente: los métodos de eliminación agresiva pueden impactar la costa y los organismos costeros (por ejemplo, la remoción y la limpieza de la arena). Requisitos para el almacenamiento y eliminación de residuos. Normalmente no recupera más del 10 al 20% del hidrocarburo derramado. Requiere mucha mano de obra. Posibilidad de que el tráfico de equipo pesado y a pie (pisoteo) puedan provocar daño adicional al medio ambiente. La eliminación ocurre después de que el hidrocarburo ya ha impactado la orilla. La respuesta en la costa puede requerir importantes recursos y apoyo logístico.


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4.4. Alert and Notification Scheme

Below is the communications diagram for alert and notifications.



See list of internal and external contacts in point 8.2.

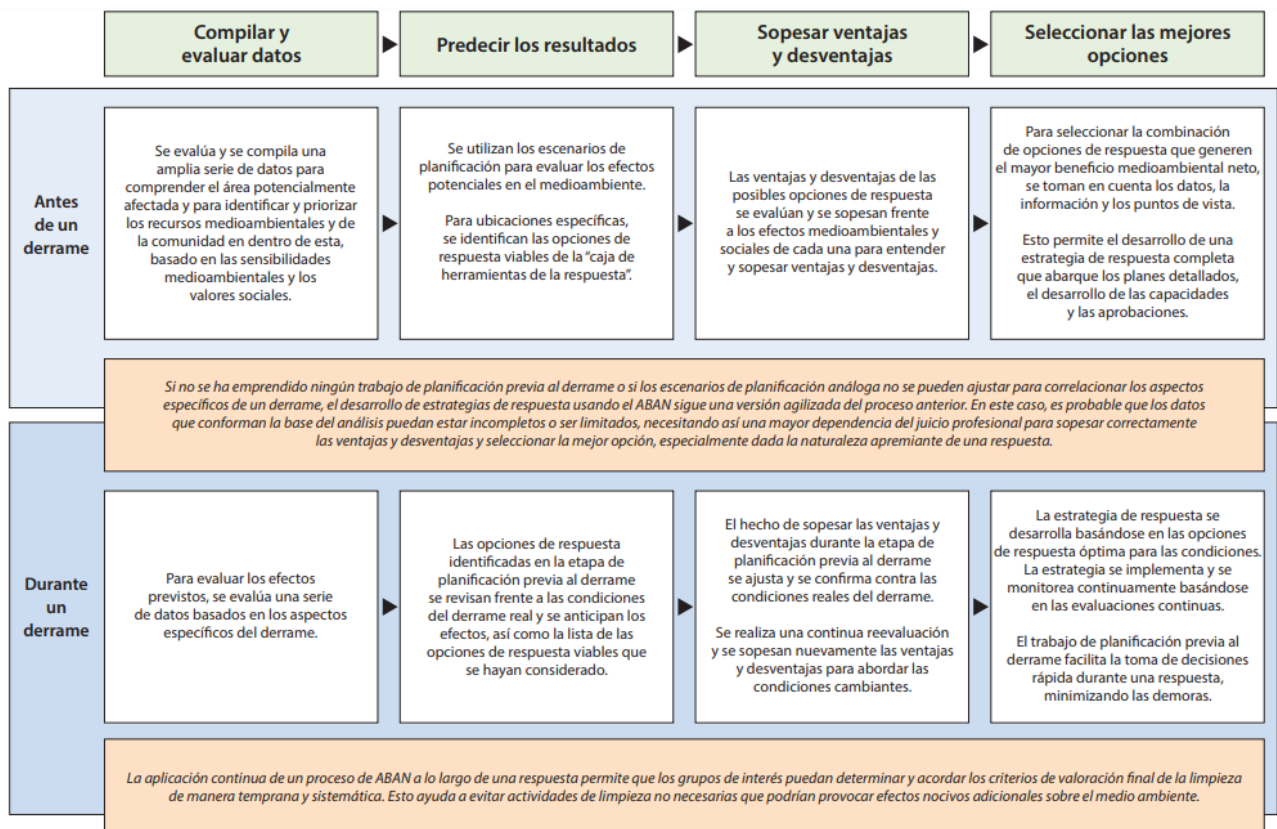
	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
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As can be seen in the diagram, the communication between Management and the OPIP is of both ways at the beginning acting immediately on the spill. Then, the Environmental Committee is the one who intervenes and the communication with the Brigade Chief is generated, who follows the natural chain of command downwards as indicated in point 2.1.1. Brigades.


4.5. Assessment. ABAN (Net Environmental Benefit Analysis)

The following tables have been obtained from Net Environmental Benefit Analysis for cases of fuel spills. At the same time, a Risk Analysis has been carried out with the possible scenarios. The most important points of an ABAN for a case of fuel spill are detailed.

Development of response strategy using ABAN.⁵



⁵ y ⁶ IMO/IPIECA (1996). Development of sensitivity maps for hydrocarbon spill response.

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4.5.1. Fuel on the coast⁶


If large amounts of moving fuel are present on the surface of the coast, a rapid response will be necessary before the fuel spreads over a wider area. Ecological recovery times can be reduced with the rapid action to remove asphyxiating or especially toxic hydrocarbon. On the contrary, more time may be allowed for decisions that refer to smaller amounts of hydrocarbon exposed and attached firmly to the coast or retained below the surface.

For many of the fuel spills that do not involve toxic or particularly heavy hydrocarbon deposits, moderate cleanliness of the coast has little or no effect on the recovery rates of coastal organisms in the long term, that is, for organisms that live on the coast such as mollusks and algae. This is an important point for the response of the coast, because it raises key questions for decision-making regarding cleanliness.

It seems likely that the least ecological damage would be the result of a moderate level of cleanliness - enough to remove most of the hydrocarbon, but soft enough to leave the surface of the coast intact and to prevent the hydrocarbon from going inside the sediments being hidden.

Table of benefits and disadvantages of the different response options to a fuel spill.⁷

⁷ IPIECA. Development of response strategies using the net environmental benefit analysis (ABAN)
http://www.oilspillresponseproject.org/wp-content/uploads/2017/02/NEBA_SP.pdf

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Option	Benefits	Inconvenient
Dispersant applied on offshore surface	Eliminates surface hydrocarbon that could harm wildlife and prevents hydrocarbon from spreading to the coast; It improves the natural biodegradation of the hydrocarbon and reduces the vapors that occur on the sea surface.	Dissolved hydrocarbon has the potential to initially affect local marine fauna.
Containment and recovery at sea	Eliminates hydrocarbon with minimal environmental impact.	Recovery by mechanical means can be inefficient, use many resources and be constrained by water conditions, and usually fails to recover more than 10-20% of the hydrocarbon.
On-site controlled burning	Large quantities of hydrocarbon are rapidly removed by controlled combustion on-site	Combustion presents a potential safety risk and a reduction in air quality at the specific location; combustion residues can be difficult to recover. The effectiveness depends on the characteristics of the hydrocarbon and the sea conditions.
Shoreline Cleaning	The environmental and social value of specific places is selectively restored through the use of a variety of tools.	Aggressive or inappropriate disposal methods can affect individual ecosystems and organisms.
Natural processes	Natural processes are used for the elimination of hydrocarbon, including biodegradation and intrusive cleaning techniques that can cause additional damage to the environment are avoided.	With natural elimination it may take longer to return to the environment to its state prior to spillage than with other response techniques.

4.6. Sampling

ROATAN CRUISE TERMINAL has a working agreement with the AGROINDUSTRIALES LABORATORY located in San Pedro Sula. In case of taking samples, whether of soil, water, hydrocarbons, etc., to analyze them, ROATAN CRUISE TERMINAL will be in charge of all the logistics so that the Agroindustriales Laboratory personnel move to the terminal facilities to perform these tasks.

4.7. Response Operations

In the event of a spill at the local level within the Terminal's facilities, ROATAN CRUISE TERMINAL has the capacity, equipment and structure, to act quickly in containment and thus prevent a spill into the waters adjacent to the facility.

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In the event of a spill or discharge by a ship, the terminal will collaborate with everything possible to minimize the impact. See detail in section 3.6.2. Environmental Management System Procedures HYDROCARBON SPILL CONTINGENCY PLAN, subsections: 39. and 40.

4.8. Monitoring and Surveillance

ROATAN CRUISE TERMINAL has established in its Environmental Management System and has the resources and the capacity to carry out monitoring and surveillance tasks in the areas adjacent to the port facility.

See point 3.6.2. Environmental Management System Procedures FUEL SPILL CONTINGENCY PLAN, subsections: 22 to 34.


In addition, see point 3.6.2. Procedures of the Environmental Management System MANAGEMENT OF THE COASTAL AND MARINE ENVIRONMENTS – **The Ships**; and subsections 39. to 42.

4.9. Containment and Recovery

ROATAN CRUISE TERMINAL has the equipment described in Appendix IV - Stock of contingency equipment for fuel spills in the Terminal, to absorb more than 1,260 gallons in the event of a spill or discharge. At the same time it has stock of 205 liters PVC barrels suitable for temporary storage of recovered substances, as well as tools and suction pumps to carry out the tasks correctly.

4.10. Use of chemical agents and dispersants

Since the possibilities of a spill of hydrocarbons or other harmful and potentially dangerous substances into the aquatic environment are VERY UNLIKELY (see point 3.3. Probability and Consequence) and the quantities are LIMITED, this subsection does not apply. However, ROATAN CRUISE TERMINAL has a detergent stock described in Annex 5 - as part of the Stock of the contingency equipment for fuel spills in the Terminal, to clean the facilities, tools and equipment that could become contaminated with any of these hydrocarbons.

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Even so, it should be clarified that the Republic of Honduras does not have an established policy regarding the use of dispersants or chemical agents as a mechanism of reaction to an episode of contamination due to fuel spills or other harmful and potentially dangerous substances, so the use of dispersants, if necessary, will depend on the authorization of the Ministry of Natural Resources and Environment (MiAmbiente) and the General Directorate of the Merchant Marine. As established in section 3.6 of the PNCH.

4.11. Burning in situ

Due to the nature of the operation, the volumes of hydrocarbons and the types of "potentially polluting elements" that are stored in the Terminal, in-situ burning does not apply.

If in situ burning is necessary in case of spillage, it must be previously evaluated and authorized by the DGMM, the Ministry of Natural Resources and Environment, and the Fire Department.

4.12. Treatment of sea and river coasts


ROATAN CRUISE TERMINAL is committed to ensuring the care of the coasts, mangroves, wetlands and so is established in its Environmental Management System. See points 3.6.2. Procedures of the Environmental Management System, (e.) MANAGEMENT OF THE COASTAL AND MARINE ENVIRONMENTS, subsections 22 to 34.

5. POST EVENT ACTIONS

5.1. Transport and storage

Taking into account that the quantities of fuel or potentially dangerous harmful substances that are handled in ROATAN CRUISE TERMINAL are limited, the transport and storage of possible residues (both liquids and solids that were used to absorb, contain and recover them) that are recovered, on existing 205-liter drums and in the Spill Kit container detailed in Appendix IV - Stock of contingency equipment for fuel spills in the Terminal and will be temporarily deposited in the area intended for the purpose detailed in point 5.2.

⁹Requirements for Controlled Burning in the PNCH, point 3.7.

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5.2. Waste management

It is a commitment of ROATAN CRUISE TERMINAL that the waste will be disposed of in an appropriate manner and as approved by the corresponding local authorities and is thus established in its Environmental Management System. See points 3.6.2. Procedures of the Environmental Management System.

In this sense, there is a specially designed area with a red roof and a containment layers, destined exclusively for the temporary disposition of the drums and other waste generated during the cleaning in case of an episode of contamination. See point 5.1. and Annex 10.

5.3. Final disposition

The deposit mentioned in point 5.2 will be exclusively for temporary disposal since the waste would then be removed by the Nelson Rittenhouse supplier that disposes of them on the mainland of Honduras.

See also section 3.6.2. of the Environmental Management System, FUEL SPILL CONTINGENCY PLAN - For Facilities, paragraph 37. b. and 38.

5.4. Decontamination


If necessary after a spill incident in which the responsibility is attributable to ROATAN CRUISE TERMINAL, it undertakes to carry out the decontamination tasks using the best techniques and practices for it, according to international norms and standards.

5.5. Actions planned for the treatment of affected wildlife

If necessary after a spill incident in which the responsibility is attributable to ROATAN CRUISE TERMINAL, it undertakes to carry out the work for the treatment of the affected wildlife, using the best techniques and practices for them, according to the experiences raised internationally in the matter of fuel spills.

5.6. Post Incident Monitoring

ROATAN CRUISE TERMINAL will carry out post-incident monitoring tasks, in order to ensure that the fauna and flora of the ecosystem are in recovery according to the plan established for it, depending on the case. See point 3.6.2, Environmental Management System (i). OTHER ENVIRONMENTAL ASPECTS, subsection 52.

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6. PUBLIC INFORMATION AND PRESS MEDIA

6.1. Company Information Policy

In the event of a contingency of spill or discharge of hydrocarbons or harmful or potentially dangerous substances in which ROATAN CRUISE TERMINAL is involved, all the current provisions and policies of the company will be followed to divulge and give information to the media communication and the general public.

7. SECURITY

7.1. Industrial Security Policy of the Company

As already mentioned throughout this document, ROATAN CRUISE TERMINAL, has a strong Environmental Policy with enough actions aimed at preserving and protecting, not only the environment, but also the safety of personnel. This is reflected in the Environmental Management System cited in section 3.6. This document mentions the following points that refer to Industrial Safety, Occupational Health and First Aid. Some of them are cited below:


“46. ROATAN CRUISE TERMINAL will ensure compliance with the provisions of the Health Code, the Labor Code and associated regulations.

47. ROATAN CRUISE TERMINAL staff uses the necessary protective equipment, depending on the activity to be performed. For the above purpose, staff receives training on the importance and proper use of personal protective equipment.

48. ROATAN CRUISE TERMINAL has installed at least three first aid kits with the necessary implements in each work environment. These kits have been placed, equipped and labeled correctly to ensure easy access for staff.”

For the fulfillment and knowledge of the personnel of all these points, ROATAN CRUISE TERMINAL, continuously develops a personnel training program.

Annex 6 shows the training schedule for the current year, in addition ROATAN CRUISE TERMINAL requires employees to complete annual awareness training on protection and contingencies to ensure they have knowledge to report on certain relevant elements and warning methods and Alert in case of emergency or spills.

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8. COMMUNICATIONS, CONTACTS, LEGAL AND FINANCIAL MATTERS

8.1. Communications


To ensure easy communication with support and response entities in case of emergency or contingency, there is a list of telephone numbers and names of contact persons. Likewise, there is a list of telephone numbers to locate their own personnel for any emergency during non-working hours and days.

The first contact in case of a spill, discharge or identify a spot in the water mirror or other contingency, is the OPIP, Gassler Cook. He will be in charge of notifying the rest of the Management team. Then, the Directorate will evaluate the need to bring together the Environmental Committee to deal with the contingency.

8.2. Internal and External Contacts.

Internal contacts in case of contingency			
Nº	Position	Name	Mobile phone
1	OPIP	Gassler Cook	9459-0810
2	General Manager	Luis Colon	9503-6581
3	Maintenance manager	Jorge Guillen	9459-0804
4	Accounting Controller	Maribel Fúnez	9459-0803
5	Environmental Regent	Elena González	9551-0145
6	Office Manager	Danielly Hynds	9459-0808
7	CENCOM	Keydie Cook	9459-0816
8	IT	Joseph Webster	9992-9344

Likewise, each Manager will be responsible for contacting the personnel of his area that corresponds to respond to the contingency. The OPIP, or whoever he designates, will be responsible for contacting the appropriate personnel of the Security Department:

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RCT-SECURITY Department		
Nº	Name	Mobile Phone
1	Carlos Callejas	9516-3959
2	Casper Rich	3215-1355
3	Elvin Romero	3301-8339
4	Harson Hinds	3247-8733
5	Jose Orellana	9519-1608
6	Lirio Aranda	8964-4006
7	Nelson Rivera	9766-5424
8	Simon Green	9436-0710
9	Zuidie Bernard	9436-0520

The Maintenance Manager, or his designee, will be in charge of contacting the corresponding personnel of the Maintenance Department:

RCT-MAINTENANCE Department		
Nº	Name	Mobile phone
1	Darwin Brooks	9914-9205
2	Edwin Hernández	8859-0445
3	Darcy Palacios	9964-5856
4	Kenny Guzmán	9665-9810
5	Edwin Mejía	3189-0392
6	Javier Zelaya	9916-9219
7	Wilmer Bustillo	9436-0248

The contacts of external collaborating entities in the event of a contingency are detailed below:

External contacts in case of contingency			
Nº	Entity or Institution	Mobile phone	Landline
1	DGMM, Dept. Marine Environment Protection	9827-3483	2239-8228 ext. 206
2	Port Captancy DGMM	9846-7781	2445-1262
3	COPECO Reg. 1 La Ceiba Sub. Com. Reg. Abraham Mejía Griffin	9590-0001	2441-5827
		Central	2229-0606
4	CODEM	9778-3827	
5	Ambulance / Fire Station Roatán	9918-8970	2445-0430
6	Red Cross	9995-1943	2445-0428
7	National Police - Los Fuertes, Roatán	2455-6438/6449	2455-6471
8	National Police Post - French Harbor	9930-7634	
9	National DPI Police - (Sr. Rodríguez)	9502-9505	

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10	Commissioner DPI - (Raúl Mejía)	9440-0320	
11	Deputy Commissioner - (Sr. Ardon)	8907-6045	
12	Roatán Hospital	2445-1227	
13	Woods Medical Center Private Hospital	2445-1080	
14	Esperanza Clinic	2445-3234	
15	Roatán Municipality	2445-1299/1276	2445-1972
16	Municipal Police - Coxen Hole	2445-0416	
17	Municipal Police - Director Joseph Solomon	9996-4749	
18	Santos Guardiola Municipality	2435-2183	
19	Anacaribe	2445-1627	2445-1086
20	Customs	2445-1315	
21	Roatán immigration	2445-1326/1148	
22	OIRSA	2445-1620	
23	Roatán Electric Company - RECO	Ext. 1 y 114	2407-2170/73
24	Hondutel	2445-1325	2445-1414
25	Town Center - Port of Roatán - (Albara Duran)	2445-3799	
26	Roatán Marine Park - (Héctor)	2445-4206 / 9430-3194	9477-5548 / 9430-3196
27	Air Evac - (Daniel Cartagena)	9560-9945	
28	National Commission for Port Protection - CNPP		2243-3787 / 2233-4696
29	Honduran Naval Force		3249-8446


8.3. Financial aspects

8.3.1. Funds provided

ROATAN CRUISE TERMINAL has established financial funds to face a contingency such as spillage or discharge of fuel and harmful and potentially dangerous substances.

8.3.2. Compensation

ROATAN CRUISE TERMINAL also has the appropriate insurance policies to pay compensation that corresponds to the coverage of a spill or discharge of hydrocarbons and harmful and potentially dangerous substances and their consequences.

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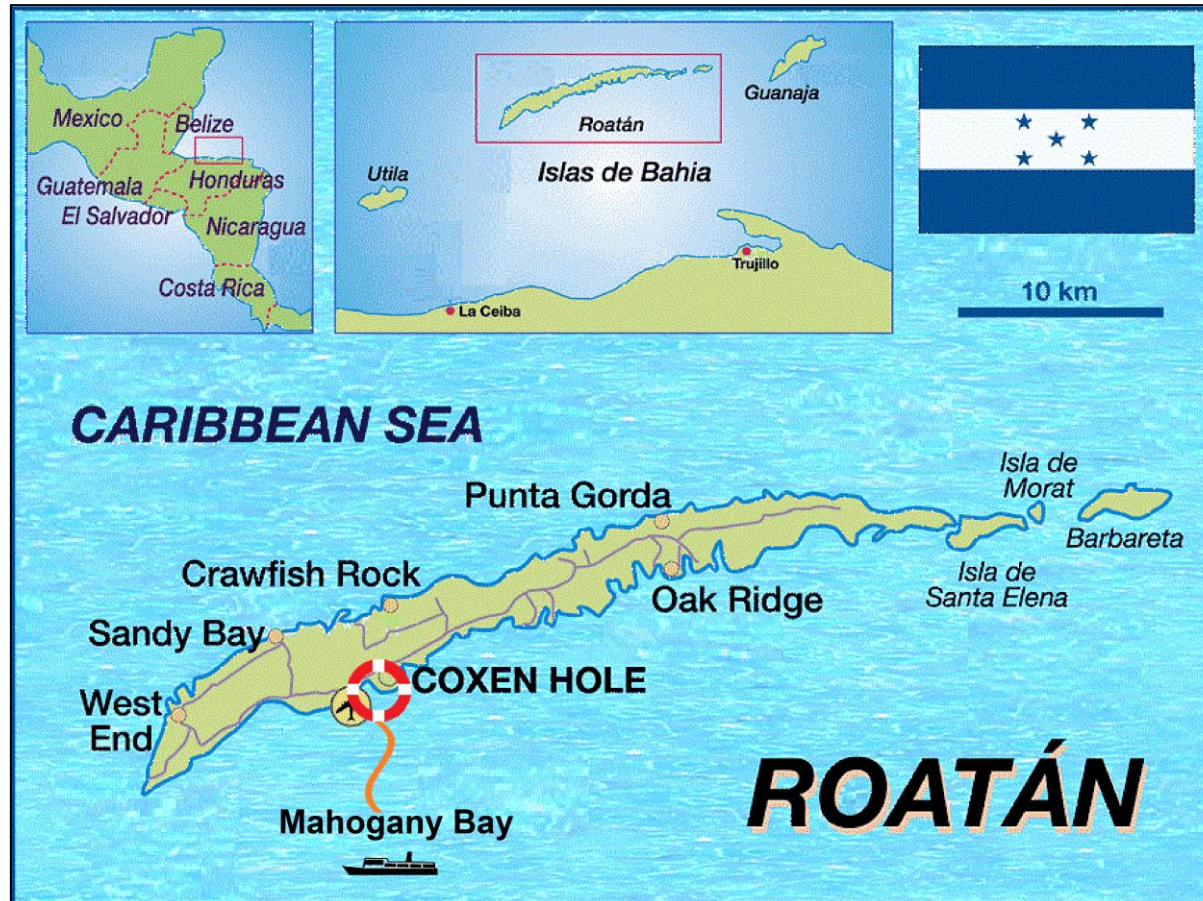
8.4. Legal Issues

ROATAN CRUISE TERMINAL has a corporate Legal Department, which is prepared to work proactively and provide advice in case of incidents, spills, discharges of hydrocarbons and harmful and potentially dangerous substances and other contingency.


	Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas			ROATAN CRUISE TERMINAL	
	Elaborado por	Revisado por	Aprobado por	Fecha	Revisión
	INTERMARIS	ROATAN CRUISE TERMINAL	DIRECCIÓN GENERAL DE MARINA MERCANTE	Diciembre-2019	1

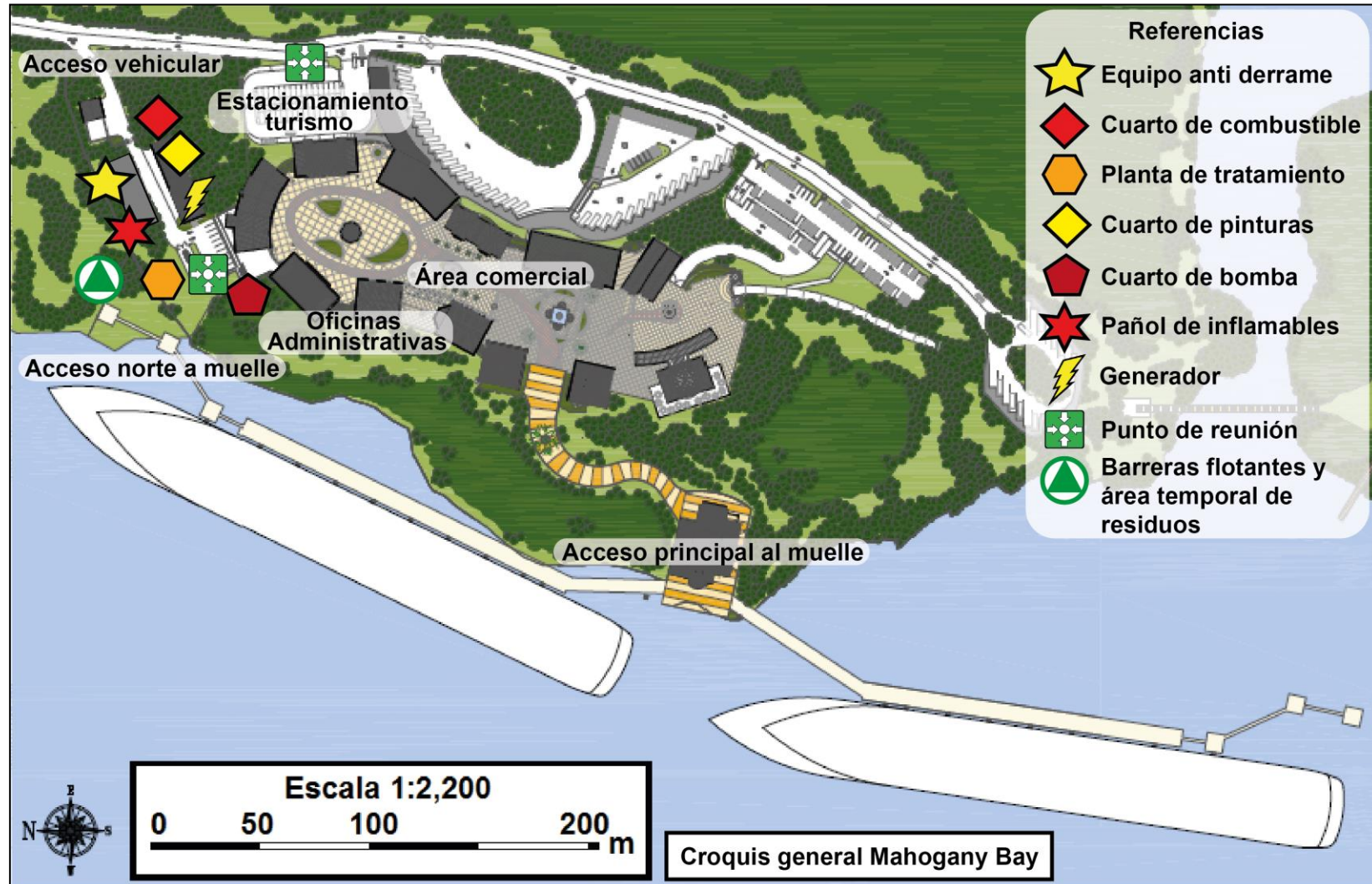
ANNEX 1 - Installation Plans and Nautical Chart


Annex 1.1. Location on the map of Bay Islands.



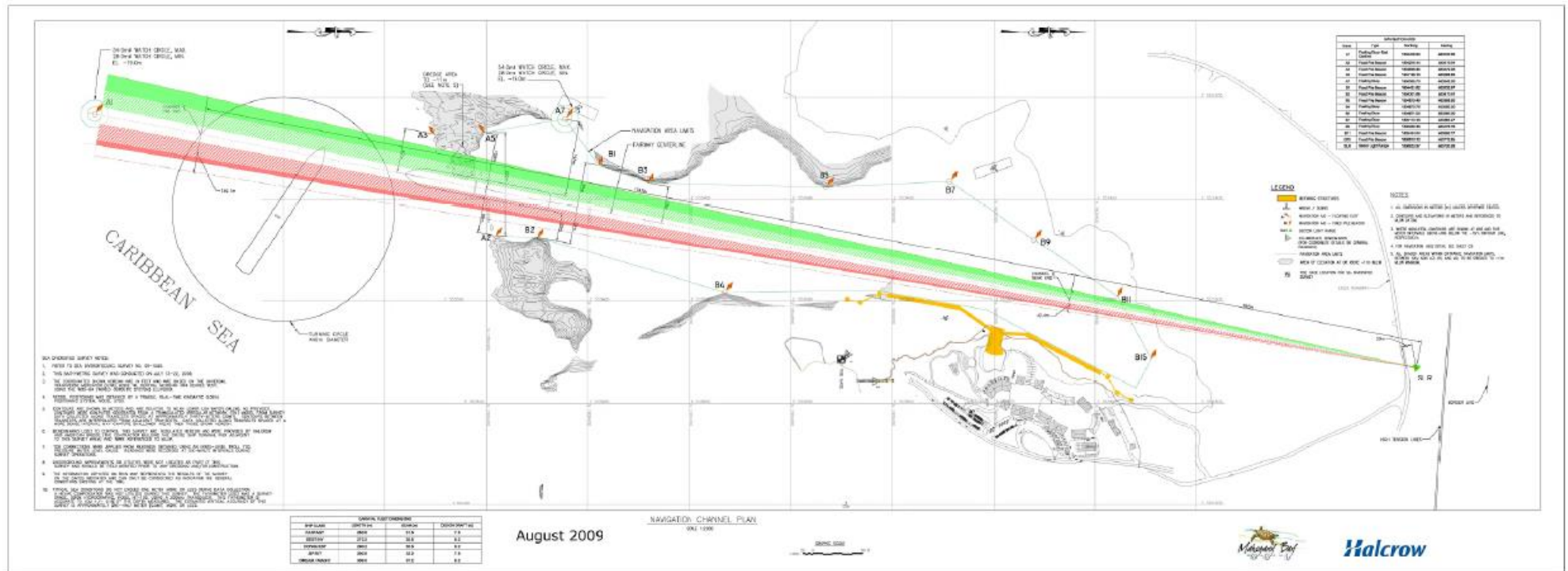
Annex 1.2. General Plant of the Terminal with references.

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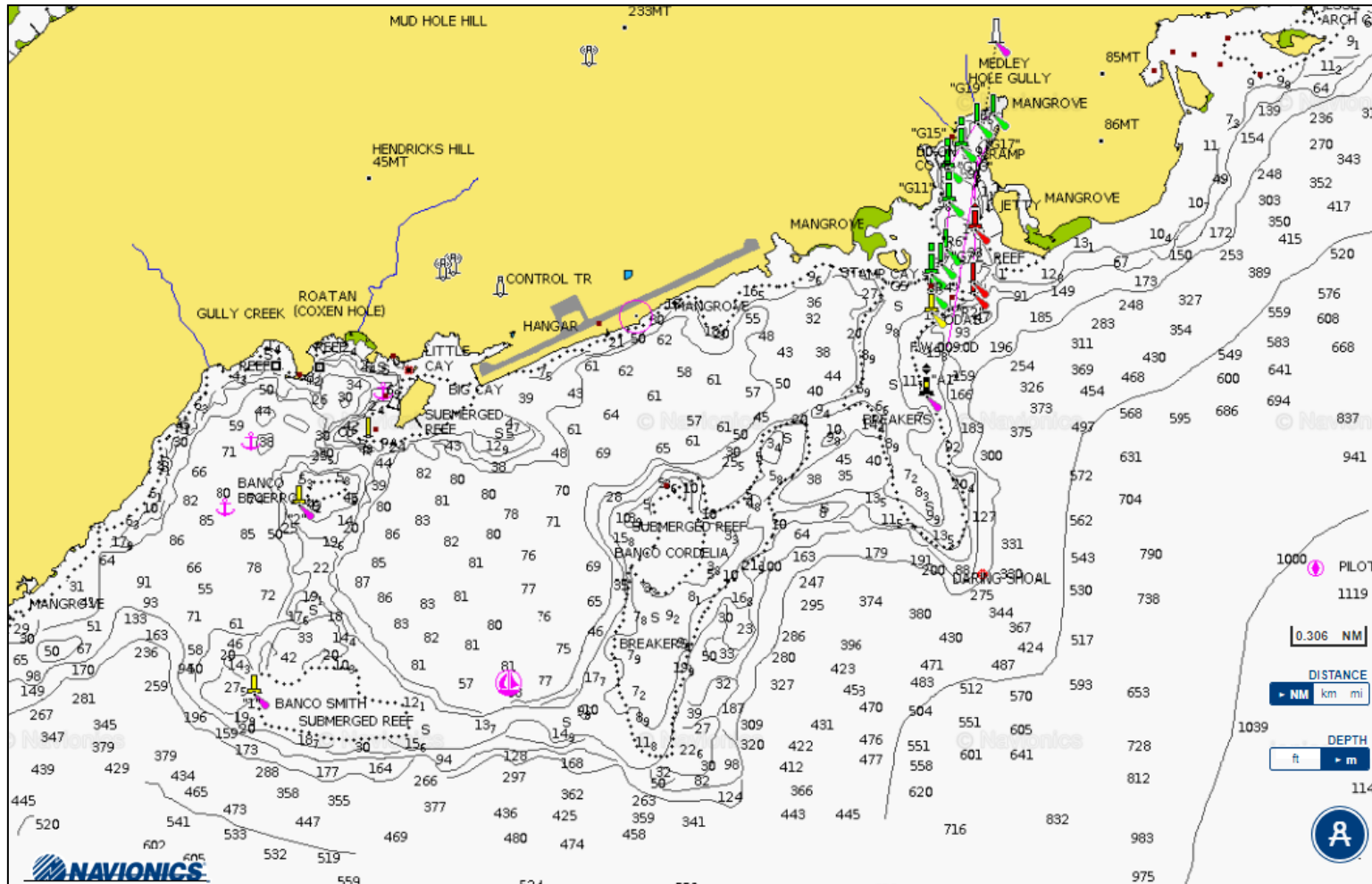
Annex 1.3. Nautical Chart Navigation Channel.⁸




⁸ Roatan - Navigation-Channel-14Aug2009

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Annex 1.4. Access and proximity to ROATAN CRUISE TERMINAL. Nautical Chart web.⁹



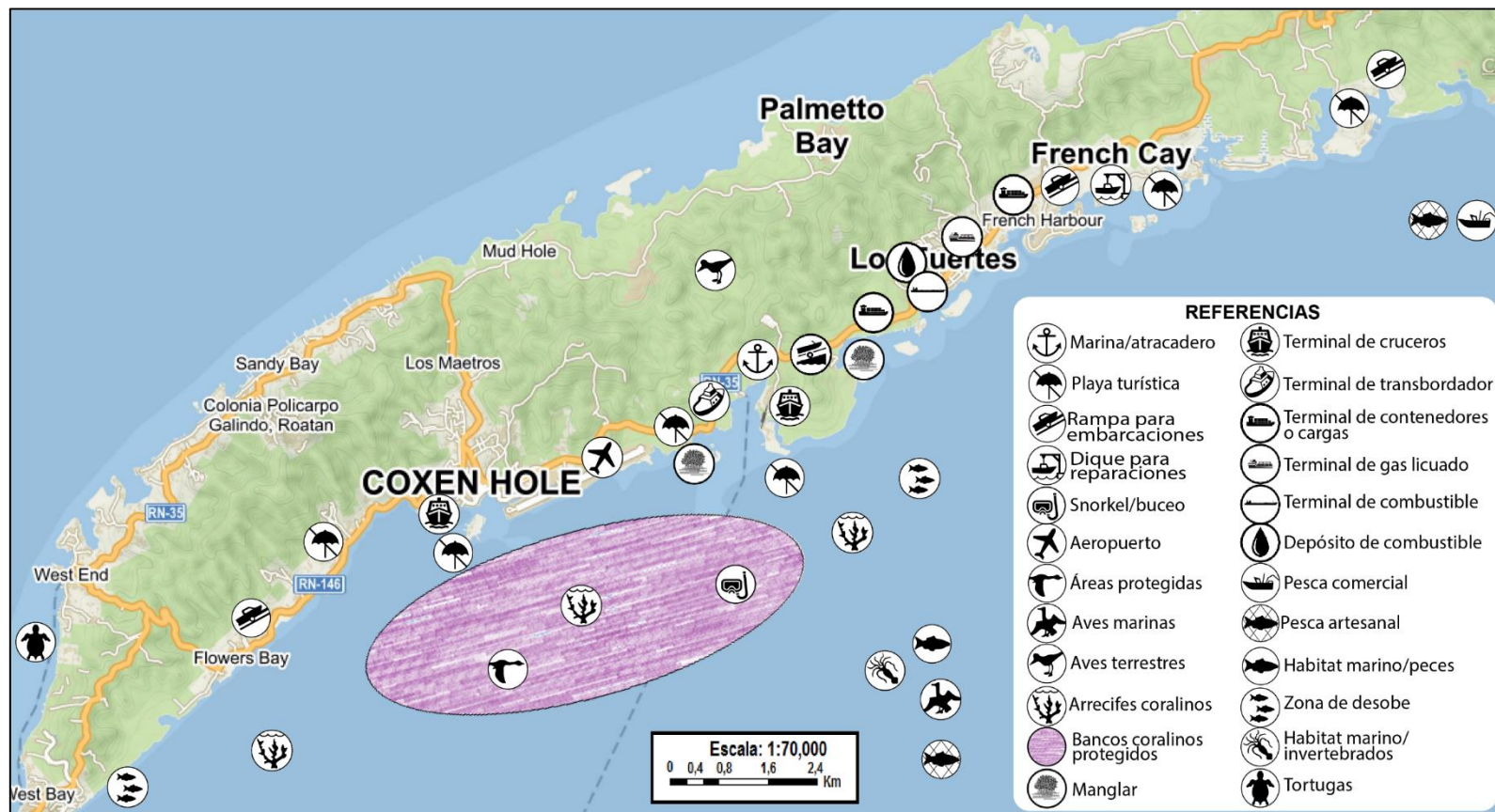
⁹ Source: <https://illuka.es/charts/carta-nautica-mar-caribe.html>


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ANNEX 2 Resource Sensitivity Maps

After a study of the available information, the following figures have been developed within Annex 2 (separate document):


Annex 2.1. Map of: Sensitive Biological and Socio-economic Resources in the Southwestern area of Roatán



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Annex 2.2. Map of: Banco Cordelia - Protected Coral Reserve

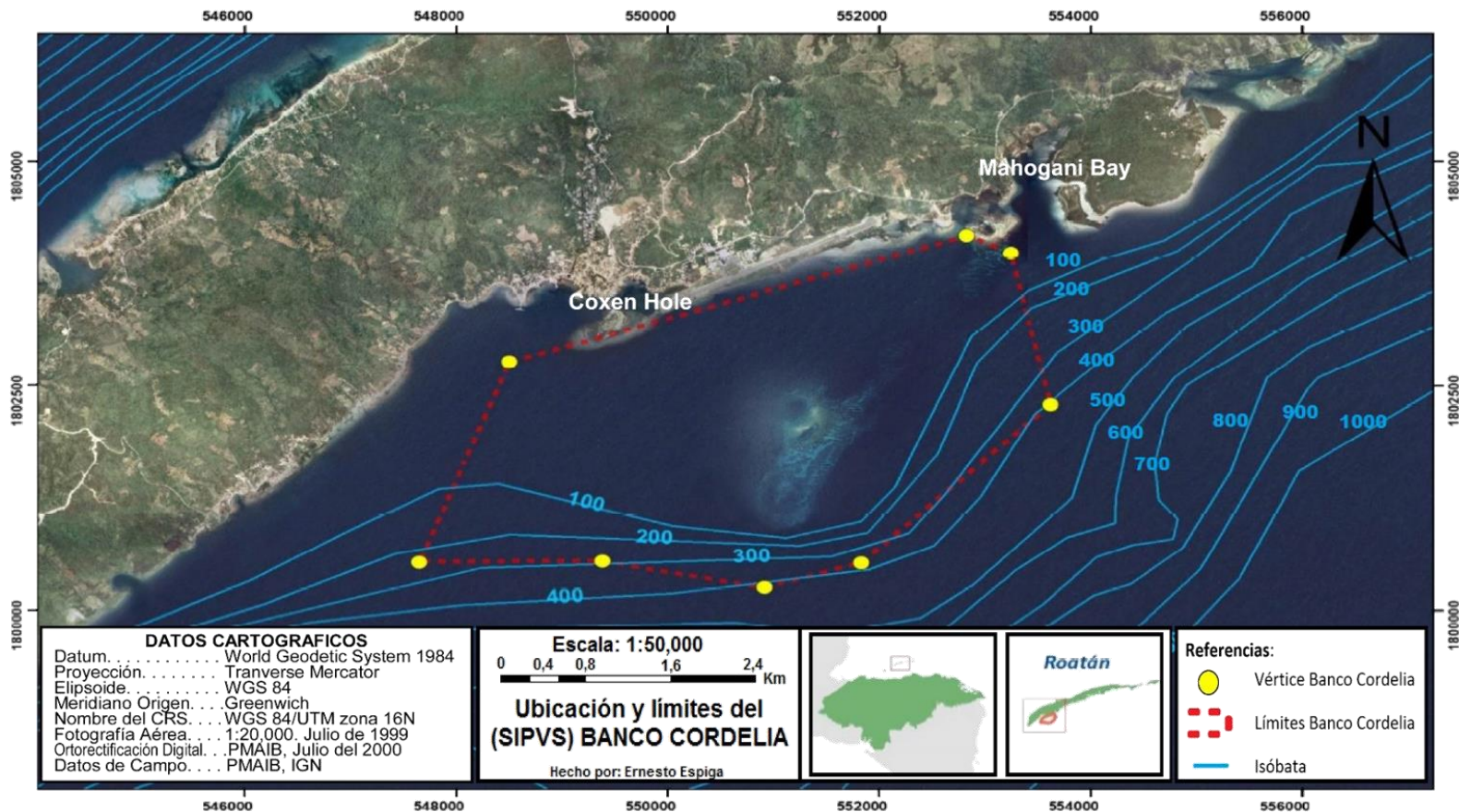
Location and limits of the Cordelia Bank, protected coral bank area between Coxen Hole and Dixon Cove (Mahogany Bay). Site of importance for wildlife.

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Source: <http://reefresilience.org/es/>

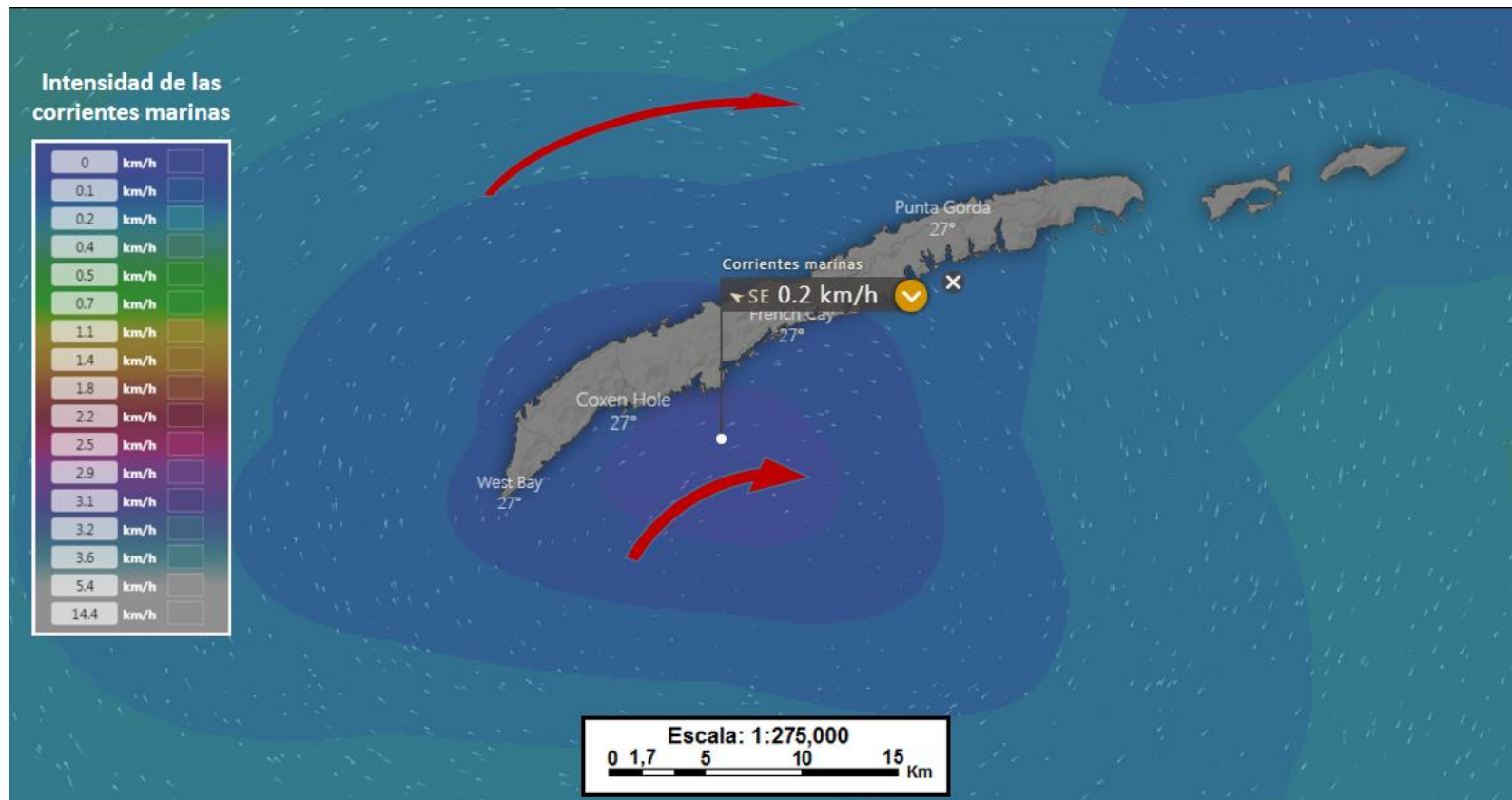
Annex 2.3. Map of: Predominant marine currents in Roatan

The




predominant sea currents normal weather conditions in Roatán are from the West Southwest to Southwest sector and of low intensity.

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Source:

<https://www.windy.com>


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Annex 2.4. Map of: Predominant marine currents in the Dixon Cove area, Roatan

The predominant marine currents in Dixon Cove are from the West Southwest to Southwest sector with a speed between 0.1 and 0.2 K / h.

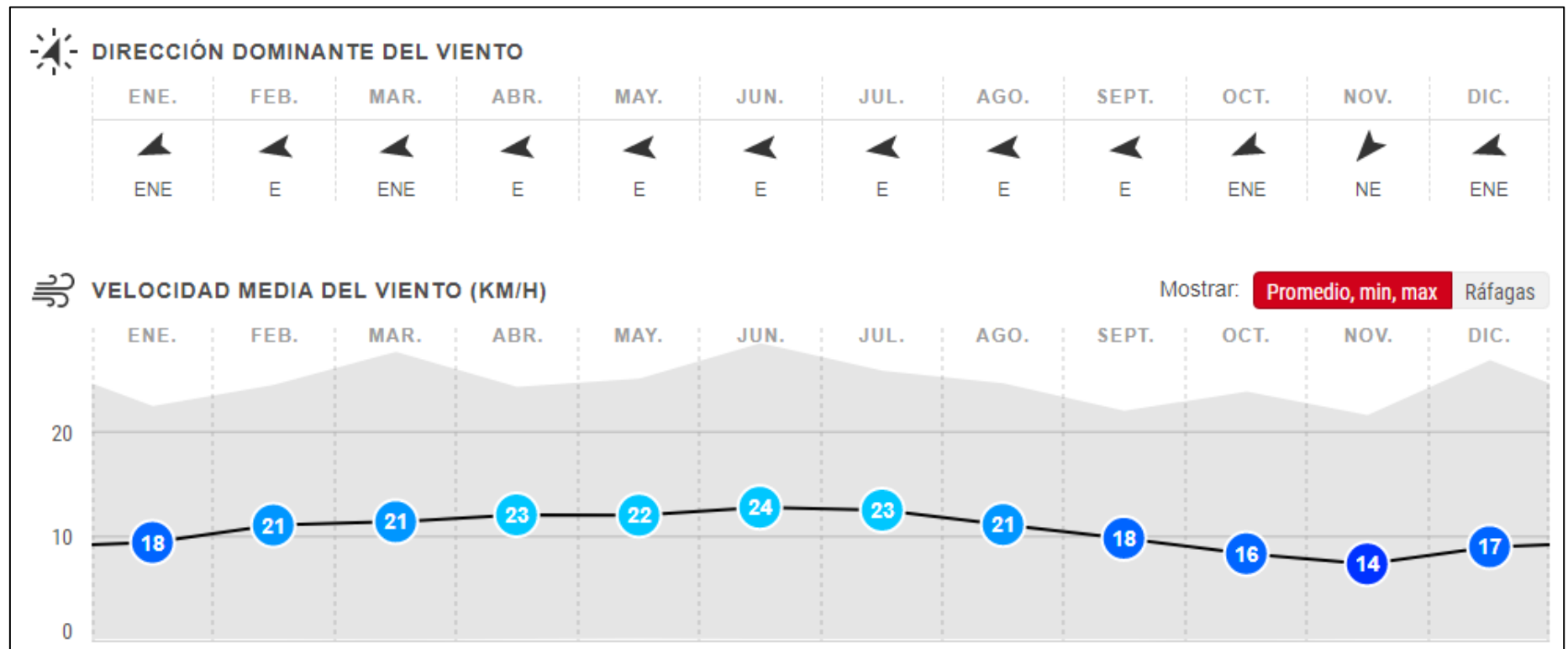


Source: <https://www.windy.com>


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Annex 2.5 Dominant winds in Roatán

The dominant wind directions go from East to Northeast and the average speed ranges between 14 and 24 Km / h depending on the month of the year, (measured at Roatán Airport).

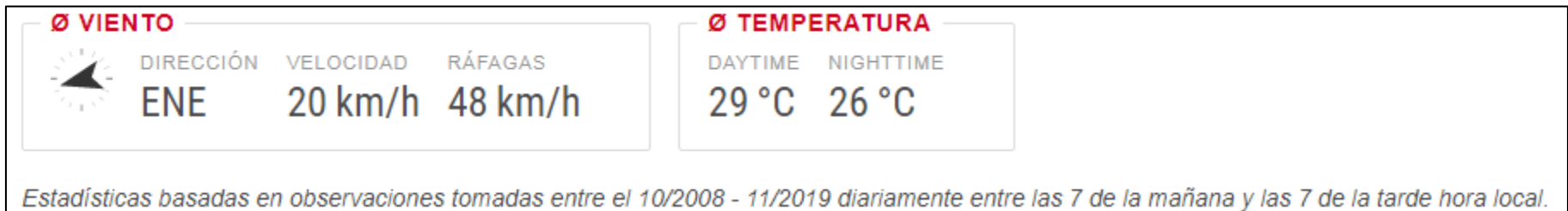


Source: https://es.windfinder.com/windstatistics/isla_de_roatan

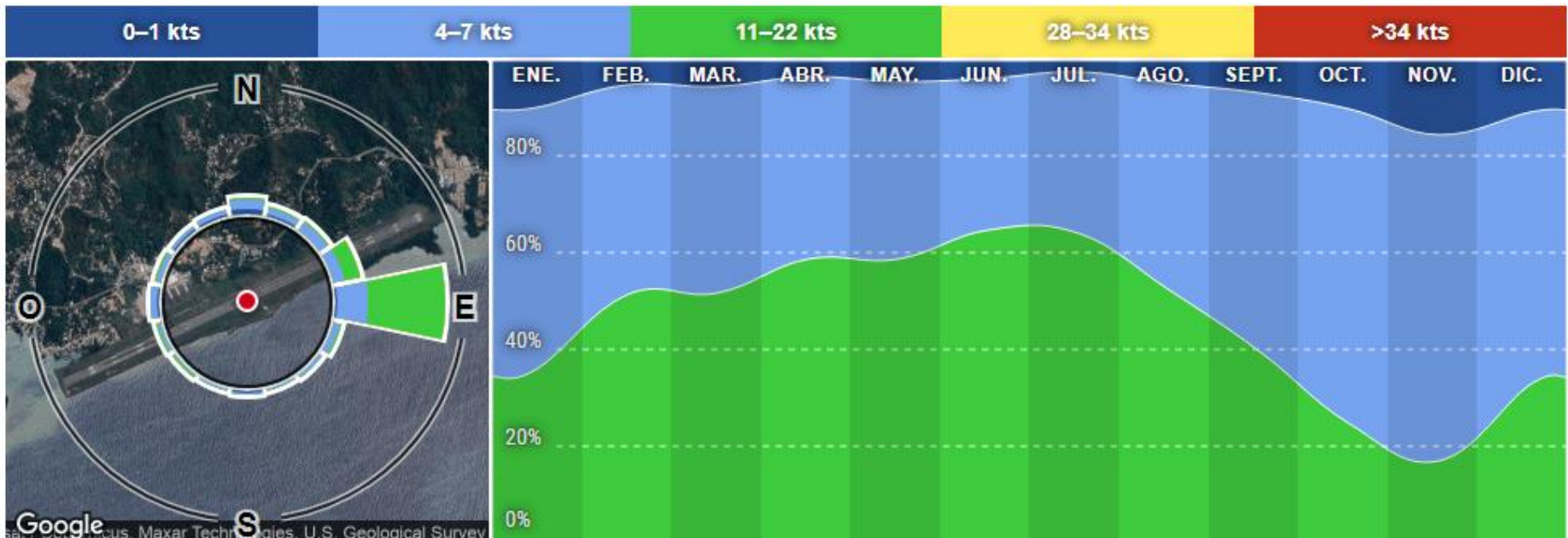
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Annex 2.6. Wind statistics in Roatán


The average wind speed and temperature, measured at Roatán Airport.



Distribution of wind direction and force during the months of the year, measured at Roatán Airport.

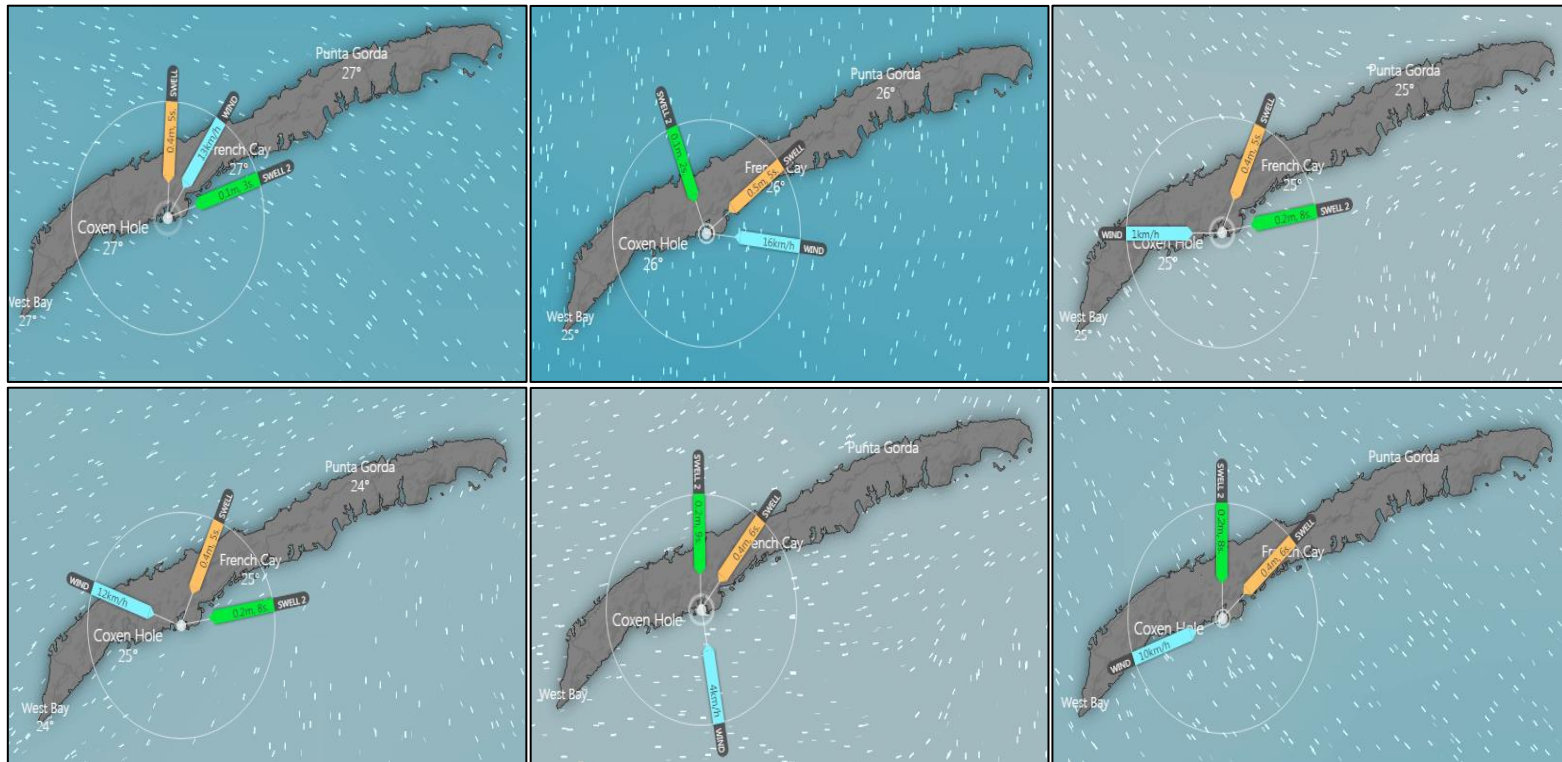


Source: https://es.windfinder.com/windstatistics/isla_de_roatan

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Annex 2.7. Wave scenarios at Dixon Cove, Roatan.

Simulation of different scenarios, according to the recurring winds in Dixon Cove, Roatan and the waves generated in each condition.




Definitions

Wind: surface wind.

Waves 1: primary waves.

Waves 2: secondary waves.


Source: <https://www.windy.com>

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Annex 2.8. Bibliography and sources of consultation

In addition to the websites mentioned in each figure, the following publications were consulted:

- BIOLOGICAL BASE LINE FOR THE FRENCH CAY FISHING RECOVERY AREA, ROATÁN. Mayra Núñez. Center for Marine Studies. 2017 edition.
- • PLAN FOR A NETWORK OF REPLENISHMENT ZONES (RZS) IN NORTHERN HONDURAS. Iliana Chollett. Smithsonian Institution, Fort Pierce, July 2017 Edition.
- • BIOPHYSICAL PRINCIPLES FOR THE DESIGN OF A NETWORK OF RECOVERY ZONES IN THE MESOAMERICAN ARRECIFAL SYSTEM. Technical report produced by The Nature Conservancy, Community and Biodiversity, A.C., Smithsonian Institution. 2017 edition.
- • FOREST MUNICIPAL ATLAS AND LAND COVERAGE. ROATÁN, LA BAHÍA ISLANDS 1101. National Institute for Forest Conservation and Development, Protected Areas and Wildlife (ICF). <http://www.icf.gob.hn>. 1st Edition, April 2015.
- • MANAGEMENT PLAN FOR THE MANAGEMENT OF THE IMPORTANT SITE FOR WILDLIFE BANCO CORDELIA THE MARINE ISLANDS MARINE NATIONAL PARK. National Institute for Forest Conservation and Development, Protected Areas and Wildlife (ICF) Department of Protected Areas (DAP). Atlantic Forest Region. 2013 edition.
- • COASTAL-MARINE RESOURCES ATLAS AND ENVIRONMENTAL SENSITIVITY INDICES FOR THE CARIBBEAN COASTAL LINE, HONDURAS. Vol. 1. U.S. Department of Commerce March 2002 edition. Extracted from the DGMM website.
- • DEVELOPMENT OF SENSITIVITY MAPS FOR THE RESPONSE TO SPILLS OF HYDROCARBONS. IMO / IPIECA (Association of the International Petroleum Industry for Environmental Conservation) series of reports, volume one. Produced in association with ARPEL. 1996 edition.

	Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas			ROATAN CRUISE TERMINAL	
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ANNEX 3 Characteristics of the materials operated by the company: fuel and their derivatives, harmful and potentially dangerous substances.

The following table shows the classification, expedition name, UN number and Emergency Card, other details such as the properties detailed in the IMDG Code for these substances.

Nº UN	Nombre de expedición	Clase o división	Riesgo(s) secundario(s)	FEm	Estiba y manipulación	Segregación	Propiedades y observaciones	Nº UN
(1)	(2)	(3)	(4)	(15)	(16a)	(16b)	(17)	(18)
	3.1.2	2.0	2.0	5.4.3.2 7.8	7.1, 7.3 a 7.7	7.2 a 7.7		
1202	GASOIL o COMBUSTIBLE PARA MOTORES DIESEL o ACEITE MINERAL PARA CALDEO, LIGERO	3	-	F-E, S-E	Categoría A	-	Inmiscible con el agua.	1202
1203	COMBUSTIBLE PARA MOTORES o GASOLINA	3	-	F-E, S-E	Categoría E	-	Inmiscible con el agua.	1203
1789	ÁCIDO CLORHÍDRICO	8	-	F-A, S-B	Categoría C	-	Líquido incoloro. Solución acuosa de cloruro de hidrógeno (gas). Sumamente corrosivo para la mayoría de los metales. Causa quemaduras en la piel, los ojos y las mucosas.	1789
1791	HIPOCLORITO EN SOLUCIÓN	8	- P	F-A, S-B	Categoría B	SG20	Líquido con olor a cloro. En contacto con ácidos desprende gases muy irritantes y corrosivos. Levemente corrosivo para la mayoría de los metales. Causa quemaduras en la piel, los ojos y las mucosas.	1791

Next, the Emergency Response Guidelines for the UN of each substance are detailed and then the corresponding Guidelines are attached.

- 💧 Diesel (Diesel) UN 1202: **Guide 128.**
- 💧 Gasoline UN 1203: **Guide 128.**
- 💧 Hydrochloric Acid (Muriatic) UN 1789: **Guide 157.**
- 💧 Sodium hypochlorite in solution (Chlorine) UN 1791: **Guide 154.**

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128 (NOT MIXABLE WITH WATER)

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE: It can easily catch fire from heat, sparks or flames.**
- Vapors may form explosive mixtures with air.
- Vapors travel to a fire source and return on fire.
- Most vapors are heavier than air, these will disperse along the ground and will gather in low or confined areas (sewers, basements, tanks).
- Danger of steam explosion indoors and outdoors or in sewers.
- Those substances designated with a (P) may polymerize explosively when heated or are involved in a fire.
- The resulting leaks falling into the sewers can create a fire or explosion hazard
- Containers may explode when heated.
- Many of the liquids are lighter than water.
- The substance can be transported hot.
- For hybrid vehicles, GUIDE 147 (Lithium Ion Battery) and GUIDE 138 (Sodium batteries) should also be consulted.
- **If involved in casting aluminum, use GUIDE 169.**

TO HEALTH

- Inhalation or contact with the material may irritate skin and eyes.
- Fire can produce irritating, corrosive, and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Leaks resulting from fire control or dilution with water may cause contamination.

PUBLIC SAFETY

- **Call the phone number on the boarding document first in case of emergency. If the boarding document is not available or there is no response, go to the phone numbers listed on the back-cover lining.**
- As an immediate precaution, isolate the spill or escape area at least 50 meters (150 feet) in all directions.
- Keep unauthorized personnel away.
- Keep upwind in high areas and/or upstream.
- Ventilate any closed spaces before entering.

PROTECTIVE CLOTHING

- Use the autonomous positive pressure air equipment (SCBA).
- Professional firefighters' suits provide only limited protection.

EVACUATION


Big Spill

- Consider the initial evacuation following the wind path of at least 300 meters (1000) feet.

Fire

- If a tank, rail car, or auto-tank involved in a fire, ISOLATE 800 meters (1/2 mile) around; Consider the initial evacuation of 800 meters (1/2 mile) all around.

In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please refer to the boarding documents and/or the ERAP program section (Page 392).

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128 (NOT MIXABLE WITH WATER)

EMERGENCY RESPONSE

FIRE

CAUTION: All products have a very low ignition point; Water usage while fighting the fire can be ineffective.

CAUTION: For mixtures containing alcohol or polar solvent, alcohol resistant foam may be more effective.

Small Fire

- Dry chemical pulses, CO2, dew or regular foam.

Big Fire

- Use water spray, mist or regular foam.
- **Don't use direct jets.**
- Move containers from the fire area if it's possible and if there's no risk.

Fire Involving Tanks, or Wagons, or Trailers and their Loads

- Fight the fire from a maximum distance or use fixed supports for hoses or regulating chiffons.
- Cool the containers with water jets even after the fire is extinguished.
- Stay away immediately if a growing sound is coming from the ventilation mechanism, or if the tank begins to discolor.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fires, use fixed hose holders or regulating chiffons; if this is impossible, leave the area and let it burn.

SPILL OR LEAK


- REMOVE all sources of ignition (Don't smoke, don't use flares, sparks or flames in the danger area).
- All equipment used during product handling must be electrically grounded.
- Don't touch or walk through spilled material.
- Stop the leak if you can do it without risk.
- Stop the entrance to waterways, sewers, basements or confined areas.
- A vapor suppressor foam can be used to reduce vapors.
- Absorb with dry earth, sand or other non-combustible absorbent material and transfer it to containers.
- Use clean spark-proof tools to collect the absorbed material

Big Spill

- Build a dike ahead of the liquid spill for later disposal.
- Water spray may reduce steam but may not prevent ignition in confined spaces.

FIRST AID

- Make sure medical personnel are aware of the materials involved and take precautions to protect the victim.
- Move the victim to somewhere with fresh air.
- Call emergency medical services.
- Apply CPR if the victim is not breathing.
- Supply oxygen if the victim has breathing issues.
- Remove and isolate any contaminated clothing and shoes
- In case of contact with the substance, immediately rinse the skin or eyes with running water for at least 20 minutes.
- Wash the skin with soap and water.
- In case of burn, immediately cool the affected skin as long as you can with cold water. Don't remove clothing that's adhered to the skin.
- Keep the victim calm and warm.

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GUIDE 157 Substances - Toxic and / or Corrosive
(NON-COMBUSTIBLE / SUSCEPTIBLE TO WATER)

POTENTIAL HAZARDS

TO THE HEALTH

- **TOXIC;** Inhalation, ingestion or contact with vapors (skin, eyes) dusts or substances can cause severe injury, burns or death.
- Reaction with water, moist air could produce toxic, corrosive and flammable gases.
- Reaction with water can generate a lot of heat, which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and toxic gases.
- Leaks resulting from fire control or dilution with water may be corrosive and/or toxic and cause contamination.

FIRE OR EXPLOSION

- Non-combustible substances don't ignite on their own, but they can decompose when heated, and produce corrosive and toxic vapors.
- For high concentrations of UN1796, UN2031 and for UN2032, these can act as oxidants. Also refer to GUIDE 140.
- Vapors can accumulate in confined areas (basement, tanks, rail and hopper cars, etc.).
- The substance can react with water (sometimes violently) releasing corrosive and / or toxic gases and spills.
- Contact with metals can release gaseous and flammable hydrogen.
- Containers may explode when heated or if contaminated with water.

PUBLIC SAFETY

Call the phone number on the boarding document first in case of emergency. If the boarding document is not available or there is no response, go to the phone numbers listed on the back-cover lining.

- As an immediate precaution, isolate the spill or escape area in all directions at least 50 meters (150 feet) for liquids, and 25 meters (75 feet) for solids.
- Keep unauthorized personnel away.
- Keep upwind in high areas and/or upstream.
- Ventilate any closed spaces before entering.

PROTECTIVE CLOTHING

- Use the autonomous positive pressure air equipment (SCBA).
- Wear chemical protective clothing which is recommended by the manufacturer. This can provide little or no thermal protection.
- The firefighter's structural protective suit provides limited protection ONLY in fire situations; It's not effective in spills with possible direct contact with the substance.

EVACUATION


Spills

- See Table 1 – Initial Isolation Distance and Protective Action for highlighted materials. For other materials, increase the insolation distance as necessary in relation to the wind direction, as shown in "PUBLIC SAFETY".

Fire

- If a tank, rail car, or auto-tank involved in a fire, ISOLATE 800 meters (1/2 mile) around; Consider the initial evacuation of 800 meters (1/2 mile) all around.

In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please refer to the boarding documents and/or the ERAP program section (Page 392).

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GUIDE Substances - Toxic and / or Corrosive
157 (NON-COMBUSTIBLE / SUSCEPTIBLE TO WATER)

EMERGENCY RESPONSE

FIRE

- Note: Some foams may react with the material and release corrosive/toxic gases.

Small Fire

- CO₂ (except for cyanides), dry chemical powder, dry sand, alcohol resistant foam.

Big Fire

- Use water spray, mist or alcohol-resistant foam.
- Move fire area containers if you can do it without any risk.
- Use water spray. Do not use direct jets.
- Make a containment dam for the water that controls the fire for later disposal; don't spread the material.

Fire Involving Tanks, or Wagons, or Trailers and their Loads

- Fight the fire from a maximum distance or use fixed supports for hoses or regulating chifbons.
- Don't get water inside containers.
- Cool the containers with water jets even after the fire is extinguished.
- Stay away immediately if a growing sound is coming from the ventilation mechanism, or if the tank begins to discolor.
- ALWAYS stay away from tanks engulfed in fire.

SPILLAGE OR LEAK


- ELIMINATE all sources of ignition (Don't smoke, don't use flares, sparks or flames in the danger area).
- All equipment used during product handling must be electrically grounded.
- Don't touch damaged containers or spilled material, unless you are wearing appropriate protective clothing.
- Stop the leak if you can do it without risk.
- A vapor suppressor foam can be used to reduce vapors.
- DON'T GET WATER INSIDE THE CONTAINERS.**
- Use water spray to reduce vapors; or divert the drifting steam. Prevent water flows from meeting spilled material.
- Prevent entry to waterways, sewer, basements confined areas.

Small spill

- Cover with DRY earth, DRY sand or other non-combustible material followed with a plastic film to decrease expansion or contact with rain.
- Use clean, spark-proof tools to collect the material and deposit them in plastic lined containers for later disposal.

FIRST AIDS

- Make sure medical personnel are aware of the materials involved and take precautions to protect themselves.
- Move the victim to where fresh air is breathed.
- Call emergency medical services.
- Apply CPR if the victim is not breathing.
- Do not use the mouth-to-mouth breathing method if the victim ingested or inhaled the substance: Provide artificial respiration with the help of a pocket mask with a one-way valve or other medical breathing device.**
- Supply oxygen if the victim has difficulty breathing
- Remove and isolate contaminated clothing and shoes.
- In case of contact with the substance immediately rinse the skin or eyes with running water for at least 20 minutes.
- In case of contact with Hydrofluoric Acid (UN1790)**, rinse with plenty of water. For skin contact if you have calcium gluconate gel, rinse for 5 minutes, and then apply the gel. Otherwise, continue rinsing until you can receive medical treatment. For eye contact, rinse with water or a saline solution for 15 minutes.
- For minor contact with the skin, avoid spreading the material on the skin that is not affected.
- Keep the victim calm and warm.
- The effects of exposure to the substance by (inhalation, ingestion or skin contact) may be delayed.

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GUIDE 154 Substances - Toxic and / or Corrosive (NON-COMBUSTIBLE)

POTENTIAL HAZARDS

TO HEALTH

- **TOXIC;** Inhalation, ingestion or contact of the material with the skin may can cause severe injury or death.
- Contact with molten substance can cause severe burns to the skin and eyes.
- Avoid contact with skin.
- The effects of contact, or inhalation may be delayed.
- Fire will produce irritating, corrosive and toxic gases.
- Leaks resulting from fire control or dilution with water may be corrosive and/or toxic and cause contamination.

FIRE OR EXPLOSION

- Non-combustible substances don't ignite on their own, but they can decompose when heated, and produce corrosive and toxic vapors.
- Some are oxidizers can ignite other combustible materials (wood, oil, clothing, etc.)
- Contact with metals can release gaseous and flammable hydrogen.
- Containers may explode when heated.
- For electric vehicles or equipment, GUIDE 147 (Lithium-ion battery) or GUIDE 138 (Sodium batteries) should also be consulted.

PUBLIC SAFETY

Call the phone number on the boarding document first in case of emergency. If the boarding document is not available or there is no response, go to the phone numbers listed on the back-cover lining.

- As an immediate precaution, isolate the spill or escape area in all directions at least 50 meters (150 feet) for liquids, and 25 meters(75 feet) for solids.
- Keep unauthorized personnel away.
- Keep upwind in high areas and/or upstream.
- Ventilate any closed spaces before entering.

PROTECTIVE CLOTHING

- Use the autonomous positive pressure air equipment (SCBA).
- Wear chemical protective clothing which is recommended by the manufacturer. This can provide little or no thermal protection.
- The firefighter's structural protective suit provides limited protection ONLY in fire situations; It's not effective in spills with possible direct contact with the substance.

EVACUATION


Spills

- See Table 1 – Initial Isolation Distance and Protective Action for highlighted materials. . For other materials, increase the insolation distance as necessary in relation to the wind direction, as shown in "PUBLIC SAFETY".

Fire

- If a tank, rail car, or auto-tank involved in a fire, ISOLATE 800 meters (1/2 mile) around; Consider the initial evacuation of 800 meters (1/2 mile) all around.

In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please refer to the boarding documents and/or the ERAP program section (Page 392).

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GUIDE Substances - Toxic and / or Corrosive
154 (NON-COMBUSTIBLE)

EMERGENCY RESPONSE

FUEGO

Small Fire

- Dry chemical powders, CO2 or water spray.

Big Fire

- Use dry chemical powder, CO2, water spray or alcohol resistant foam.
- Move fire area containers if you can do it without any risk.
- Make a containment dam for the water that controls the fire for later disposal; don't spread the material.

Fire Involving Tanks, or Wagons, or Trailers and their Loads


- Fight the fire from a maximum distance or use fixed supports for hoses or regulating chifbons.
- Don't get water inside containers.
- Cool the containers with water jets even after the fire is extinguished.
- Stay away immediately if a growing sound is coming from the ventilation mechanism, or if the tank begins to discolor.
- ALWAYS stay away from tanks engulfed in fire.

SPILLAGE OR LEAK

- ELIMINATE all sources of ignition (Don't smoke, don't use flares, sparks or flames in the danger area).
- Don't touch damaged containers or spilled material, unless you are wearing appropriate protective clothing.
- Stop the leak if you can do it without risk.
- Prevent entry to waterways, sewer, basements confined areas.
- Absorb with dry earth, sand or other non-combustible absorbent material and transfer it to containers.
- DON'T GET WATER INSIDE THE CONTAINERS.

FIRST AIDS

- Make sure medical personnel are aware of the materials involved and take precautions to protect themselves.
- Move the victim to where fresh air is breathed.
- Call emergency medical services.
- Apply CPR if the victim is not breathing.
- **Do not use the mouth-to-mouth breathing method if the victim ingested or inhaled the substance: Provide artificial respiration with the help of a pocket mask with a one-way valve or other medical breathing device.**
- Supply oxygen if the victim has difficulty breathing.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with the substance immediately rinse the skin or eyes with running water for at least 20 minutes.
- For minor contact with the skin, avoid spreading the material on the skin that is not affected.
- Keep the victim calm and warm.
- The effects of exposure to the substance by (inhalation, ingestion or skin contact) may be delayed.

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ANNEX 5 List of chemical agents approved for use.





5 gal

Joy® Professional Manual Pot and Pan Detergent

Joy has long-lasting suds with powerful surfactants to clean a wide variety of soils. Designed to be mild, Joy has a high surfactant level to give a rich layer of suds and high suds mileage. Forms surfactant micelles that stays suspended in wash water to provide micro-reservoirs of reserve cleaning power. Available in lemon scent.

1-30





Features

Long-lasting suds make tasks easy by reducing sink changeover.

Task Areas

1. Three-compartment sink (wash sink)	6. Trash receptacles
2. Countertops	8. Coffeemaker
3. Dining room tables	9. Drive-thru menu board
4. Cooler doors	10. Tile walls
5. Portable equipment	

Pack/Size	Description	UPC
1/5 gal	Joy Manual Detergent Lemon Scent	100-37000-70683-7

El Detergente para el lavado a mano de ollas y sartenes Joy® tiene una fragancia fresca a limón. El Detergente para el lavado a mano de ollas y sartenes Joy® se ha formulado para penetrar la grasa de manera rápida y fácil. La espuma duradera del Detergente para el lavado a mano de ollas y sartenes Joy® facilita las tareas del empleado al reducir el cambio de fregadero.

El Detergente para el lavado a mano de ollas y sartenes Joy® se encuentra disponible en:


- Cubetas de 5 galones

ÁREAS DE APLICACIÓN

• Fregadero de tres compartimientos (fregadero de lavado)	• Receptáculos de basura
• Mostradores	• Cafeteras
• Mesas de comedor	• Cartel del menú del área de pedidos (drive-thru)
• Puertas de refrigerador	• Paredes de azulejo
• Equipos portátiles	



For more information call 1-800-332-7787 or visit www.pgpro.com

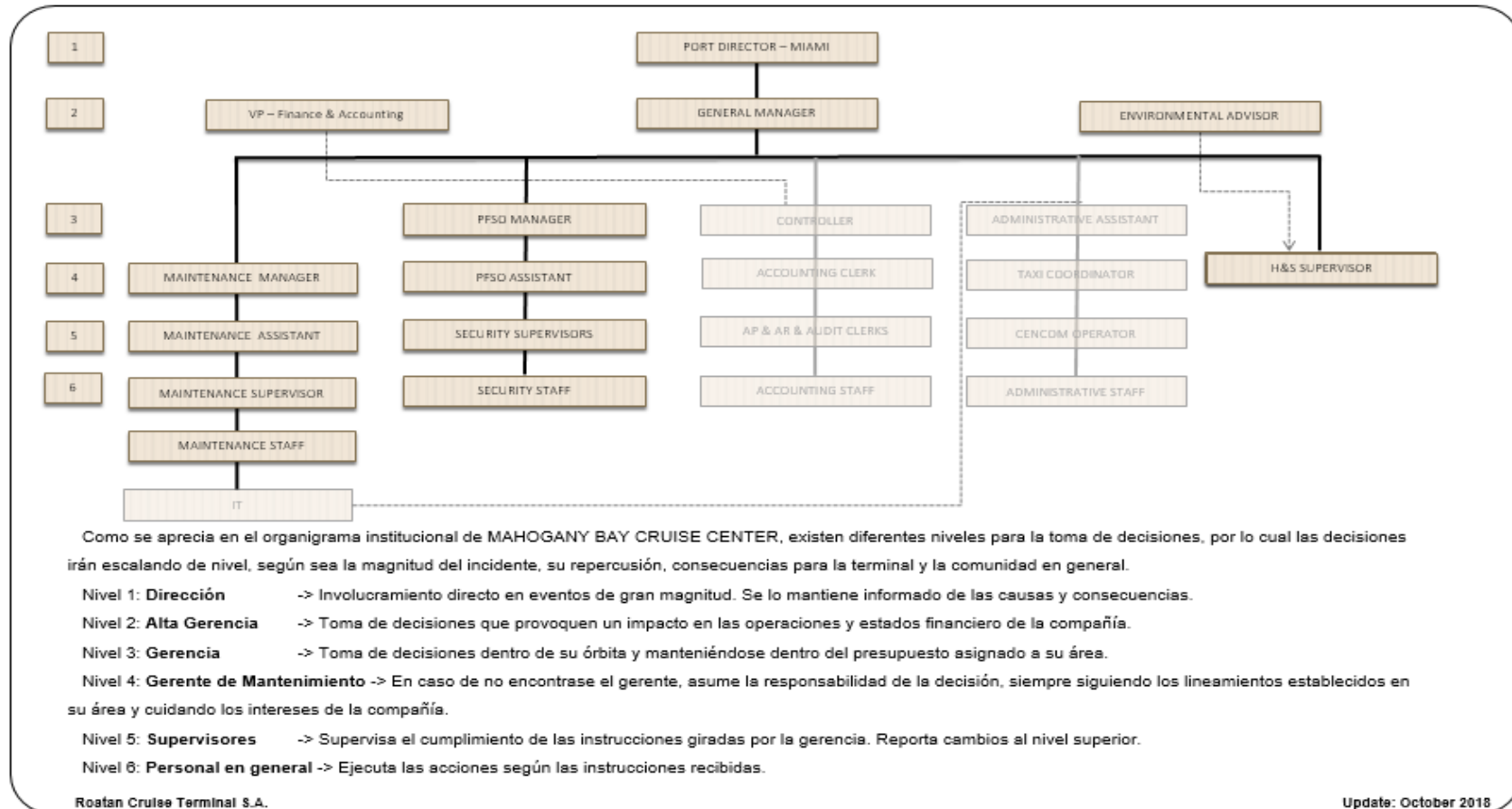
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ANNEX 6 Training Plan of the Company's Personnel and Form with the detail of the previous Experience of the Personnel assigned in key positions for the management of the contingency. Annual Drills Plan according to types and objectives.

Calendar Exercises 2018				
VOLUME II - LIST OF MARITIME PROTECTION EXERCISES				
ISPS CODE: DRILL		PBIP CODE: EXERCISE	APEC MANUAL: SIMULACRO	
Exercise	Type	Topic	Date	Responsible
Access control				
D1-03	Personnel Controls	Illegal Entry Attempt	February 21, 2018	OPIP
D1-04	Personnel Controls	Employee entry without identification card	February 21, 2018	OPIP
Adjacent Zone Protection				
D5-01	Ship / Port Interface	Maritime Protection Declaration Exchange	May 23, 2018	MANAGER
D2-03	Vehicles and Vessels	Embankment prowling offshore at the port facility	May 23, 2018	OPIP
Material handling				
D3-03	Personal effects, packages and correspondence	Suspicious items in personal belongings	August 22, 2018	OPIP
D3-04	Personal effects, packages and correspondence	Unauthorized upload / download of personal items in a restricted area	August 22, 2018	OPIP
Emergency Response				
D4-05	Contingencies	Bomb threat	November 21, 2018	OPIP
D4-04	Contingencies	Power Supply Cut	November 21, 2018	OPIP

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ANNEX 7 Diagrams of decisions in response to spills



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ANNEX 8 Reference standards for the execution of Risk Analysis

In addition to the regulations detailed in section 1.3., The UNE 150008 regulation is added for the development of the “Analysis and evaluation of environmental risk” that bases the actions to be described in this Plan.

UNE 150008 is a standard created by the Technical Committee for Standardization (CTN) of the Spanish Association for Standardization and Certification (AENOR), in accordance with the provisions of Regulation (EU) 1025/2012 on European Standardization.

The standard UNE 150008 of Analysis and Evaluation of Environmental Risk, establishes all the requirements and guidelines to follow when making the evaluation and quantification of all the risks generated by the activities carried out by organizations.

To carry out the determination of environmental risks, which companies can generate, different concepts are taken into account:

- 💧 The **basis of an indicator event** that involves the fact that an incident can be caused.
- 💧 The **assignment of the probability** of occurrence of said event.

The combination of the concepts detailed in the previous paragraph, are the scenarios of possible accidents, being the objective of said combination, the determination of the probability of occurrence in each of the scenarios and the determination of the natural, human and socioeconomic consequences that are derived from the succession of possible accidents.

The UNE 150008 standard is designed to be implemented in any company, regardless of the sector to which it belongs or the size it has, being the organizations that most demand this type of implementation those that by their activity, have a greater possibility of having an environmental accident

The benefits that organizations obtain after the implementation of a Management System that is based on the UNE 150008 standard are:

- 💧 **Define internal functions and responsibilities** in the event of an environmental accident.
- 💧 **Encourage workers** to be pending to improve the company's environmental management policy.
- 💧 **Reduce risk premiums.**
- 💧 **Improve the image** of the company
- 💧 Get a **better deal with the administration.**


Environmental risk

It is obtained as a result of a function that relates the probability of occurrence of a given accident scenario and its negative consequences on the natural environment,

human and socioeconomic

Risk = f (probability or frequency, consequence)

Usually this function takes the form of the following product:

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Risk = Probability / Frequency x Consequences.

We want to record that UNE 150008 is integral with the environmental management systems already implemented in the company that decides to bet on complying with the requirements detailed in UNE 150008.


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Table 1 - Natural, Human and Socioeconomic Environment Indicators

INDICATORS OF THE NATURAL ENVIRONMENT	
Abiotic environment	Climatic conditions Air, water, soil
Biotic environment	Fauna and flora Ecosystem structure
Other Indicators	Landscape Natural Protected Areas
HUMAN ENVIRONMENT INDICATORS	
Population and Public Health	
SOCIOECONOMIC ENVIRONMENT INDICATORS	
Economic activities	
Infrastructure	
Cultural historical heritage	

Table 2 - Probability Estimate

Value	Probability	
5	Very Probable	> once a month
4	Highly Probable	> once a year and <once a month
3	Probable	> once every 10 years and <once a year
2	Possible	> once every 50 years and <once every 10 years
1	Very Unlikely	<once every 50 years.

Table 4 - About the Natural Environment

Value	Quantity	Danger	Extension	Quality of the Medium
4	Very High	Very Dangerous	Very Extensive	Very High
3	High	Dangerous	Extensive	High
2	Little	Slightly Dangerous	Slightly Extensive	Medium
1	Very Little	Not Dangerous	Limited	Low


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Table 5 - About the Human Environment

Value	Quantity	Danger	Extension	Affected Population
4	Very High	Death or Irreversible Effects	Very Extensive	More than 100
3	High	Serious damage	Extensive	Between 25 and 100
2	Little	Minor Damage	Slightly Extensive	Between 5 and 25
1	Very Little	Very Minor Damage	Limited	<5 people

Table 6 - About the Socioeconomic Environment

Value	Quantity	Danger	Extension	Heritage and Productive Equity
4	Very High	Very Dangerous	Very Extensive	Very High
3	High	Dangerous	Extensive	High
2	Little	Slightly Dangerous	Slightly Extensive	Medium
1	Very Little	Not Dangerous	Limited	Low



	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

Table 7 - Severity Level

Severity level	Assigned Value
Critical	5
Serious	4
Moderate	3
Mild	2
Not relevant	1

Evaluation Outcome			Action
	Very high risk	21 to 25	Take immediate action
	High risk	16 to 20	Take concrete action and establish a short-term execution / implementation schedule.
	Medium risk	11 to 15	Take action and establish an execution / implementation schedule.
	Moderate Risk	6 to 10	Evaluate case by case to determine improvement action.
	Low risk	1 to 5	Keep record.

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
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ANNEX 9 Inspection certificates for hoses, pipes and storage tanks

Since it does not have facilities dedicated to the exploitation, sale, distribution and storage for commercial purposes, there are no certificates of hoses and pipes, instead the Certificate of Inspection of the Emergency and Contingency Plan carried out by the Fire Department is attached from Roatán.

LOCAL STATION ROATAN, BAY ISLANDS

ESTACION LOCAL ROATAN, ISLAS DE LA BAHIA

CONSTANCIA

El suscrito Comandante del Heroico y Benemérito Cuerpo de Bomberos de Roatán hace constar que **MAHOGANY BAY** ubicado en el sector de Dixon Cove, Municipio de Roatán, Departamento de Islas de La Bahía, ha realizado su respectiva revisión del plan de emergencias y contingencias, cumpliendo con los requisitos que establece la ley.

Y para los fines que estime conveniente, se le extiende la presente constancia en la ciudad de Roatán, Departamento de Islas de La Bahía a los seis días del mes de junio del año dos mil dieciocho.

VALIDO HASTA EL 31 DE DICIEMBRE DEL AÑO 2018.

DISCIPLINA
HONOR
ABNEGACION

CAPITAN DE BOMBEROS



LIC. WILMER A. GUERRERO


COMANDANTE LOCAL.



Copia: Archivo


"EN DONDE SURGE EL DOLOR Y LA TRAGEDIA LLEGAMOS NOSOTROS"

Tel. (504) 2445-0430/ 2445-0428/ 9919-8970 email: roatan@bomberoshonduras.hn

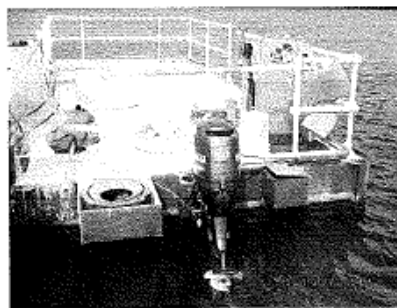
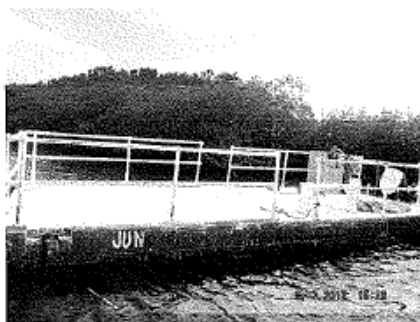
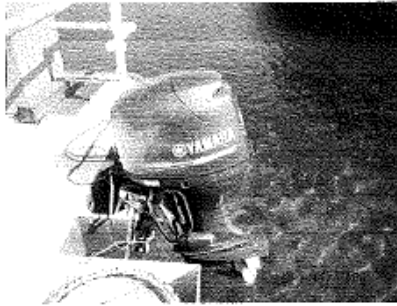
	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

ANNEX 10 Floating barrier storage area and temporary disposal of waste generated during cleaning in case of an episode of contamination



	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

APPENDIX II - Barge "MBCC 2"



REPUBLICA DE HONDURAS
 DIRECCION GENERAL DE LA MARINA MERCANTE
 DEPARTAMENTO DE CAPITANIAS DE PUERTO

PERMISO DE NAVEGACION
 PR - DGMM - No. 001763

Número de Registro: RO-3-562

Generalidades de la Nave

Nombre: MBCC 2

Propietario: ROATAN CRUISE TERMINAL

Tarjeta de Identidad prop.: RTN: 08019005011533

Tipo: BALSA

Actividad: TRASPORTE DE CARGA

Características principales

Año de construcción: 1999 Tonelaje Bruto: 2.00

Color: ROJO/NEGRO Tonelaje Neto: 2.00

Material del Casco: ACERO

Motores: F/B YAMAHA 40 HP

Marca: F/B YAMAHA 40 HP

Serie de motor: (1) 66TK-L-11174-D
 (2) *****

Eslora: 23.0 PIES Manga: 9.3 PIES

Puntal: 2.0 PIES Calado: 1.5 PIE

Cap. Pasajeros: *0* Cap. Tripul: *02*

Ruta: ROATAN, I. B. LITORAL ATLANTICO

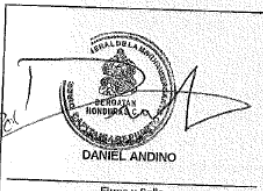
Observación: RENOVACION

Tel.: 9459-0810

Fecha de Emisión: 22 DE MARZO DEL 2018


Fecha de Expiración: 04 DE MAYO DEL 2019

(Uso Exclusivo de D.G.M.M.)





DANIEL ANDINO

Firma y Sello
Capitán de Puerto

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1	

APPENDIX III - DECK CLEAN NP Safety Data Sheet


<p>DECK CLEAN NP Revision: 10/27/2014 SAFETY DATA SHEET</p> <p>SECTION 1 Identification of the substance/mixture and of the company/undertaking</p> <p>1.1 Product identifier - Product Name: DECK CLEAN NP - Product Part Number: 765990 (25L)</p> <p>1.2 Relevant identified uses of the substance or mixture and uses advised against - Use of the substance/mixture: - Add Cleaner</p> <p>1.3 Details of the supplier of the safety data sheet - Name of Supplier: Wilhelmsen Ships Service AS - Address of Supplier: Willem Barentszstraat 50, 3105AB Rotterdam, The Netherlands - Telephone: +31 4877 777 Fax: +31 4877 888 - Head office: Wilhelmsen Ships Service AS - Strandveien 20, N 1324 Lysaker - Norway, Tel: (47) 6349 440 35 - Other suppliers SEE SECTION 16!!! - For quotations contact your local Customer Services - Responsible Person: Product HSE Manager, - Email: Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com - Telephone: Tel.: +31 10 487775 - Responsible Person: 1.4 Emergency telephone number - ***ONLY TO BE USED IN CASE OF AN INCIDENT*** - International 24hrs Emergency NCEC: +44 1865 407333 - American Chemistry Council 24hrs +1 703 527 3887 - American 24hrs Emergency CHEMTREC (800) 424 9300 - Greece: Poisoning emergency center: +30 210 7763777 - Norway: Poison information centre, +47 22591300 - Sweden: Poison information centre, +46 08 33 12 31 - China NRCO 24hrs emergency telephone number: +86-0532-8388 9090 - Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998</p> <p>SECTION 2 Hazards identification</p> <p>2.1 Classification of the substance or mixture - Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations - Not hazardous according to current The Dangerous Substances Directive (67/548/EEC) - Symbols: C - Causes burns (R34)</p> <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p> <p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 3 Composition/information on ingredients (...)</p> <p>Concentration: 1-5% CAS Number: 112-34-5 EC Number: 203-961-6 R/H Phrases: R36 - H319 Symbols: Xi, GHS07 Categories: Eye Irrit. 2</p> <p>SECTION 4 First aid measures</p> <p>4.1 Description of first aid measures - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353). - Seek medical advice if necessary - Wash contaminated clothing before reuse (P363). - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338). - Irrigate eyes thoroughly whilst lifting eyelids - Seek immediate medical attention - IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331). - Give plenty of water to drink - Never make an unconscious person vomit or drink fluids - Seek immediate medical attention - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341). - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract - Seek medical attention if irritation persists 4.2 Most important symptoms and effects, both acute and delayed - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract - Prolonged skin or eye contact may cause chemical burns - The ingestion of significant quantities may cause damage to digestive system 4.3 Indication of any immediate medical attention and special treatment needed</p> <p>SECTION 5 Fire-fighting measures</p> <p>5.1 Extinguishing media - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions 5.2 Special hazards arising from the substance or mixture - Smoke from fires is toxic. Take precautions to protect personnel from exposure - Smoke from fires is corrosive. Take precautions to protect personnel from exposure 5.3 Advice for firefighters - Wear chemical protection suit and positive-pressure breathing apparatus - Smoke from fires is corrosive. Take precautions to protect personnel from exposure - Smoke from fires is toxic. Take precautions to protect personnel from exposure - Keep container(s) exposed to fire cool by spraying with water</p> <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p>	<p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 2 Hazards identification (...)</p> <p>- Regulations 1272/2008/EEC Classification, labeling and packing of dangerous substances and preparations - Symbols: GHS05 - Signal Word: Danger - Skin Corr. 1B - Met. Corr. 1</p> <p>2.2 Label elements</p> <p></p> <p>- Signal Word: Danger - Contains: - Methanesulphonic acid -2-(2-Butoxyethoxy)ethanol</p> <p>- Hazard phrases - Causes severe skin burns and eye damage (H314). - May be corrosive to metals (H290).</p> <p>- Precautionary Phrases - Wear protective gloves/protective clothing/eye protection/face protection (P280). - IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331). - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353). - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338). - IF exposed: Call a POISON CENTER or doctor/physician (P307+P311).</p> <p>2.3 Other hazards - Not a PBT according to REACH Annex XIII - Odour: Perceptible odour - Appearance: colourless - Inhalation: Vapours or aerosols may cause irritation of eyes, nose and - Ingestion: Thoroughly wash significant quantities may cause damage to digestive system</p> <p>SECTION 3 Composition/information on ingredients</p> <p>3.1 Mixtures - Methanesulphonic acid - Concentration: 10-30% - CAS Number: 75-75-2 - EC Number: 200-898-6 - R/H Phrases: R34 - H314, H290 - Symbols: C, GHS05 - Categories: Skin Corr. 1B, Met. Corr. 1 - REACH REG. NO: 01-21194116 6-34 - 2-(2-butoxyethoxy)ethanol</p> <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p> <p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 6 Accidental release measures</p> <p>6.1 Personal precautions, protective equipment and emergency procedures - Wear suitable respiratory protection - Wear protective clothing as per section 8 6.2 Environmental Precautions - Do not flush spill material into any public water system 6.3 Methods and material for containment and cleaning up - Neutralise with Lime - Neutralise with Soda ash - Absorb spillage in earth or sand - Ventilate the area and wash spill site after material pick-up is complete 6.4 Reference to other sections - See Section 13</p> <p>SECTION 7 Handling and storage</p> <p>7.1 Precautions for safe handling - Ensure adequate ventilation - Wear protective clothing as per section 8 - Do not get in eyes, on skin, or on clothing (P262). 7.2 Conditions for safe storage, including any incompatibilities - Keep in acid store - Protect from frost - Keep only in original container (P234). - Keep cool. Protect from sunlight (P235+P410). - Keep in a cool, dry, well ventilated place 7.3 Specific end use(s) - Contact supplier for further information</p> <p>SECTION 8 Exposure controls/personal protection</p> <p>8.1 Control parameters - CAS: 112-34-5 - Lowest value: TLV (TWA) 10 ppm, 50mg/m3 - European Union: TLV (TWA) 10 ppm, 67.5 mg/m3 8.2 Exposure controls - Ensure adequate ventilation 8.3 Occupational exposure controls</p> <p></p> <p>- In case of inadequate ventilation wear respiratory protection (P285). - Wear suitable respiratory protection. Gas cartridge (acid gases). - Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile are recommended)</p> <p>SECTION 9 Physical and chemical properties</p> <p>9.1 Information on basic physical and chemical properties - Odour: Perceptible odour</p> <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p>
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	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1	









Cont. APPENDIX III - DECK CLEAN NP Safety Sheet

<p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 9 Physical and chemical properties (....)</p> <ul style="list-style-type: none"> - Appearance: colourless - pH 1.5 - 2.5 at 1 % concentration - Boiling point >100 °C - Completely soluble in water - Density 1,1 - 1,11 kg/m³ at 20 °C <p>9.2 Other information</p> <ul style="list-style-type: none"> - None <p>SECTION 10 Stability and reactivity</p> <p>10.1 Reactivity</p> <ul style="list-style-type: none"> - This article is considered stable under normal conditions <p>10.2 Chemical stability</p> <ul style="list-style-type: none"> - This article is considered stable under normal conditions <p>10.3 Possibility of hazardous reactions</p> <ul style="list-style-type: none"> - No hazardous reactions known if used for its intended purpose <p>10.4 Conditions to avoid</p> <ul style="list-style-type: none"> - Avoid overheating <p>10.5 Incompatible materials</p> <ul style="list-style-type: none"> - Avoid contact with metals - Contact with metals may form explosive gases - Incompatible with alkalis (strong bases) <p>10.6 Hazardous Decomposition Products</p> <ul style="list-style-type: none"> - No hazardous decomposition products known <p>SECTION 11 Toxicological information</p> <p>11.1 Information on toxicological effects</p> <ul style="list-style-type: none"> - No experimental data available <p>11.2 Contact with eyes</p> <ul style="list-style-type: none"> - Can cause damage to the eyes - Prolonged skin or eye contact may cause chemical burns <p>11.3 Contact with skin</p> <ul style="list-style-type: none"> - Can cause damage to the skin - Prolonged skin or eye contact may cause chemical burns <p>11.4 Ingestion</p> <ul style="list-style-type: none"> - Not regarded as a potential route of exposure. - The ingestion of significant quantities may cause damage to mucous membranes <p>11.5 Inhalation</p> <ul style="list-style-type: none"> - In cases of severe exposure, irritation may develop <p>SECTION 12 Ecological information</p> <p>12.1 Toxicity</p> <ul style="list-style-type: none"> - LC50 (fish) (2-(2-butylsulfonyletanol)) 2500 mg/l (96 hr) - EC50 (daphnia) 2-(2-butylsulfonyletanol)) >1000 mg/l (48 hr) - Biodegradability, OECD-test: > 70% OECD 302B, CAS: 112-43-5 - LC50 (fish) (Methane Sulphonic acid) 73 mg/l (96 hr) - Biodegradability, OECD-test: 28 days >60 % (Methane Sulphonic acid) <p>12.2 Persistence and degradability</p> <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p>	<p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 12 Ecological information (....)</p> <ul style="list-style-type: none"> - Its main ingredients will either dissolve rapidly and dissociate in water or are readily/inherently biodegradable. <p>12.3 Bioaccumulation Potential</p> <ul style="list-style-type: none"> - Bioaccumulation of the components in this product is insignificant. <p>12.4 Mobility in soil</p> <ul style="list-style-type: none"> - Completely soluble in water <p>12.5 Results of PBT and vPvB assessment</p> <ul style="list-style-type: none"> - Not a PBT according to REACH Annex X.III <p>12.6 Other Adverse Effects</p> <ul style="list-style-type: none"> - No information available <p>SECTION 13 Disposal considerations</p> <p>13.1 Waste treatment methods</p> <ul style="list-style-type: none"> - Do not discharge into drains or the environment, dispose to an authorised waste collection point - Disposal should be in accordance with local, state or national legislation <p>13.2 Classification</p> <p>SECTION 14 Transport information</p> <p style="text-align: center;"></p> <p>14.1 UN</p> <ul style="list-style-type: none"> - UN No.: UN3265 - Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid solution) - Hazard Class: 8 - Packing Group: III <p>14.2 Environmental hazards</p> <ul style="list-style-type: none"> - Presents no hazard to the environment <p>14.3 Special precautions for use</p> <ul style="list-style-type: none"> - No special precautions are required for this product <p>14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</p> <ul style="list-style-type: none"> - Not applicable <p>14.5 Road/Rail (ADR/RID)</p> <ul style="list-style-type: none"> - ADR UN No.: UN3265 - Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid solution) - ADR Hazard Class: 8 - ADR Packing Group: III - ADR subrisk: N/A - ADR Flashpoint: N/A <p>14.6 Sea (IMDG)</p> <ul style="list-style-type: none"> - IMDG UN No.: UN3265 <p>Datasheet Number 765990-r - v8.0.0 Prometheus version 1.4.3.0</p>
<p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 14 Transport information (....)</p> <ul style="list-style-type: none"> - Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid solution) - IMDG Hazard Class: 8 - IMDG Pack Group: III - IMDG EmS: F-A, 8-B - IMDG subrisk: N/A - IMDG Flashpoint: N/A <p>14.7 Air (ICAO/IATA)</p> <ul style="list-style-type: none"> - ICAO UN No.: UN3265 - Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid solution) - ICAO Hazard Class: 8 - ICAO Packing Group: III - ICAO subrisk: N/A - ICAO Flashpoint: N/A <p>14.8 DOT / CFR (US Department of Transportation)</p> <ul style="list-style-type: none"> - Identification Number: UN3265 - DOT Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Methanesulphonic acid solution) - DOT Labels: <ul style="list-style-type: none"> - Product (lbs): N/A - Hazardous Material: Methanesulphonic acid - Hazard Class: 8 - DOT subrisk: N/A - DOT Flashpoint: N/A <p>SECTION 15 Regulatory information</p> <p>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <ul style="list-style-type: none"> - Regulations 1272/2008/EEC, Classification, labeling and packing of dangerous substances and preparations - Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations. - Dangerous Substances Directive (67/548/EEC), Classification, packaging and labelling of dangerous substances - This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010 - Danish PR number: 2398383 - Norwegian Productregistraton no: 301100 - This composition meets the criteria for not being harmful to the marine environment according to MARPOL Annex V and may be discharged into the sea when used to clean cargo holds and external surfaces on ships. <p>15.2 Chemical Safety Assessment</p> <ul style="list-style-type: none"> - None 	<p>DECK CLEAN NP Revision: 10/27/2014</p> <p>SECTION 16 Other information (....)</p> <p>serious eye irritation. R34: Causes burns. R36: Irritating to eyes.</p> <p>The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents</p> <p>The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer</p> <p>The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties</p> <p>The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/himspervice</p> <p>OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES</p> <p>Wilhelmsen Ships Service Level 17, 636 St Kilda Road Melbourne Vic 3004 AUSTRALIA Tel: +61 3 9630 0900 Emergency 24hrs: +61 3 9630 0998</p> <p>Wilhelmsen Ships Service INC 210 Edgewater Street US-10305 Staten Island New York United States Telephone daytime: (+1) 718 815 1310 Fax: (+1) 718 233 3268</p> <p>Wilhelmsen Ships Service INC 2200 W. Pacific Coast Highway US-90810 Long Beach California, United States Tel (+1) 562 624 8888 Fax (+1) 562 624 1011</p> <p>Wilhelmsen Ships Service INC 701 Ashland Ave, Ashland Center Two, Bay 12 US- 19032 Folcroft Pennsylvania United States Tel (+1) 610 586 7801 Fax (+1) 215 701 0646</p> <p>Wilhelmsen Ships Service INC, 9400 New Century Drive US-77507 Pasadena Texas United States Telephone daytime: (+1) 281 867 2200 Fax: (+1) 281 867 2800</p> <p>Wilhelmsen Ships Service Ltd, Unit 3A Newtons Court Crossways DA2 6QL Dartford, Kent United Kingdom Tel (+44) 1322 282 412 Fax (+44) 1322 284 774</p> <p>Wilhelmsen Ships Service Ltda Rua Bispo Lacerda nos 61/67 Del Catilho BR 21051 120 Rio de Janeiro Brazil Tel (+55) 21 25 82 8000 Fax (+55) 21 25 82 8001</p> <p>Wilhelmsen Ships Service (S) Pta Ltd 186 Pandan Loop Singapore 128376 Tel (+65) 6395 4545</p> <p>Wilhelmsen Ships Service Co., Ltd 12-31 Torihama-cho Kanazawa-ku Yokohama-shi JP-236 0002, Japan Tel (+81) 45 775 9012 Fax (+81) 45 775 0070</p> <p>Wilhelmsen Ships Service Hellas SA, 100, D. Moutsopoulou & Serifou str GR-185 41 Piraeus Greece Tel (+30) 210 4239100 Fax (+30) 210 4212480</p> <p>Wilhelmsen Ships Service AS U.A.E. Fl 24 Executive Heights, Tecom C Sheikh Zayed Road (East) Dubai United Arab Emirates Tel (+971) 4 382 3888</p> <p>Wilhelmsen Ships Service AS, Willem Baerentszstraat 50 3165 AB Rotterdam-Albrandswaard, the Netherlands, Tel (+31) 10 4577 777</p>



	Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas			ROATAN CRUISE TERMINAL	
	Elaborado por	Revisado por	Aprobado por	Fecha	Revisión
	INTERMARIS	ROATAN CRUISE TERMINAL	DIRECCIÓN GENERAL DE MARINA MERCANTE	Diciembre-2019	1

APPENDIX IV - Stock of contingency equipment for hydrocarbon spills in the Terminal.

Nº	Material - Hoja Técnica	Marca	Item	Dimensión	Empaque	Cantidad	Capacidad de Absorción	Capacidad total	Imagen
1	Almohadilla Absorbente para aceite, petróleo	OIL-DRI	44Z106	19in x 15in	Caja x 100 un.	4	17 gal/caja	68 gal.	
2	Rollo Absorbente pesado de polipropileno, absorbente para aceite, petróleo	n/e	3YEG6	15in x 150ft	Caja x 2 rollos	5	56 gal/ caja	280 gal.	
3	Barrera Absorbente de aceite, petróleo, color Naranja	BROOM	3RPT4	5ft	Caja x 2 un.	10	16 gal/ caja	160 gal.	
4	Detergente líquido	JOY	1-30	5 gal/ cubeta	Cubeta	10	n/a	n/a	
5	Tapete Absorbente para aceite, petróleo	SPC SPLIFYTER		16in x 100ft	Bolsas	9	24 gal/ bolsa	216 gal.	
6	Kit Móvil de Respuesta ante Derrames	BRADY SPC ABSORBENTS	SKM-LT	Large	Contenedor Móvil	1	169 gal/ Kit	169 gal.	
7	Barrera de Contención Flotante		Amarillo		Unidad	7	n/a	ft o mts.	
8	Barrera Absorbente para aceite, petróleo, color Celeste	OIL-DRI	L90857	Sin D x 10ft L	Paq x 4 un.	11 1/2	32 gal/ paq	368 gal.	

	Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas			ROATAN CRUISE TERMINAL	
	Elaborado por	Revisado por	Aprobado por	Fecha	Revisión
	INTERMARIS	ROATAN CRUISE TERMINAL	DIRECCIÓN GENERAL DE MARINA MERCANTE	Diciembre-2019	1

APPENDIX V - Diesel Data Sheet ¹⁰

Hoja de Datos de Seguridad



SECCIÓN 1 IDENTIFICACIÓN DEL PRODUCTO Y LA COMPAÑÍA

DIESEL FUEL No. 2

Uso del Producto: Combustible [Busque Números de Productos Adicionales en la sección 16]

Sinónimos: 15 S Diesel Fuel 2, Alternative Low Aromatic Diesel (ALAD), Calco LS Diesel 2, CALCO ULS C-B0-B5 DF2, CALCO ULS C-B0-B5 DF2 DYED, CALCO ULS C-B2 DF2, CALCO ULS C-B2 DF2 DYED, CALCO ULS C-B5 DF2, CALCO ULS C-B5 DF2 DYED, Calco ULS DF2, Calco ULS Diesel 2, CALCO ULS S-B0-B5 DF2 DYED, Calco ULS S-B5 DF2, Calco ULS S-B5 DF2 DYED, CALCO ULS TC-B1 DF2, CALCO ULS TC-B1 DF2 DYED, CALCO ULS TC-B2 DF2, CALCO ULS TC-B2 DF2 DYED, CALCO ULS TC-B3 DF2, CALCO ULS TC-B3 DF2 DYED, CALCO ULS TC-B4 DF2, CALCO ULS TC-B4 DF2 DYED, CALCO ULS TC-B5 DF2, CALCO ULS TC-B5 DF2 DYED, CALCO ULS TX-B1 DF2, CALCO ULS TX-B1 DF2 DYED, CALCO ULS TX-B2 DF2, CALCO ULS TX-B2 DF2 DYED, CALCO ULS TX-B3 DF2, CALCO ULS TX-B3 DF2 DYED, CALCO ULS TX-B4 DF2, CALCO ULS TX-B4 DF2 DYED, CALCO ULS TX-B5 DF2, CALCO ULS TX-B5 DF2 DYED, Chevron LS Diesel 2, Chevron ULS Diesel 2, CT ULS C-B0-B5 DF2, CT ULS C-B0-B5 DF2 DYED, CT ULS C-B2 DF2, CT ULS C-B5 DF2, CT ULS S-B0-B5 DF2 DYED, CT ULS S-B5 DF2, CT ULS S-B5 DF2 DYED, CT ULS S-B0-B5 DF2, CT ULS SPECIAL DF2 DYED, CT ULS TC-B1 DF2, CT ULS TC-B2 DF2, CT ULS TC-B3 DF2, CT ULS TC-B4 DF2, CT ULS TC-B5 DF2, CT ULS TX-B1 DF2, CT ULS TX-B2 DF2, CT ULS TX-B3 DF2, CT ULS TX-B4 DF2, CT ULS TX-B5 DF2, Diesel Fuel Oil, Diesel Grade No. 2, Diesel No. 2-D S15, Diesel No. 2-D S500, Diesel No. 2-D S5000, Distillates, straight run, Gas Oil, HS Diesel 2, HS Heating Fuel 2, Light Diesel Oil Grade No. 2-D, LS Diesel 2, LS Heating Fuel 2, Marine Diesel, RR Diesel Fuel, Texaco Diesel, Texaco Diesel No. 2, ULS C-B0-B5 DF2, ULS C-B0-B5 DF2 DYED, ULS C-B2 DF2, ULS C-B2 DF2 DYED, ULS C-B5 DF2, ULS C-B5 DF2 DYED, ULS S-B0-B5 DF2 DYED, ULS S-B5 DF2, ULS S-B5 DF2 DYED, ULS TC-B1 DF2, ULS TC-B1 DF2 DYED, ULS TC-B2 DF2, ULS TC-B2 DF2 DYED, ULS TC-B3 DF2, ULS TC-B3 DF2 DYED, ULS TC-B4 DF2, ULS TC-B4 DF2 DYED, ULS TC-B5 DF2, ULS TC-B5 DF2 DYED, ULS TX-B1 DF2, ULS TX-B1 DF2 DYED, ULS TX-B3 DF2, ULS TX-B3 DF2 DYED, ULS TX-B4 DF2, ULS TX-B4 DF2 DYED, ULS TX-B5 DF2, ULS TX-B5 DF2 DYED, Ultra Low Sulfur Diesel 2

Identificación de la compañía

Chevron Products Company
Marketing, MSDS Coordinator
6001 Bollinger Canyon Road
San Ramon, CA 94583
United States of America

Respuesta a emergencia de transportación

CHEMTREC: (800) 424-9300 or (703) 527-3887

Emergencia Médica

Centro de Información de Emergencia de Chevron: Localizado en los Estados Unidos de América. Se aceptan llamadas internacionales por cobrar. (800) 231-0623 o (510) 231-0623

Información sobre el Producto

Solicitudes de MSDS: <http://www.chevron.com/contact/>

Información Técnica: (510) 242-5357

Revision Number: 24


Revision Date: MAYO 07, 2015

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DIESEL FUEL No. 2

SDS : 6894

¹⁰ SDS Diesel – Source - CHEVRON

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NOTAS ESPECIALES: Esta Hoja de Datos sobre la Seguridad de Sustancias (MSDS) cubre todos los Combustibles Diésel No. 2 CARB & no-CARB de Chevron, Texaco y Calco. El contenido de azufre es de menos de 0.5% (masa). Se agrega tinte rojo al combustible exento de impuestos. (MSDS 6894)
 NOTAS ESPECIALES: Esta Hoja de Datos sobre la Seguridad de Sustancias (MSDS) cubre todos los Combustibles Diesel No. 2 CARB Bajos de Azufre de Chevron y Calco. Se agrega tinte rojo al combustible exento de impuestos. (MSDS 7098)

SECCIÓN 2 IDENTIFICACIÓN DE RIESGOS

CLASIFICACIÓN: Líquido inflamable: Categoría 3. Tóxico por aspiración: Categoría 1. Carcinógeno: Categoría 1B. Irritación de la piel: Categoría 2. Tóxico para órganos diana (exposición reiterada): Categoría 2. Tóxico para órganos diana (sistema nervioso central): Categoría 3. Tóxico agudo por inhalación: Categoría 4. Tóxico agudo de medios acuáticos: Categoría 2. Tóxico crónico de medios acuáticos: Categoría 2.



Palabra señal: Peligro

Peligros físicos: Líquido y vapor inflamables.

Peligros para la salud: Puede ser mortal si se ingiere y entra en las vías respiratorias. Puede provocar cáncer. Causa una irritación dérmica. Nocivo de ser inhalado. Puede causar somnolencia o mareos.

Órganos objetivos: Puede causar daño a los órganos (Sangre/Órganos hematopoyéticos, Hígado, Timo) por exposición prolongada o repetida.


Peligros ambientales: Tóxico para la vida acuática con efectos de larga duración.

DECLARACIONES DE ADVERTENCIA

General: Mantenga lejos del alcance de los niños. Lea la etiqueta antes de usar.

Prevención: Obtenga instrucciones especiales antes de usar. No lo manipule hasta haber leído y entendido todas las instrucciones de seguridad. Mantenga alejado del calor, las chispas, las llamas abiertas y las superficies calientes. – No fumar. Conecte el recipiente y el equipo receptor a tierra y entre sí. Use sólo herramientas que no generen chispas. Tome medidas de precaución contra descargas electrostáticas. Mantenga el recipiente herméticamente cerrado. Use aparatos eléctricos/de ventilación/de iluminación/equipos a prueba de explosión. No respire polvo/humo/gas/neblina/vapores/atomizado. Use solamente en exteriores o en zonas bien ventiladas. Use guantes y vestimenta protectores y protección ocular y facial. Use equipo de protección personal como sea requerido. Lávese minuciosamente después de manipularlo. Evite pérdidas al medio ambiente.

Respuesta: SI SE INHALA: Lleve a la persona al aire libre y manténgala en una posición confortable para la respiración. SI SE DEPOSITA SOBRE LA PIEL: Lávese con abundante agua y jabón. Si se manifiesta una irritación en la piel: Obtenga consejo/atención médica. Sáquese la ropa contaminada y lávela antes de volver a usarla. SI SE DEPOSITA SOBRE LA PIEL (o el pelo): Sáquese inmediatamente la ropa contaminada y lávela antes de volver a usarla. Enjuáguese la piel con agua/ducha. SI SE INGIERE: Llame de inmediato a un centro de venenos o a un médico. NO induzca el vómito. Llame a un centro de

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venenos o a un médico si no se siente bien. En caso de incendio: Use los medios especificados en la Hoja de Datos de Seguridad para la extinción. Tratamiento específico (véase Notas al Médico en esta etiqueta). Recoja el derrame.

Almacenamiento: Almacene en un lugar bien ventilado. Mantenga fresco. Mantenga el recipiente herméticamente cerrado. Almacene bajo llave.

Desecho: Deseche los contenidos y/o el recipiente de acuerdo con los reglamentos municipales/regionales/nacionales/internacionales que correspondan.

PELIGROS NO CLASIFICADOS DE OTRO MODO: Not Applicable

SECCIÓN 3 COMPOSICIÓN/ INFORMACIÓN SOBRE LOS INGREDIENTES

COMPONENTES	NUMERO DEL CAS	CANTIDAD
Combustible diésel, número 2	68476-34-6	95 - 100 %vol/vol
Ésteres metílicos de ácidos (FAME)	Mezcla	0 - 5 %vol/vol
Alcanos, C10-20, ramificados y lineales	928771-01-1	0 - 5 %vol/vol
Naftaleno	91-20-3	0.02 - 0.2 %vol/vol
Total de azufre	Mezcla	0 - 5000 ppm (en peso)

SECCIÓN 4 MEDIDAS DE PRIMEROS AUXILIOS

Descripción de las medidas de primeros auxilios

Ojo: No hacen falta medidas específicas de primeros auxilios. A modo de precaución, quítese los lentes de contacto, si los trae puestos y lávese los ojos con agua.

Piel: Lávese la piel con agua inmediatamente y quítese las ropas y los zapatos contaminados. Procure atención médica si sobreviene algún síntoma. Para quitarse la sustancia de la piel, use agua y jabón. Deseche la ropa y los zapatos contaminados o límpielos a cabalidad antes de volverlos a usar.

Ingestión: Si se traga, procure atención médica inmediatamente. No induzca el vómito. Nunca le dé nada por la boca a una persona inconsciente.

Inhalación: Mueva a la persona expuesta al aire fresco. Si no hay respiración, dé respiración artificial. Si la respiración se dificulta, proporcione oxígeno. Si las dificultades de respiración continúan o se desarrollan otros síntomas, obtenga atención médica.

Síntomas y efectos más importantes, tanto graves como retrasados


EFFECTOS INMEDIATOS PARA LA SALUD

Ojo: No se anticipa que cause irritación prolongada o significativa a los ojos.

Piel: El contacto con la piel causa irritación. Entre los síntomas se pueden encontrar dolor, picazón, decoloración, inflamación y formación de ampollas. No se espera que el contacto con la piel cause una respuesta alérgica en la piel.

Ingestión: Sumamente tóxico; puede ser fatal si se traga. A causa de su baja viscosidad, esta sustancia puede entrar directamente a los pulmones si se traga o al vomitarse posteriormente. Una vez que está en los pulmones, es muy difícil de extraer y puede causar lesiones severas o muerte. Puede irritar la boca, la garganta y el estómago. Entre los síntomas se pueden encontrar dolor, náusea, vómitos y diarrea.

Inhalación: El vapor o las emanaciones de esta sustancia puede causam irritación respiratoria. Las neblinas o atomizaciones de esta sustancia puede causam irritación respiratoria. Entre los síntomas de la irritación respiratoria se pueden encontrar tos y dificultad al respirar. La respiración excesiva o prolongada

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de esta sustancia puede causar efectos en el sistema nervioso central. Entre los efectos causados al sistema nervioso se pueden encontrar dolor de cabeza, aturdimiento, náusea, vómitos, debilidad, pérdida de coordinación, visión borrosa, somnolencia, confusión y desorientación. A exposiciones extremas, entre los efectos causados al sistema nervioso se pueden encontrar depresión respiratoria, temblores y convulsiones, pérdida del conocimiento, coma y muerte.

EFFECTOS RETARDADOS SOBRE LA SALUD O DE OTRO TIPO:

Cáncer: Los gases de escape entero de los motores de diésel han sido clasificados como carcinógeno del Grupo 2A (probablemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). La exposición repetida o prolongada a esta sustancia puede causar cáncer. Contiene naftaleno, que ha sido clasificado como un carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Investigaciones sobre el Cáncer (IARC).

Órganos Blanco: Contiene sustancia que puede causar daño a el/los siguiente(s) órgano(s) después de inhalación repetida a concentraciones por encima del límite de exposición recomendado sobre la base de datos provenientes de animales: Hígado Sangre-Órganos Productores de Sangre Timo El riesgo depende de la duración y nivel de exposición. Busque más información en la sección 11.

Indicación de atención médica inmediata y tratamiento especial necesario

Nota para los Médicos: La ingestión de este producto o el vomitarla posteriormente puede resultar en la aspiración de líquido compuesto de hidrocarburos líquidos ligeros, lo cual puede causar neumonitis.

SECCIÓN 5 MEDIDAS PARA LA EXTINCIÓN DE INCENDIOS

MEDIOS EXTINTORES: Use niebla de agua, espuma, materiales químicos secos o dióxido de carbono (CO2) para extinguir las llamas.

Riesgos de incendio fuera de lo común: Busque en la sección 7 el modo adecuado de manejo y almacenamiento.

PROTECCIÓN DE LOS BOMBEROS:

Instrucciones para la Extinción de Incendios: Con respecto a los fuegos que tengan que ver con esta sustancia, no entre ningún espacio de incendio cerrado o confinado sin haberse puesto los adecuados equipos protectores, incluyendo aparato de respiración autónoma.


Productos de la Combustión: Depende mucho de las condiciones de combustión. Se puede desarrollar una mezcla compleja de sólidos, líquidos y gases aerotransportados, incluyendo monóxido de carbono, dióxido de carbono y compuestos orgánicos no identificados al combustionarse esta sustancia.

SECCIÓN 6 MEDIDAS QUE DEBEN ADOPTARSE EN CASO DE LIBERACIÓN ACCIDENTAL

Medidas de Protección: Elimine todas las fuentes de ignición cerca del derrame o del vapor despedido. Si la sustancia se propaga al área de trabajo, evacúela inmediatamente. Vigile el área con el indicador de gas combustible.

Manejo de Derrames: Detenga la fuente de la emisión si lo puede hacer sin correr riesgo. Contenga la emisión para evitar la contaminación adicional de los terrenos, las aguas superficiales y las aguas subterráneas. Limpie el derrame lo más pronto posible, observando las precauciones que aparecen en Controles de Exposición-Protección Personal. Use las técnicas que correspondan tales como aplicar materiales absorbentes no combustibles o bombeo. Todos los equipos que se usen para manejar el producto deben tener conexión a tierra. Se puede usar espuma supresora de vapores para reducir éstos. Use herramientas limpias que no echan chispas para recolectar el material absorbido. Cuando sea factible y apropiado, quite y retire la tierra contaminada. Coloque los materiales contaminados en recipientes desechables y deséchelos observando los reglamentos correspondientes.

Reportes: Reporte los derrames a las autoridades locales y/o al Centro de Respuesta Nacional de la

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Guardia Costera de los EE.UU. al número de teléfono (800) 424-8802 según se exija o corresponda.

SECCIÓN 7 MANEJO Y ALMACENAMIENTO

Información sobre su Manejo en General: Evite contaminar la tierra o echar esta sustancia en los sistemas de desagüe o en los cuerpos de agua.

Medidas Precautorias: El líquido se evapora forma vapor (emanaciones) que pueden prender fuego e inflamarse con una violencia explosiva. El vapor invisible se propaga fácilmente y lo pueden encender diversas fuentes de ignición tales como luces piloto, equipos de soldadura y motores e interruptores eléctricos. El peligro de incendio es más elevado cuando la temperatura del líquido pasa por encima de los 85F (29.4C).

No deje que le caiga en los ojos, en la piel o en la ropa. No lo pruebe ni lo trague. No respire vapores ni emanaciones. No respire la neblina. Lávese bien después de manipularlo. Manténgalo fuera del alcance de los niños.

Riesgos de Manejo Poco Comunes: ¡ADVERTENCIA! No usar como calentador portátil ni combustible para utensilios domésticos. Pueden acumularse emanaciones tóxicas y causar la muerte. Puede tener lugar una generación lenta de calor con trapos empapados en aceite, ayudantes de filtración agotados y materiales absorbentes agotados y puede provocar una combustión espontánea si se almacena cerca de combustibles y no se manipula apropiadamente. Almacene trapos empapados de biodiésel, ayudantes de filtración y materiales absorbentes de derrames en contenedores de eliminación segura aprobados y elimine de una manera apropiada. Los trapos empapados de biodiésel pueden lavarse con agua y jabón y permitirles secar en una zona bien ventilada.

Riesgo Estático: La descarga electrostática se puede acumular y crear una condición peligrosa cuando se maneja este material. Para minimizar este peligro, la unión y conexión a tierra puede ser necesaria, pero pueden ser insuficientes por sí solos. Revise todas las operaciones que tengan el potencial de generar y acumular una carga electrostática y/o una atmósfera inflamable (incluyendo las operaciones de llenado del tanque y recipiente, salpicaduras al llenar, limpieza del tanque, muestreos, calibración, cambios de carga, filtrado, mezclado, agitación y camión al vacío) y utilice los procedimientos mitigantes adecuados.


Advertencias Acerca de los Recipientes: El recipiente no está diseñado para contener presión. No use presión para vaciar el recipiente porque éste se puede quebrar o romper con fuerza explosiva. Los recipientes vacíos contienen residuos del producto (sólido, líquido y/o vapor) y pueden ser peligrosos. No presurice, corte, suelde de manera alguna, taladre, esmerile, triture ni esponga a dichos recipientes al calor, llamas, chispas, electricidad estática ni a ninguna otra fuente de ignición. Pueden explotar y causar lesiones o muerte. Los recipientes vacíos se deben vaciar escurriéndolos por completo, taponarlos de manera adecuada y devolverlos prontamente a un reacondicionador de bidones, o desecharlos como es debido.

Información sobre su Almacenamiento en General: NO LO/LA USE NI GUARDE cerca del calor, chispas, llamas ni superficies calientes. SOLAMENTE EN ÁREA BIEN VENTILADA. Mantenga el recipiente cerrado cuando no lo esté usando.

SECCIÓN 8 CONTROLES DE EXPOSICIÓN/PROTECCIÓN PERSONAL

CONSIDERACIONES GENERALES:

Considere los peligros en potencia de este material (ver Sección 3), límites de exposición aplicables, actividades laborales, y otras sustancias en el centro de trabajo al diseñar controles tecnológicos y seleccionar los equipos protectores personales. Si los controles tecnológicos o las prácticas laborales no son adecuados para impedir la exposición a niveles nocivos de este material, se recomiendan los equipos protectores personales que aparecen a continuación. El usuario debe leer y entender todas las instrucciones y limitaciones que se suministran con los equipos ya que por lo general se provee protección durante un tiempo limitado o bajo ciertas circunstancias.

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CONTROLES DE INGENIERÍA:

Use barreras de protección para encerrar el lugar donde se realiza el proceso, ventilación local de extracción y demás controles tecnológicos para mantener los niveles aerotransportados por debajo de los límites recomendados de exposición.

EQUIPO DE PROTECCIÓN PERSONAL

Protección de ojos/cara: Normalmente no hace falta protección especial para los ojos. Cuando sea posible que la sustancia salpique, póngase gafas de seguridad con resguardos laterales como una buena práctica de seguridad.

Protección de la Piel: Póngase ropas protectoras para evitar el contacto con la piel. La selección de ropas protectoras puede incluir guantes, delantal, botas y protección facial completa dependiendo de las operaciones que se realicen. Los materiales que se sugieren para guantes protectores incluyen:

Poliétileno clorado (o polietileno clorosulfonado), Hule de Nitrilo, Poliuretano, Viton.

Protección Respiratoria: Determine si las concentraciones aerotransportadas están por debajo de los límites de exposición ocupacional recomendados para la jurisdicción donde se use. Si están por encima de éstos, póngase un respirador aprobado que le dé adecuada protección contra esta sustancia, tal como: Respirador con Purificación de Aire para Vapores Orgánicos.

Cuando se usa como combustible, esta sustancia puede producir monóxido de carbono en los gases de escape. Determine si las concentraciones aerotransportadas están por debajo del límite de exposición ocupacional para el monóxido de carbono. Si no lo están, póngase un respirador aprobado de suministro de aire a presión positiva.

Use un respirador de suministro de aire a presión positiva en circunstancias en las que los respiradores de purificación de aire tal vez no provean protección adecuada.

Límites de Exposición Ocupacional:


Componente	Agencia	TWA	STEL	Límite Tope	Notación
Combustible diésel, número 2	ACGIH	100 mg/m ³	--	--	Piel A3 hidrocarburo total
Combustible diésel, número 2	CVX	--	1000 mg/m ³	--	--
Ésteres metílicos de ácidos (FAME)	No pertinente	--	--	--	--
Alcanos, C10-20, ramificados y lineales	No pertinente	--	--	--	--
Naftaleno	ACGIH	10 ppm (weight)	15 ppm (weight)	--	Piel
Naftaleno	OSHA Z-1	50 mg/m ³	--	--	--
Total de azufre	No pertinente	--	--	--	--

Consulte a las autoridades locales para averiguar cuáles son los valores adecuados.

SECCIÓN 9 PROPIEDADES FÍSICAS Y QUÍMICAS

Atención: los datos que aparecen a continuación son valores típicos y no constituyen una especificación.

Color: Varía dependiendo de la especificación

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Estado físico: Líquido
Olor: Olor del petróleo
Umbral del olor: No Hay Datos Disponibles
pH: No pertinente
Presión de vapor: 0.04 kPa (Aproximado) @ 40 °C (104 °F)
Densidad de vapor (Aire = 1): >1
Punto de ebullición inicial: 175.6°C (348°F) - 370°C (698°F)
Solubilidad: Soluble en hidrocarburos; insoluble en agua
Punto de congelación: No pertinente
Punto de fusión: No pertinente
Gravedad específica: 0.8 - 0.88 @ 15.8°C (60.1°F) (Típico)
Viscosidad: 1.9 cSt - 4.1 cSt @ 40°C (104°F)
Temperatura de descomposición: No Hay Datos Disponibles
octanol/agua, coeficiente de partición: No Hay Datos Disponibles

PROPIEDADES INFLAMABLES:

Inflamabilidad (sólido, gas): No Hay Datos Disponibles

Punto de Inflamación: (Método Pensky-Martens de Copa Cerrada) 52 °C (125 °F) Mínimo

Autoignición: 257 °C (494 °F)

Límites de Inflamabilidad (Explosivos) (% por volumen en aire): Inferior: 0.6 Superior: 4.7

SECCIÓN 10 ESTABILIDAD Y REACTIVIDAD

Reactividad: Puede reaccionar con los ácidos fuertes o los agentes oxidantes potentes, tales como cloratos, nitratos, peróxidos, etc.

Estabilidad Química: Esta sustancia se considera estable en condiciones de temperatura y presión anticipadas para su almacenaje y manipulación y condiciones normales de ambiente.

Condiciones que Deben Evitarse: Evitar el contacto con el calor, chispas, fuego y agentes oxidantes

Incompatibilidad con Otros Materiales: No pertinente

Productos Peligrosos de la Descomposición: No se conoce ninguno/a (No se anticipa ninguno/a)

Polimerización Peligrosa: No experimentará polimerización peligrosa.

SECCIÓN 11 INFORMACIÓN TOXICOLÓGICA

Información sobre efectos toxicológicos

Irritación/Daño grave en el ojo: El riesgo de irritación ocular corresponde a la evaluación de datos con respecto a materiales similares.


Irritación/Corrosión de la piel: El riesgo de irritación de la piel corresponde a la evaluación de datos con respecto a materiales similares.

Sensibilización de la Piel: El riesgo de sensibilización de la piel corresponde a la evaluación de datos con respecto a materiales similares.

Toxicidad Dérmica Aguda: El riesgo de toxicidad cutánea grave corresponde a la evaluación de datos con respecto a materiales similares.

Toxicidad Oral Aguda: El riesgo de toxicidad oral grave corresponde a la evaluación de datos con respecto a materiales similares.

Toxicidad por Inhalación Aguda: El riesgo de toxicidad grave por inhalación corresponde a la evaluación de datos con respecto a materiales similares.

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Estimación de toxicidad aguda: No determinado

Mutagenia de células reproductoras: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

Carcinogenia: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar. Los gases de escape entero de los motores de diésel han sido clasificados como carcinógeno del Grupo 2A (probablemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). Contiene naftaleno, que ha sido clasificado como un carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Investigaciones sobre el Cáncer (IARC).

Toxicidad reproductiva: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

Toxicidad específica para el órgano objetivo: exposición única: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.


Toxicidad específica para el órgano objetivo: exposición reiterada: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

INFORMACIÓN ADICIONAL DE TOXICOLOGÍA:

El Instituto Nacional de Seguridad y Salud Ocupacional de EE.UU. (NIOSH) ha recomendado que los gases de escape entero de diésel sean considerados potencialmente causantes de cáncer. Esta recomendación se basó en resultados de pruebas que mostraron un aumento en cáncer pulmonar en animales de laboratorio expuestos a los gases de escape entero de diésel. Este producto contiene naftaleno. **TOXICIDAD GENERAL:** Se ha reportado que la exposición al naftaleno causa metahemoglobinemia y/o anemia hemolítica, especialmente en los humanos deficientes en la enzima glucosa-6-fosfato deshidrogenasa. Los animales de laboratorio que recibieron dosis orales repetidas de naftaleno han desarrollado cataratas. **TOXICIDAD REPRODUCTIVA Y DEFECTOS CONGÉNITOS:** El naftaleno no causó defectos congénitos cuando se administró por vía oral a conejas, ratas y ratonas durante la gestación, pero redujo ligeramente el tamaño de las camadas de ratones a niveles de dosificación que fueron letales para las hembras preñadas. Se ha reportado que el naftaleno cruza la placenta humana. **TOXICIDAD GENÉTICA:** El naftaleno causó aberraciones cromosómicas e intercambios de cromátidas hermanas en células de ovario de hámster chino, pero no fue mutagénico en varias otras pruebas in vitro. **CARCINOGENICIDAD:** En un estudio realizado por el Programa Nacional de Toxicología (NTP) de EE.UU., los ratones expuestos por inhalación diariamente a 10 ó 30 ppm de naftaleno durante dos años tuvieron inflamación crónica de la nariz y los pulmones y frecuencias más altas de metaplasia en esos tejidos. La frecuencia de tumores pulmonares benignos (adenomas alveolares/bronquiolares) aumentó significativamente en el grupo de las hembras tratadas con la dosis alta pero no en los grupos de los machos. En otro estudio de inhalación de dos años realizado por el NTP, la exposición de ratas a 10, 30 y 60 ppm de naftaleno produjo aumentos en las frecuencias de varias lesiones neoplásicas de la nariz. Se observaron aumentos de los tumores nasales en los animales de ambos sexos, incluyendo neuroblastomas olfatorios en las hembras tratadas con 60 ppm y adenomas del epitelio respiratorio en los machos tratados con todas las dosis. No se ha establecido la importancia que tienen estos efectos en los humanos. No se reportó ningún efecto carcinogénico en un estudio de administración en la dieta durante 2 años en ratas que recibieron naftaleno en dosis de 41 mg/kg/día.

Este producto contiene gasóleos. La CONCAWE (expediente de producto 95/107) ha resumido los actuales datos sobre la salubridad, seguridad y ambiente de una serie de gasóleos, típicamente los destilados medios hidrodesulfurizados, CAS 64742-80-9, los destilados medios de destilación directa, CAS 64741-44-2, y/o los destilados ligeros resultantes de craqueo catalítico CAS 64741-59-9.

CARCINOGENICIDAD: Todas las sustancias examinadas han causado el desarrollo de tumores dérmicos

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en ratones, pero todos presentaron severa irritación de la piel y a veces un largo periodo de latencia antes de que se desarrollaran los tumores. Se estudiaron muestras de gasóleos de destilación directa y de gasóleos craqueados para determinar la influencia de la irritación dérmica en la actividad carcinogénica de los destilados medios. A dosis no irritantes el gasóleo de destilación directa no resultó ser carcinogénico, pero a dosis irritantes se demostró la existencia de una débil actividad. Los gasóleos craqueados, al diluirlos con aceite mineral, demostraron actividad carcinogénica independientemente de la ocurrencia de irritación dérmica. Se pusieron a prueba gasóleos en ratones macho con el fin de estudiar la actividad iniciadora o promotora de tumores. Los resultados demostraron que, aunque la muestra de gasóleo de destilación directa no fue ni iniciadora ni promotora, la mezcla de gasóleo de destilación directa y de aceite de base FCC sí resultó ser iniciadora así como promotora de tumores. GENOTOXICIDAD: Los gasóleos hidrotratados e hidrodesulfurizados varían en actividad de inactivos a débilmente positivos en los ensayos in vitro de mutagenicidad bacteriana. Los ensayos de linfoma de ratón con gasóleos de destilación directa sin subsiguiente hidrodesulfurización dieron resultados positivos en la presencia de activación metabólica por la S9. Los componentes producidos por destilación directa con y sin hidrodesulfurización examinados a través de la citogenética de la médula ósea in vivo y del ensayo de intercambio entre cromátidas hermanas no dieron muestras de actividad. Los gasóleos craqueados térmica o catalíticamente que se sometieron a prueba con ensayos in vitro de mutagenicidad bacteriana en la presencia de activación metabólica por la S9 dieron muestras de ser mutagénicos. Los ensayos in vitro de intercambio entre cromátidas hermanas realizados con gasóleo craqueado dieron resultados equivocados tanto con activación metabólica por la S9 como sin ella. El ensayo citogenético de la médula ósea in vivo resultó ser inactivo con las dos muestras de gasóleo craqueado. Se pusieron a prueba tres gasóleos hidrotraqueados mediante ensayos in vitro de mutagenicidad bacteriana con la S9, y uno de los tres dio resultados positivos. Doce muestras de combustibles destilados se examinaron mediante ensayos de mutagenicidad bacteriana in vitro y con activación metabólica por la S9 y dieron resultados que fueron de negativos a débilmente positivos. En una serie, se demostró que la actividad estaba relacionada con el contenido de PCA en las muestras examinadas. También se realizaron dos estudios in vivo. Un ensayo de dominante letal de ratón de una muestra de combustible diésel dio negativo. En el otro estudio, 9 muestras de aceite de calefacción No. 2 que contenían 50% de aceites de base craqueados causó un ligero aumento en el número de aberraciones cromosómicas en los ensayos citogenéticos de la médula ósea. TOXICIDAD DEL DESARROLLO: El vapor de combustible diésel no tuvo efectos fetotóxicos ni teratogénicos cuando se expusieron ratas preñadas durante los días 6-15 de embarazo. Se aplicaron gasóleos diariamente a la piel de las ratas preñadas en los días 0-19 de gestación. Todos menos uno (gasóleo ligero de coquificador) causaron fetotoxicidad (aumento de reabsorciones, reducción en el peso de la camada, reducción en el tamaño de la camada) a niveles de dosificación que también fueron tóxicos a la madre.

SECCIÓN 12 INFORMACIÓN ECOLÓGICA

ECOTOXICIDAD

Se espera que este material sea tóxico para los organismos acuáticos y puede causar efectos adversos a largo plazo en el medio ambiente acuático. Un laboratorio realizó una serie de estudios sobre la toxicidad aguda de 4 muestras de combustible diésel utilizando fracciones acomodadas en agua. La gama de concentraciones efectivas (EC50) o letales (LC50) expresadas en términos de velocidad de carga fue de:

72 hora(s) EC50: 2.6-25 mg/l (Selenastrum capricornutum)

96 hora(s) LC50: 21-210 mg/l (Salmo gairdneri)


48 hora(s) EC50: 20-210 mg/l (Daphnia magna)

MOBILIDAD

No Hay Datos Disponibles.

PERSISTENCIA Y DEGRADABILIDAD

No se anticipa que esta sustancia sea fácilmente biodegradable. Al ser liberados al medio ambiente los componentes más ligeros del combustible diesel generalmente se evaporarán pero, dependiendo de las

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condiciones ambientales locales (temperatura, viento, mezcla o acción del oleaje, tipo de suelo, etc.), el resto podría llegar a dispersarse en la columna de agua o ser absorbido en el suelo o sedimento. No se esperaría que el combustible diesel fuese fácilmente biodegradable. En una prueba de Strum modificada (método OECD 301B) se registró aproximadamente 40% de biodegradación durante 28 días. Sin embargo, se ha demostrado que casi todos los componentes de hidrocarburos del combustible diesel se degradan en el suelo en presencia de oxígeno. En condiciones anaerobias, tales como las que se encuentran en sedimentos anóxicos, las velocidades de biodegradación son insignificantes. El producto no se ha probado. La declaración se deriva de productos de composición y estructura similares.

POTENCIAL DE BIOACUMULARSE

factor de bioconcentración: No Hay Datos Disponibles.
 octanol/agua, coeficiente de partición: No Hay Datos Disponibles

SECCIÓN 13 CONSIDERACIONES ACERCA DE LA ELIMINACIÓN FINAL

Use la sustancia o material para el propósito para el cual estaba destinada o reciclela de ser posible. Este material, si hay que desecharlo, tal vez cumpla los criterios que clasifican un desecho peligroso según la definición de leyes y reglamentos internacionales, nacionales o locales.

SECCIÓN 14 INFORMACIÓN SOBRE EL TRANSPORTE


La descripción que aparece tal vez no sea aplicable a todas las situaciones de los envíos. Consulte el 49CFR, o los correspondientes Reglamentos para Artículos Peligrosos con el fin de buscar requisitos adicionales para la descripción (por ejemplo, el nombre técnico) y requisitos de envío específicos en cuanto a la modalidad o a la cantidad.

Descripción de Embarque del DOT: For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C but <= 60 deg C: UN1202, GAS OIL, 3, III; OPTIONAL DISCLOSURE: UN1202, GAS OIL, 3, III, MARINE POLLUTANT (DIESEL FUEL) Optional disclosure per 49 CFR when Flash Point (PM Closed Cup) >= 38 deg C < 63 deg C per 49 173.150 (f): UN1202, GAS OIL, COMBUSTIBLE LIQUID, III; NON-BULK PACKAGES ARE EXEMPTED FROM THE PROVISIONS OF 49 CFR IN USA JURISDICTIONS. Optional disclosure as a GHS Environmental Hazard/Marine Pollutant when Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

Descripción de Envío IMO/IMDG: For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C, <= 60 deg C: UN1202, GAS OIL, 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (DIESEL FUEL); OPTIONAL DISCLOSURE: UN1268, PETROLEUM DISTILLATES, N.O.S. (DIESEL FUEL), 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (DIESEL FUEL) For packages with a Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

Descripción de embarque ICAO/IATA: For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C, <= 60 deg C: UN1202, GAS OIL, 3, III For packages with a Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

Transporte a granel de acuerdo con el Anexo II de MARPOL 73/78 y el código IBC:
 No corresponde

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SECCIÓN 15 INFORMACIÓN REGULATORIA

CATEGORÍAS DE ACUERDO CON LA Sección 311/312 DE LA EPCRA: 1. Efectos Inmediatos (Agudos) en la Salud: **SI**

- | | |
|---|----|
| 2. Efectos Retrasados (Crónicos) en la Salud: | SI |
| 3. Peligro de incendio: | SI |
| 4. Peligro por Liberación Súbita de Presión: | NO |
| 5. Peligro por Reactividad: | NO |

LISTAS REGULATORIAS BUSCADAS:

- | | |
|---------------------|----------------------|
| 01-1-IARC Grupo 1 | 03-EPCRA 313 |
| 01-2A-IARC Grupo 2A | 04-CA Proposition 65 |
| 01-2B-IARC Grupo 2B | 05-MA RTK |
| 02-NTP Carcinogen | 06-NJ RTK |
| | 07-PA RTK |

Los siguientes componentes de esta sustancia se encuentran en las listas reglamentarias que se indican.

Naftaleno	01-2B, 02, 03, 04, 05, 06, 07
Combustible diésel, número 2	07

CANTIDADES REPORTABLES CERCLA(RQ)/EPCRA 302 CANTIDADES DE PLANIFICACIÓN DEL UMBRAL(TPQ):

Componente	C a n t i d a d Reportable del Componente	Cantidad de Planeación del Umbral del Componente	C a n t i d a d Reportable (RQ) del Producto
Naftaleno	100 lbs	Ninguno	40000 lbs

INVENTARIOS QUÍMICOS:

Todos los componentes cumplen con los siguientes requisitos de inventario de productos químicos: AICS (Australia), DSL (Canadá), EINECS (Union Europea), IECSC (China), KECI (Corea), PICCS (Filipinas), TSCA (Estados Unidos).


CLASIFICACIÓN SEGÚN LA LEY DEL DERECHO A LA INFORMACIÓN DE NUEVA JERSEY::

Según la Ley del Derecho-a-saber de L. 1983 Capítulo 315 N.J.S.A. 34:5A-1 et. seq., el producto se debe identificar de la siguiente manera: **COMBUSTIBLE DIESEL**

SECCIÓN 16 OTRA INFORMACIÓN

EVALUACIONES DE LA NFPA: Salud: 1 Inflamabilidad: 2 Reactividad: 0

EVALUACIONES HMIS: Salud: 2* Inflamabilidad: 2 Reactividad: 0
 (0-Mínimo, 1-Leve, 2-Moderado, 3-Alto, 4-Extremo, PPE:- recomendación del Índice de Equipo de Protección Personal, *- Indicador del Efecto Crónico). Estos valores se obtienen utilizando las pautas o las evaluaciones publicadas elaboradas por la Asociación Nacional de Protección Contra Incendios (NFPA) o por la Asociación Nacional de Pinturas y Recubrimientos (en lo que respecta a las clasificaciones del Sistema de Identificación de Materiales Peligrosos (HMIS)).

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Número(s) de Producto(s) Adicional(es): 203408, 203410, 203413, 203417, 203431, 203436, 203437, 203441, 203443, 203447, 203449, 203450, 220122, 225114, 225115, 225150, 266176, 270000, 270005, 270030, 270031, 270032, 270033, 270034, 270040, 270041, 270042, 270043, 270044, 270045, 270046, 270047, 270048, 270049, 270050, 270051, 270052, 270053, 270054, 270058, 270059, 270060, 270062, 270063, 270064, 270065, 270068, 270069, 270070, 270081, 270082, 270083, 270084, 270085, 270086, 270087, 270088, 270089, 270090, 270091, 270094, 270095, 270096, 270100, 270101, 270102, 270103, 270104, 270105, 270106, 270107, 270108, 270109, 270110, 270111, 270112, 270113, 270114, 270115, 270116, 270117, 270118, 270119, 270120, 270121, 270122, 270123, 270124, 271006, 272006, 272007, 272008, 272009, 272010, 272011, 272012, 272013, 272093, 272102, 272126, 272129, 272130, 272131, 272152, 272185, 272190, 272195, 272593, 272601, 272602, 272693, 272793, 273003, 273030, 273053, 275000

DECLARACIÓN DE REVISIÓN: Esta revisión actualiza las siguientes secciones de esta Hoja de Datos de Seguridad (SDS): 2,3,4,12,16


Fecha de revisión: MAYO 07, 2015

ABREVIATURAS QUE PUEDEN HABER SIDO UTILIZADAS EN ESTE DOCUMENTO:

TLV - Valor Limite Umbral	TWA - Tiempo Promedio Ponderado
STEL - Limite de Exposición a Corto Plazo	PEL - Limite Permisible de Exposición
GHS - Sistema mundialmente armonizado	CAS - Número del Servicio de Abstractos Químicos
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Hoja de Datos de Seguridad
HMIS - Sistema de Información sobre materiales peligrosos	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - Nuevo Limite de Exposición Química	EPA - Agencia de Protección Ambiental
SCBA - Aparato de respiración autónoma	

Preparados de acuerdo con el 29 CFR 1910.1200 (2012) por Chevron Energy Technology Company, 6001 Bollinger Canyon Road San Ramon, CA 94583.

La anterior información se basa en los datos que conocemos y que se cree eran correctos en la fecha de la presente comunicación. Ya que esta información se puede aplicar en condiciones que están fuera de nuestro control y con las cuales talvez no estemos familiarizados y en vista de que los datos que se hayan publicado posteriormente a la fecha de la presente talvez sugieran modificaciones a la información, no asumimos responsabilidad alguna por los resultados de su uso. Esta información se suministra a condición de que la persona que la reciba tome su propia determinación sobre la idoneidad de la sustancia o material para su propósito particular.

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APPENDIX VI - Premium Gasoline Fact Sheet ¹¹

Hoja de Datos de Seguridad



SECCIÓN 1 IDENTIFICACIÓN DEL PRODUCTO Y LA COMPAÑÍA

CHEVRON and TEXACO PREMIUM UNLEADED GASOLINES

Uso del Producto: Combustible

Número(s) de Productos: CPS201019 [Busque Números de Productos Adicionales en la sección 16]

Sinónimos: Calco Premium Gasoline, Chevron Premium Unleaded Gasoline, Chevron Supreme Plus Unleaded Gasoline, Chevron Supreme Unleaded Gasoline, Gasolines, Automotive, Texaco Power Premium Unleaded Gasoline

Identificación de la compañía

Chevron Products Company
Marketing, MSDS Coordinator
8001 Bollinger Canyon Road
San Ramon, CA 94583
United States of America

Respuesta a emergencia de transportación

CHEMTREC: (800) 424-9300 or (703) 527-3887

Emergencia Médica

Centro de Información de Emergencia de Chevron: Localizado en los Estados Unidos de América. Se aceptan llamadas internacionales por cobrar. (800) 231-0823 o (510) 231-0823

Información sobre el Producto

Solicitudes de MSDS: <http://www.chevron.com/contact>

Información Técnica: (510) 242-5357

NOTAS ESPECIALES: Esta Hoja de Datos de Seguridad de Materiales (MSDS) aplica a: toda la gasolina para motores.

SECCIÓN 2 IDENTIFICACIÓN DE RIESGOS

CLASIFICACIÓN: Líquido inflamable: Categoría 1. Tóxico por aspiración: Categoría 1. Carcinógeno: Categoría 1A. Tóxico para órganos diana (exposición reiterada): Categoría 1. Irritación ocular: Categoría 2A. Mutágeno de células germinales: Categoría 1B. Irritación de la piel: Categoría 2. Tóxico reproductivo (para el desarrollo): Categoría 2. Tóxico para órganos diana (sistema nervioso central): Categoría 3. Tóxico agudo de medios acuáticos: Categoría 2. Tóxico crónico de medios acuáticos: Categoría 2.




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Revisión Date: MARZO 18, 2015

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CHEVRON and TEXACO PREMIUM
UNLEADED GASOLINES
SDS : 2653

¹¹ SDS Gasolina – Fuente - CHEVRON

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Palabra señal: Peligro

Peligros físicos: Líquido y vapor extremadamente inflamables.

Peligros para la salud: Puede ser mortal si se ingiere y entra en las vías respiratorias. Puede provocar defectos genéticos. Puede provocar cáncer. Causa una irritación dérmica. Causa una irritación ocular grave. Se sospecha que daña al feto. Puede causar somnolencia o mareos.

Peligros ambientales: Tóxico para la vida acuática. Tóxico para la vida acuática con efectos de larga duración.

Órganos objetivos: Causa daño a los órganos (Sangre/Órganos hematopoyéticos) por exposición prolongada o repetida.

DECLARACIONES DE ADVERTENCIA

General: Mantenga lejos del alcance de los niños. Lea la etiqueta antes de usar.

Prevención: Obtenga instrucciones especiales antes de usar. No lo manipule hasta haber leído y entendido todas las instrucciones de seguridad. Mantenga alejado del calor, las chispas, las llamas abiertas y las superficies calientes. – No fumar. Conecte el recipiente y el equipo receptor a tierra y entre sí. Use sólo herramientas que no generen chispas. Tome medidas de precaución contra descargas electrostáticas. Mantenga el recipiente herméticamente cerrado. Use aparatos eléctricos/de ventilación/de iluminación/equipos a prueba de explosión. No respire polvo/humo/gas/neblina/vapores/atomizado. Evite respirar polvo/humo/gas/neblina/vapores/atomizado. Use solamente en exteriores o en zonas bien ventiladas. Use guantes y vestimenta protectores y protección ocular y facial. Use equipo de protección personal como sea requerido. No coma ni beba ni fume mientras usa este producto. Lávese minuciosamente después de manipularlo. Evite pérdidas al medio ambiente.

Respuesta: **SI SE INHALA:** Lleve a la persona al aire libre y manténgala en una posición confortable para la respiración. **SI SE DEPOSITA EN LOS OJOS:** Enjuague cuidadosamente con agua por varios minutos. Saque los lentes de contacto, de estar presentes y sea fácil hacerlo. Continúe enjuagando. Si persiste una irritación ocular: Obtenga consejo/atención médica. **SI SE DEPOSITA SOBRE LA PIEL:** Lávese con abundante agua y jabón. Si se manifiesta una irritación en la piel: Obtenga consejo/atención médica. Sáquese la ropa contaminada y lávela antes de volver a usarla. **SI SE DEPOSITA SOBRE LA PIEL (o el pelo):** Sáquese inmediatamente la ropa contaminada y lávela antes de volver a usarla. Enjuáguese la piel con agua/ducha. **SI SE INGIERE:** Llame de inmediato a un centro de venenos o a un médico. NO induzca el vómito. Llame a un centro de venenos o a un médico si no se siente bien. Obtenga consejo/atención médica si no se siente bien. Si se ha expuesto o está preocupado: Obtenga consejo/atención médica. En caso de incendio: Use los medios especificados en la Hoja de Datos de Seguridad para la extinción. Tratamiento específico (véase Notas al Médico en esta etiqueta). Recoja el derrame.


Almacenamiento: Almacene en un lugar bien ventilado. Mantenga fresco. Mantenga el recipiente herméticamente cerrado. Almacene bajo llave.

Desecho: Deseche los contenidos y/o el recipiente de acuerdo con los reglamentos municipales/regionales/nacionales/internacionales que correspondan.

PELIGROS NO CLASIFICADOS DE OTRO MODO: Not Applicable

SECCIÓN 3 COMPOSICIÓN/ INFORMACIÓN SOBRE LOS INGREDIENTES

COMPONENTES	NÚMERO DEL CAS	CANTIDAD
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Gasolina	86290-81-5	100 %vol/vol
Tolueno (metilbenceno)	108-88-3	1 - 35 %vol/vol
xileno (contiene los isómeros o-, m-, y p-xileno en cantidades variables)	1330-20-7	1 - 15 %vol/vol
pentano, 2,2,4-trimetil- (isooctano)	540-84-1	1 - 13 %vol/vol
Butano	106-97-8	1 - 12 %vol/vol
Etanol	64-17-5	0 - 10 %vol/vol
Benceno	71-43-2	0.1 - 4.9 %vol/vol
Hexano	110-54-3	1 - 5 %vol/vol
Heptano	142-82-5	1 - 4 %vol/vol
Etilbenceno	100-41-4	0.1 - 3 %vol/vol
Ciclohexano	110-82-7	1 - 3 %vol/vol
Naftaleno	91-20-3	0.1 - 2 %vol/vol
Metilciclohexano	108-87-2	1 - 2 %vol/vol

La EPA (Agencia de Protección del Medio Ambiente de los EE.UU.) considera que la gasolina para motores es una mezcla según la Ley para el Control de Sustancias Tóxicas (TSCA por sus siglas en inglés). Las corrientes de combustibles de refinería que se utilizan para mezclar la gasolina de motor aparecen todas en el Inventario de Sustancias Químicas de la TSCA. El número CAS que corresponde a la gasolina de motor mezclada en refinería es el 86290-81-5. Las especificaciones para productos con respecto a la gasolina de motor que se venda en su zona dependerán de los reglamentos federales, provinciales o estatales que correspondan.

SECCIÓN 4 MEDIDAS DE PRIMEROS AUXILIOS

Descripción de las medidas de primeros auxilios

Ojo: Lávese los ojos con agua inmediatamente manteniendo al mismo tiempo los párpados abiertos. Qúitese los lentes de contacto, si los trae puestos, después del lavado inicial y siga echándose agua por lo menos durante 15 minutos. Procure atención médica inmediatamente.

Piel: Lávese la piel con agua inmediatamente y quítese las ropas y los zapatos contaminados. Procure atención médica si sobreviene algún síntoma. Para quitarse la sustancia de la piel, use agua y jabón. Deseche la ropa y los zapatos contaminados o límpielos a cabalidad antes de volverlos a usar.

Ingestión: Si se traga, procure atención médica inmediatamente. No induzca el vómito. Nunca le dé nada por la boca a una persona inconsciente.


Inhalación: Mueva a la persona expuesta al aire fresco. Si no hay respiración, dé respiración artificial. Si la respiración se dificulta, proporcione oxígeno. Si las dificultades de respiración continúan o se desarrollan otros síntomas, obtenga atención médica.

Síntomas y efectos más importantes, tanto graves como retrasados

EFFECTOS INMEDIATOS PARA LA SALUD

Ojo: El contacto con los ojos causa irritación severa. Entre los síntomas se pueden encontrar dolor, lagrimeo, enrojecimiento, inflamación y dificultades visuales.

Piel: El contacto con la piel causa irritación. Entre los síntomas se pueden encontrar dolor, picazón, decoloración, inflamación y formación de ampollas. El contacto con la piel puede causar secamiento o desgrase de la piel. No se espera que el contacto con la piel cause una respuesta alérgica en la piel.

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Ingestión: Sumamente tóxico; puede ser fatal si se traga. A causa de su baja viscosidad, esta sustancia puede entrar directamente a los pulmones si se traga o al vomitarse posteriormente. Una vez que está en los pulmones, es muy difícil de extraer y puede causar lesiones severas o muerte. Puede irritar la boca, la garganta y el estómago. Entre los síntomas se pueden encontrar dolor, náusea, vómitos y diarrea.

Inhalación: La respiración excesiva o prolongada de esta sustancia puede causar efectos en el sistema nervioso central. Entre los efectos causados al sistema nervioso se pueden encontrar dolor de cabeza, aturdimiento, náusea, vómitos, debilidad, pérdida de coordinación, visión borrosa, somnolencia, confusión y desorientación. A exposiciones extremas, entre los efectos causados al sistema nervioso se pueden encontrar depresión respiratoria, temblores y convulsiones, pérdida del conocimiento, coma y muerte.

EFFECTOS RETARDADOS SOBRE LA SALUD O DE OTRO TIPO:

Defectos sobre la Reproducción y el Nacimiento: Contiene material que puede causar daño al nonato si se inhala arriba del límite de exposición recomendado.

Cáncer: La exposición repetida o prolongada a esta sustancia puede causar cáncer. La gasolina ha sido clasificada como Carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). Los gases de escape completo de motor de gasolina han sido clasificados como un carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). Contiene benceno, que ha sido clasificado como Carcinógeno por el Programa Nacional de Toxicología (NTP) de EE.UU. y como carcinógeno del Grupo 1 (carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC).

Contiene naftaleno, que ha sido clasificado como un carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Investigaciones sobre el Cáncer (IARC). Contiene etilbenceno que ha sido clasificado como Carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC).

Toxicidad Genética: Contiene sustancia que puede causar daño genético hereditario en base a datos provenientes de animales.

Órganos Blanco: Contiene material que puede causar daños al siguiente órgano u órganos por inhalación repetida en concentraciones superiores al límite de exposición recomendado: Sangre-Órganos Productores de Sangre. El riesgo depende de la duración y nivel de exposición. Busque más información en la sección 11.

Indicación de atención médica inmediata y tratamiento especial necesario

Nota para los Médicos: La ingestión de este producto o el vomitarla posteriormente puede resultar en la aspiración de líquido compuesto de hidrocarburos líquidos ligeros, lo cual puede causar neumonitis.

SECCIÓN 5 MEDIDAS PARA LA EXTINCIÓN DE INCENDIOS


MEDIOS EXTINTORES: Use niebla de agua, espuma, materiales químicos secos o dióxido de carbono (CO2) para extinguir las llamas.

Riesgos de incendio fuera de lo común: Busque en la sección 7 el modo adecuado de manejo y almacenamiento.

PROTECCIÓN DE LOS BOMBEROS:

Instrucciones para la Extinción de Incendios: Con respecto a los fuegos que tengan que ver con esta sustancia, no entre ningún espacio de incendio cerrado o confinado sin haberse puesto los adecuados equipos protectores, incluyendo aparato de respiración autónoma.

Productos de la Combustión: Depende mucho de las condiciones de combustión. Se puede desarrollar una mezcla compleja de sólidos, líquidos y gases aerotransportados, incluyendo monóxido de carbono, dióxido de carbono y compuestos orgánicos no identificados al combustionarse esta sustancia.

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SECCIÓN 6 MEDIDAS QUE DEBEN ADOPTARSE EN CASO DE LIBERACIÓN ACCIDENTAL

Medidas de Protección: Elimine todas las fuentes de ignición cerca del derrame o del vapor despedido. Si la sustancia se propaga al área de trabajo, evacúela inmediatamente. Vigile el área con el indicador de gas combustible.

Manejo de Derrames: Detenga la fuente de la emisión si lo puede hacer sin correr riesgo. Contenga la emisión para evitar la contaminación adicional de los terrenos, las aguas superficiales y las aguas subterráneas. Limpie el derrame lo más pronto posible, observando las precauciones que aparecen en Controles de Exposición-Protección Personal. Use las técnicas que correspondan tales como aplicar materiales absorbentes no combustibles o bombeo. Todos los equipos que se usen para manejar el producto deben tener conexión a tierra. Se puede usar espuma supresora de vapores para reducir éstos. Use herramientas limpias que no echan chispas para recolectar el material absorbido. Cuando sea factible y apropiado, quite y retire la tierra contaminada. Coloque los materiales contaminados en recipientes desechables y deséchelos observando los reglamentos correspondientes.

Reportes: Reporte los derrames a las autoridades locales y/o al Centro de Respuesta Nacional de la Guardia Costera de los EE.UU. al número de teléfono (800) 424-8802 según se exija o corresponda.

SECCIÓN 7 MANEJO Y ALMACENAMIENTO

Información sobre su Manejo en General: Evite contaminar la tierra o echar esta sustancia en los sistemas de desagüe o en los cuerpos de agua.


Medidas Precautorias: Este producto presenta un elevadísimo riesgo de incendio. El líquido se evapora muy rápidamente, incluso a bajas temperaturas y forma vapor (emanaciones) que pueden prender fuego e inflamarse con una violencia explosiva. El vapor invisible se propaga fácilmente y lo pueden encender diversas fuentes de ignición tales como luces piloto, equipos de soldadura y motores e interruptores eléctricos. Nunca saque gasolina chupándola por un sifón con la boca.

No lo guarde en recipientes abiertos o sin rotular. **LEA Y OBSERVE TODAS LAS PRECAUCIONES EN LA ETIQUETA DEL PRODUCTO.** No deje que le caiga en los ojos, en la piel o en la ropa. No deje que le caiga en los ojos. No lo pruebe ni lo trague. No respire vapores ni emanaciones. Lávese bien después de manipularlo. Manténgalo fuera del alcance de los niños.

Riesgo Estático: La descarga electrostática se puede acumular y crear una condición peligrosa cuando se maneja este material. Para minimizar este peligro, la unión y conexión a tierra puede ser necesaria, pero pueden ser insuficientes por sí solos. Revise todas las operaciones que tengan el potencial de generar y acumular una carga electrostática y/o una atmósfera inflamable (incluyendo las operaciones de llenado del tanque y recipiente, salpicaduras al llenar, limpieza del tanque, muestreos, calibración, cambios de carga, filtrado, mezclado, agitación y camión al vacío) y utilice los procedimientos mitigantes adecuados.

Advertencias Acerca de los Recipientes: El recipiente no está diseñado para contener presión. No use presión para vaciar el recipiente porque éste se puede quebrar o romper con fuerza explosiva. Los recipientes vacíos contienen residuos del producto (sólido, líquido y/o vapor) y pueden ser peligrosos. No presurice, corte, suelde de manera alguna, taladre, esmerile, triture ni esponga a dichos recipientes al calor, llamas, chispas, electricidad estática ni a ninguna otra fuente de ignición. Pueden explotar y causar lesiones o muerte. Los recipientes vacíos se deben vaciar escurriéndolos por completo, taponarlos de manera adecuada y devolverlos prontamente a un reacondicionador de bidones, o desecharlos como es debido.

Información sobre su Almacenamiento en General: NO LO/LA USE NI GUARDE cerca del calor, chispas, llamas ni superficies calientes. SOLAMENTE EN ÁREA BIEN VENTILADA. Mantenga el recipiente cerrado cuando no lo esté usando.

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SECCIÓN 8 CONTROLES DE EXPOSICIÓN/PROTECCIÓN PERSONAL

CONSIDERACIONES GENERALES:

Considere los peligros en potencia de este material (ver Sección 3), límites de exposición aplicables, actividades laborales, y otras sustancias en el centro de trabajo al diseñar controles tecnológicos y seleccionar los equipos protectores personales. Si los controles tecnológicos o las prácticas laborales no son adecuados para impedir la exposición a niveles nocivos de este material, se recomiendan los equipos protectores personales que aparecen a continuación. El usuario debe leer y entender todas las instrucciones y limitaciones que se suministran con los equipos ya que por lo general se provee protección durante un tiempo limitado o bajo ciertas circunstancias.

CONTROLES DE INGENIERÍA:

Use barreras de protección para encerrar el lugar donde se realiza el proceso, ventilación local de extracción y demás controles tecnológicos para mantener los niveles aerotransportados por debajo de los límites recomendados de exposición.

EQUIPO DE PROTECCIÓN PERSONAL

Protección de ojos/cara: Póngase equipos protectores para evitar contacto con los ojos. La selección de equipos protectores puede incluir gafas de seguridad, gafas de protección química, pantallas faciales o una combinación de estos equipos dependiendo de las operaciones laborales que se lleven a cabo.

Protección de la Piel: Póngase ropas protectoras para evitar el contacto con la piel. La selección de ropas protectoras puede incluir guantes, delantal, botas y protección facial completa dependiendo de las operaciones que se realicen. Los materiales que se sugieren para guantes protectores incluyen: Polietileno clorado (o polietileno clorosulfonado), Hule de Nitrilo, Poliuretano, Viton.


Protección Respiratoria: Determine si las concentraciones aerotransportadas están por debajo de los límites de exposición ocupacional recomendados para la jurisdicción donde se use. Si están por encima de éstos, póngase un respirador aprobado que le dé adecuada protección contra esta sustancia, tal como: Respirador con Purificación de Aire para Vapores Orgánicos.

Cuando se usa como combustible, esta sustancia puede producir monóxido de carbono en los gases de escape. Determine si las concentraciones aerotransportadas están por debajo del límite de exposición ocupacional para el monóxido de carbono. Si no lo están, póngase un respirador aprobado de suministro de aire a presión positiva.

Use un respirador de suministro de aire a presión positiva en circunstancias en las que los respiradores de purificación de aire tal vez no provean protección adecuada.

Límites de Exposición Ocupacional:

Componente	Agencia	TWA	STEL	Límite Tope	Notación
Gasolina	ACGIH	300 ppm (weight)	500 ppm (weight)	--	A3
Tolueno (metilbenceno)	ACGIH	50 ppm (weight)	--	--	Piel A4
Tolueno (metilbenceno)	OSHA Z-2	200 ppm (weight)	--	300 ppm (weight)	--
Xileno (contiene los isómeros o-, m-, y p-xileno en cantidades variables)	ACGIH	100 ppm (weight)	150 ppm (weight)	--	A4
Xileno (contiene los isómeros o-, m-,	OSHA Z-1	435 mg/m ³	--	--	--

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y p-xileno en cantidades variables)					
pentano, 2,2,4-trimetil- (isooctano)	OSHA Z-1	2350 mg/m3	--	--	--
pentano, 2,2,4-trimetil- (isooctano)	ACGIH	300 ppm (weight)	--	--	--
Butano	ACGIH	1000 ppm (weight)	--	--	--
Etanol	ACGIH	1000 ppm (weight)	--	--	A4 A3
Etanol	OSHA Z-1	1900 mg/m3	--	--	--
Benceno	ACGIH	.5 ppm (weight)	2.5 ppm (weight)	--	Piel A1 Piel
Benceno	OSHA SRS	1 ppm (weight)	5 ppm (weight)	--	--
Benceno	OSHA Z-2	10 ppm (weight)	--	25 ppm (weight)	--
Benceno	CVX	1 ppm (weight)	5 ppm (weight)	--	--
Hexano	ACGIH	50 ppm (weight)	--	--	Piel
Hexano	OSHA Z-1	1800 mg/m3	--	--	--
Heptano	ACGIH	400 ppm (weight)	500 ppm (weight)	--	--
Heptano	OSHA Z-1	2000 mg/m3	--	--	--
Etilbenceno	ACGIH	20 ppm (weight)	125 ppm (weight)	--	A3
Etilbenceno	OSHA Z-1	435 mg/m3	--	--	--
Ciclohexano	ACGIH	100 ppm (weight)	--	--	--
Ciclohexano	OSHA Z-1	1050 mg/m3	--	--	--
Naftaleno	ACGIH	10 ppm (weight)	15 ppm (weight)	--	Piel
Naftaleno	OSHA Z-1	50 mg/m3	--	--	--
Metilciclohexano	ACGIH	400 ppm (weight)	--	--	--
Metilciclohexano	OSHA Z-1	2000 mg/m3	--	--	--

Consultar la Norma del Benceno de la OSHA (29 CFR 1910.1028) y la Tabla Z-2 en lo que respecta a la capacitación detallada, el monitoreo de la exposición, la protección respiratoria y los requisitos de vigilancia médica antes de usar este producto. Consulte a las autoridades locales para averiguar cuáles son los valores adecuados.

SECCIÓN 9 PROPIEDADES FÍSICAS Y QUÍMICAS

Atención: los datos que aparecen a continuación son valores típicos y no constituyen una especificación.

Color: De incoloro a amarillo

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Estado físico: Líquido
 Olor: Olor del petróleo
 Umbral del olor: No Hay Datos Disponibles
 pH: No pertinente
 Presión de vapor: 5 psi (siglas en inglés de "presión por pulgada cuadrada") - 15 psi (siglas en inglés de "presión por pulgada cuadrada") (Típico) @ 37.8 °C (100 °F)
 Densidad de vapor (Aire = 1): 3 - 4 (Típico)
 Punto de ebullición inicial: 27.2°C (81°F) - 204.4°C (400°F) (Típico)
 Solubilidad: Insoluble en agua; miscible con la mayoría de los disolventes.
 Punto de congelación: No pertinente
 Punto de fusión: No pertinente
 Gravedad específica: 0.7 g/ml - 0.8 g/ml @ 15.6°C (60.1°F) (Típico)
 Viscosidad: <1 SUS @ 37.8°C (100°F)
 Tasa de evaporación: No Hay Datos Disponibles
 Temperatura de descomposición: No Hay Datos Disponibles
 octanol/agua, coeficiente de partición: 2 - 7

PROPIEDADES INFLAMABLES:

Inflamabilidad (sólido, gas): No Hay Datos Disponibles

Punto de Inflamación: (Taza Cerrada Tagliabue ASTM D58) < -45 °C (< -49 °F)

Autoignición: > 280 °C (> 536 °F)

Límites de Inflamabilidad (Explosivos) (% por volumen en aire): Inferior: 1.4 Superior: 7.6

SECCIÓN 10 ESTABILIDAD Y REACTIVIDAD

Reactividad: Puede reaccionar con los ácidos fuertes o los agentes oxidantes potentes, tales como cloratos, nitratos, peróxidos, etc.

Estabilidad Química: Esta sustancia se considera estable en condiciones de temperatura y presión anticipadas para su almacenaje y manipulación y condiciones normales de ambiente.

Incompatibilidad con Otros Materiales: No pertinente

Productos Peligrosos de la Descomposición: No se conoce ninguno/a (No se anticipa ninguno/a)

Polimerización Peligrosa: No experimentará polimerización peligrosa.

SECCIÓN 11 INFORMACIÓN TOXICOLÓGICA

Información sobre efectos toxicológicos

Irritación/Daño grave en el ojo: El riesgo de irritación ocular corresponde a la evaluación de datos con respecto a componentes de los productos.

Irritación/Corrosión de la piel: Para una exposición de 4 horas, el Índice de Irritación Primaria (PII) en los conejos es: 4.8/8.0.


Sensibilización de la Piel: Este material no causó reacciones de sensibilización de la piel en una prueba de Buehler en cobayos.

Toxicidad Dérmica Aguda: LD50: >3.75g/kg (conejo).

Toxicidad Oral Aguda: LD50: >5 ml/kg (rata)

Toxicidad por Inhalación Aguda: 4 hora(s) LD50: >20000mg/m3 (rata).

Estimación de toxicidad aguda: No determinado

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Mutagenia de células reproductoras: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

Carcinogenia: Consulte la INFORMACIÓN DE TOXICOLOGÍA ADICIONAL a continuación. La gasolina ha sido clasificada como Carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). Los gases de escape completo de motor de gasolina han sido clasificados como un carcinógeno del Grupo 2B (posiblemente carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC). Contiene benceno, que ha sido clasificado como carcinógeno por el Programa Nacional de Toxicología (NTP) de EE.UU. y como carcinógeno del Grupo 1 (carcinogénico para los humanos) por el Centro de Internacional de Investigaciones sobre el Cáncer (IARC).

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Toxicidad reproductiva: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.


Toxicidad específica para el órgano objetivo: exposición única: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

Toxicidad específica para el órgano objetivo: exposición reiterada: La evaluación de riesgos estuvo basada en datos de los componentes o de una sustancia similar.

INFORMACIÓN ADICIONAL DE TOXICOLOGÍA:

T_88_A - Gasolines are highly volatile and can produce significant concentrations of vapor at ambient temperatures. Gasoline vapor is heavier than air and at high concentrations may accumulate in confined spaces to present both safety and health hazards. When vapor exposures are low, or short duration and infrequent, such as during refueling and tanker loading/unloading, neither total hydrocarbon nor components such as benzene are likely to result in any adverse health effects. In situations such as accidents or spills where exposure to gasoline vapor is potentially high, attention should be paid to potential toxic effects of specific components. Information about specific components in gasoline can be found in Sections 2/3, 8 and 15 of this MSDS. More detailed information on the health hazards of specific gasoline components can be obtained calling the Chevron Emergency Information Center (see Section 1 for phone numbers).

El uso inadecuado patológico de solventes y gasolina, que involucran exposición prolongada y repetida a concentraciones altas de vapor es una exposición significativa sobre la que hay muchos reportes en la literatura médica. Como con otros solventes, el abuso persistente que involucra exposiciones prolongadas y repetidas a concentraciones altas de vapor se ha reportado que resultan en daño al sistema nervioso central y eventualmente, la muerte. En un estudio en el que diez voluntarios humanos se expusieron durante 30 minutos a concentraciones de vapor de gasolina de aproximadamente 200, 500 o 1000 ppm, el único efecto significativo observado fue irritación de los ojos, basado en evaluaciones tanto subjetivas como objetivas. La inhalación de por vida de gasolina sin plomo completamente vaporizada a 2056 ppm causó un aumento en los tumores del hígado de ratones hembra y cáncer en los riñones en ratas macho. La International Agency for Research on Cancer (IARC), en su revisión de 1988 de los riesgos carcinógenos de la gasolina indicó que debido a los estudios de epidemiología publicados, no incluyó ningún dato de exposición, solamente se revisaron ocupaciones en donde pudo haber ocurrido exposición a la gasolina. Éstos incluyeron a encargados de gasolineras y mecánicos de automóviles. La IARC también indicó que no hubo oportunidad de separar los efectos de los productos de combustión de aquéllos de la gasolina por sí sola. Aún cuando la IARC asignó a la


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gasolina una clasificación general de grupo 2B, i.e. posible carcinógeno para humanos, esto se basó en limitada evidencia con animales experimentales más evidencia soporte que incluye la presencia de benceno en la gasolina. La evidencia real de la carcinogenicidad en humanos se consideró inadecuada.

MUTAGENICIDAD: La gasolina no resultó ser mutagénica, tanto con activación como sin ella, en el ensayo de Ames (*Salmonella typhimurium*), *Saccharomyces cerevisiae*, o en los ensayos de linfoma de ratón. Además, no se indujeron mutaciones puntiformes en los linfocitos humanos. La gasolina no resultó ser mutagénica cuando se le puso a prueba con el ensayo de dominante letal de ratón. La administración de gasolina a las ratas no causó aberraciones cromosómicas en las células de la médula ósea.

EPIDEMIOLOGÍA: Para explorar los efectos en la salud de obreros potencialmente expuestos al vapor de gasolinas en los sectores de la comercialización y distribución de la industria del petróleo, el American Petroleum Institute patrocinó un estudio por cohorte de mortalidad (Publicación 4555), un estudio anidado de control de casos (Publicación 4551) y un estudio de evaluación de la exposición (Publicación 4552). La historias de exposición a la gasolina se reconstruyeron para crear un cohorte de más de 18,000 empleados de cuatro compañías para el período entre 1946 y 1985. Los resultados del estudio de mortalidad por cohorte indicaron que no aumentó la tasa de mortalidad, ni a causa del cáncer renal ni de leucemia, entre los empleados de mercadeo y de distribución marina que estuvieron expuestos a la gasolina en la industria del petróleo al compararlos con la población general. Más importante aun, sobre la base de comparaciones internas, no hubo asociación de la mortalidad debida al cáncer renal o a la leucemia con los diversos índices de exposición a la gasolina. En particular, ni la duración del empleo, la duración de la exposición, la edad a la primera exposición, año de la primera exposición, categoría laboral, exposición acumulativa, frecuencia de la exposición pico ni la intensidad promedio de exposición tuvieron efecto alguno sobre la mortalidad debida al cáncer renal o a leucemia. Los resultados del estudio anidado con control de casos confirmaron los hallazgos del estudio original con cohorte. O sea, que la exposición a la gasolina a los niveles experimentados por este cohorte de trabajadores en el sector de la distribución no constituye un factor de riesgo significativo para la leucemia (de todos los tipos celulares), la leucemia mielode agua, el cáncer renal ni para el mieloma múltiple. *T_31G - This product contains cyclohexane. Cyclohexane primarily affects the central nervous systems of laboratory animals and humans. Acute or prolonged inhalation of cyclohexane at levels below the recommended exposure limits does not result in toxic effects while acute exposures to levels above these recommended limits can cause reversible central nervous system depression. Prolonged exposures of laboratory animals to high levels (up to low thousands of parts per million) have also caused reversible effects which included hyperactivity, diminished response to stimuli, and adaptive liver changes while very high levels (high thousands of parts per million) were fatal. No developmental effects were seen in rats or rabbits following exposures of up to 7000 ppm cyclohexane. No reproductive effects occurred in rats, although postnatal pup growth was reduced at 7000 ppm in a similar manner as observed in the parental animals. Cyclohexane has not been shown to be mutagenic in several in vitro and in vivo assays and has not produced tumors in several dermal application long-term bioassays. Based on these results and the lack of any mutagenic or genotoxic metabolites, cyclohexane is not expected to be mutagenic or genotoxic. Following dermal exposure, cyclohexane is rapidly absorbed, metabolized, and excreted.* *T_31B - This product contains naphthalene.


GENERAL TOXICITY: Exposure to naphthalene has been reported to cause methemoglobinemia and/or hemolytic anemia, especially in humans deficient in the enzyme glucose-6-phosphate dehydrogenase. Laboratory animals given repeated oral doses of naphthalene have developed cataracts. **REPRODUCTIVE TOXICITY AND BIRTH DEFECTS:** Naphthalene did not cause birth defects when administered orally to rabbits, rats, and mice during pregnancy, but slightly reduced litter size in mice at dose levels that were lethal to the pregnant females. Naphthalene has been reported to cross the human placenta. **GENETIC TOXICITY:** Naphthalene caused chromosome aberrations and sister chromatid exchanges in Chinese hamster ovary cells, but was not a mutagen in several other in-vitro tests. **CARCINOGENICITY:** In a study conducted by the National Toxicology Program (NTP), mice exposed to 10 or 30 ppm of naphthalene by inhalation daily for two years had chronic inflammation of the nose and lungs and increased incidences of metaplasia in those tissues. The incidence of benign lung tumors (alveolar/bronchiolar adenomas) was significantly increased in the high-dose female group but not in the male groups. In another two-year inhalation study conducted by NTP, exposure of rats to 10, 30, and 60 ppm naphthalene caused increases in the incidences of a variety of nonneoplastic lesions in the nose. Increases in nasal tumors were seen in

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both sexes, including olfactory neuroblastomas in females at 60 ppm and adenomas of the respiratory epithelium in males at all exposure levels. The relevance of these effects to humans has not been established. No carcinogenic effect was reported in a 2-year feeding study in rats receiving naphthalene at 41 mg/kg/day." *T_38 - This product contains ethanol (ethyl alcohol).

Chronic ingestion of ethanol can damage the liver, nervous system and heart. Chronic heavy consumption of alcoholic beverages has been associated with an increased risk of cancer. Ingestion of ethanol during pregnancy can cause human birth defects such as fetal alcohol syndrome." *T_A18 - This product contains butane.

An atmospheric concentration of 100,000 ppm (10%) butane is not noticeably irritating to the eyes, nose or respiratory tract, but will produce slight dizziness in a few minutes of exposure. No chronic systemic effect has been reported from occupational exposure." Este producto contiene n-hexano. **TOXICIDAD SOBRE LOS ÓRGANOS BLANCO:** Se ha demostrado que la ingestión prolongada o repetida, el contacto con la piel y la respiración de vapores de n-hexano producen neuropatía periférica. La recuperación varía desde la ausencia de recuperación hasta la recuperación completa dependiendo de la severidad del daño a los nervios. Se ha demostrado que la exposición a 1000 ppm de n-hexano 18 horas/día durante 61 días causa daño testicular en las ratas. Sin embargo, cuando las ratas fueron expuestas a concentraciones más altas durante períodos diarios más cortos (10,000 ppm 6 horas/día, 5 días a la semana durante 13 semanas), no se observaron lesiones testiculares. **CARCINOGENICIDAD:** La exposición crónica al hexano comercial (52% de n-hexano) a una concentración de 9000 ppm no resultó Carcinogénica para las ratas ni los ratones machos, pero sí produjo una frecuencia más alta de tumores hepáticos en los ratones hembras. No se observaron efectos carcinogénicos en los ratones hembras expuestos a 900 ó 3000 ppm de hexano ni en los ratones machos. La importancia que pueden tener para los humanos estos tumores hepáticos inducidos por el hexano en ratones está en tela de juicio. **TOXICIDAD GENÉTICA:** El n-hexano produjo aberraciones cromosómicas en la médula ósea de ratas, pero produjo resultados negativos en las pruebas de AMES y del linfoma de ratón. Este producto contiene tolueno. **TOXICIDAD GENERAL:** Los efectos principales de la exposición al tolueno en animales y humanos afectan el sistema nervioso central. Las personas que abusan de disolventes, quienes típicamente inhalan altas concentraciones (miles de ppm) durante breves períodos, además de experimentar irritación de las vías respiratorias, a menudo padecen efectos permanentes en el sistema nervioso central, entre los que se encuentran temblores, marcha tambaleante, deterioro del habla, pérdida auditiva, visual y alteraciones del tejido cerebral. La muerte en algunos abusadores de disolventes ha sido atribuida a arritmias cardíacas, que parecen haber sido desencadenadas por la acción de la epinefrina sobre el tejido cardíaco sensibilizado por los disolventes. Aunque se han observado efectos sobre el hígado y los riñones de algunos abusadores de solventes, los resultados de las pruebas con tolueno en animales no respaldan que éstos sean órganos blanco primarios. **AUDICIÓN:** Los humanos que estuvieron expuestos ocupacionalmente a concentraciones de tolueno tan bajas incluso como 100 ppm durante períodos prolongados han experimentado déficits auditivos. La pérdida auditiva demostrada en pruebas electrofisiológicas y conductuales así como por observación del daño estructural de las células pilas cocleares, se presentó en animales de laboratorio expuestos al tolueno. También parece ser que la exposición al tolueno y el ruido pueden interactuar para producir déficits auditivos. **VISION DEL COLOR:** En un solo estudio de trabajadores expuestos al tolueno en concentraciones por debajo de 50 ppm, se reportaron pequeñas disminuciones en la capacidad para distinguir los colores en porción azul-amarillo del espectro en obreros del sexo femenino. Este efecto, que debería ser investigado más ampliamente, es muy sutil, y no es probable que lo hayan advertido las personas sometidas a las pruebas. **TOXICIDAD REPRODUCTIVA Y/O DEL DESARROLLO:** El tolueno puede causar retraso mental y/o del crecimiento en los hijos de abusadoras de disolventes que inhalen tolueno directamente (generalmente en concentraciones de miles de ppm) cuando están embarazadas. El tolueno causó retraso del crecimiento en ratas y conejos cuando se les administraron dosis que resultaron tóxicas para las madres. En las ratas, las concentraciones de hasta 5000 ppm no causaron defectos congénitos. No se observaron efectos en las crías a dosis que no causaron toxicidad a las madres. El nivel de exposición al cual no se observaron efectos ("Nivel al Cual No Se Observaron Efectos", o "NOEL" por sus siglas en inglés) es de 750 ppm en las ratas y 500 ppm en los conejos. Este producto contiene xileno. **TOXICIDAD AGUDA:** Los efectos primarios de la exposición al xileno en animales y humanos recaen sobre el sistema nervioso central. Además, en algunos

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individuos, la exposición al xileno puede sensibilizar el tejido cardíaco a la epinefrina, lo cual puede precipitar una fibrilación ventricular fatal. **TOXICIDAD DEL DESARROLLO:** Se ha reportado que el xileno causa toxicidad del desarrollo en ratas y ratones expuestos por inhalación durante el embarazo. Los efectos advertidos consistieron en retraso del desarrollo y variaciones esqueléticas menores. Además, cuando las ratonas preñadas fueron expuestas por ingestión a un nivel que mató a casi un tercio del grupo de prueba, hubo letalidad (reabsorciones) así como malformaciones (principalmente paladar hendido). Como el xileno puede cruzar la placenta, quizá sea apropiado impedir que haya exposición durante el embarazo. *T_A34A - GENETIC TOXICITY/CARCINOGENICITY: Xylene was not genotoxic in several mutagenicity testing assays including the Ames test. In a cancer study sponsored by the National Toxicology Program (NTP), technical grade xylene gave no evidence of carcinogenicity in rats or mice dosed daily for two years. **HEARING:** Mixed xylenes have been shown to cause measurable hearing loss in rats exposed to 800 ppm in the air for 14 hours per day for six weeks. Exposure to 1450 ppm xylene for 8 hours caused hearing loss while exposure to 1700 ppm for 4 hours did not. Although no information is available for lower concentrations, other chemicals that cause hearing loss in rats at relatively high concentrations do not cause hearing loss in rats at low concentrations. Worker exposure to xylenes at the permissible exposure limit (100 ppm, time-weighted average) is not expected to cause hearing loss.* Este producto contiene benceno. **TOXICIDAD GENÉTICA/CÁNCER:** Se ha asociado la respiración repetida o prolongada del vapor de benceno con el desarrollo de daños cromosómicos en animales experimentales y de diversas patologías de la sangre en los seres humanos que van desde la anemia aplásica hasta la leucemia (una forma de cáncer). Todas estas enfermedades pueden ser fatales. En algunas personas, la exposición al benceno puede sensibilizar el tejido cardíaco a la epinefrina, lo cual puede precipitar una fibrilación ventricular fatal. **TOXICIDAD REPRODUCTIVA Y DEL DESARROLLO :** No se ha demostrado que ocurran defectos congénitos en animales de laboratorio en estado de gestación expuestos a dosis que no le son tóxicas a la madre. Sin embargo, se ha observado alguna evidencia de toxicidad fetal tal como retraso del desarrollo físico a esos niveles. La información que existe sobre los efectos del benceno en los embarazos humanos es inadecuada pero se ha establecido que el benceno puede cruzar la placenta humana. **OCUPACIONAL:** La Norma de la OSHA para el Benceno (29 CFR 1910.1028) contiene requisitos detallados en cuanto a la capacitación, supervisión de la exposición, protección respiratoria y vigilancia médica motivadas por el nivel de exposición. Remítase a la Norma de la OSHA antes de usar este producto. Este producto contiene etilbenceno. *T_34 - BIRTH DEFECTS AND REPRODUCTION: Ethylbenzene is not expected to cause birth defects or other developmental effects based on well-conducted studies in rabbits and rats sponsored by NIOSH. Other studies in rats and mice which reported urinary tract malformations have many deficiencies and have limited usefulness in evaluating human risk. Reproductive effects are not expected based on a NIOSH study of fertility, and lack of effects observed for sperm counts and motility, estrous cycle and pathology of reproductive organs following repeated exposures. **HEARING:** Statistically significant losses in outer hair cells (OHCs) were observed in rats exposed to >=200 ppm ethylbenzene, 6 hours/day, 6 days/week for 13 weeks, after an 8-week recovery period. Following longer exposure, inner hair cells losses were also observed in rats exposed to >= 600 ppm ethylbenzene, but only occasionally in rats exposed to 400 ppm. The Lowest Observed Adverse Effect Level in rats (LOAEL) was 200 ppm for losses of OHCs. Guinea pigs exposed to ethylbenzene at 2,500 ppm, 6 hours/day for 5 days did not show auditory deficits or losses in OHCs. The concentration of ethylbenzene used in the JP-8 study was approximately 10 ppm.* *T_34A - GENETIC TOXICITY: Ethylbenzene tested negative in the bacterial mutation test, Chinese Hamster Ovary (CHO) cell in vitro assay, sister chromatid exchange assay and an unscheduled DNA synthesis assay. Conflicting results have been reported for the mouse lymphoma cell assay. Increased micronuclei were reported in an in vitro Syrian hamster embryo cell assay; however, two in vivo micronuclei studies in mice were negative. In Syrian hamster embryo cells in vitro, cell transformation was observed at 7 days of incubation but not at 24 hours. Based on these results, ethylbenzene is not expected to be mutagenic or clastogenic. **CARCINOGENICITY:** In studies conducted by the National Toxicology Program, rats and mice were exposed to ethylbenzene at 25, 250 and 750 ppm for six hours per day, five days per week for 103 weeks. In rats exposed to 750 ppm, the incidence of kidney tubule hyperplasia and tumors was increased. Testicular tumors develop spontaneously in nearly all rats if allowed to complete their natural life span; in this study, the development of these tumors appeared to be enhanced in male rats exposed to 750 ppm. In

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mice, the incidences of lung tumors in males and liver tumors in females exposed to 750 ppm were increased as compared to control mice but were within the range of incidences observed historically in control mice. Other liver effects were observed in male mice exposed to 250 and 750 ppm. The incidences of hyperplasia were increased in the pituitary gland in female mice at 250 and 750 ppm and in the thyroid in male and female mice at 750 ppm.*

SECCIÓN 12 INFORMACIÓN ECOLÓGICA

ECOTOXICIDAD

Se espera que este material sea tóxico para los organismos acuáticos y puede causar efectos adversos a largo plazo en el medio ambiente acuático.

96 hora(s) LC50: 2.7 mg/l (Oncorhynchus mykiss)
 96 hora(s) LC50: 1.8 mg/l (Mysidopsis bahia)
 96 hora(s) LC50: 8.3 mg/l (Cyprinodon variegatus)
 48 hora(s) LC50: 3.0 mg/l (Daphnia magna)

MOBILIDAD

No Hay Datos Disponibles.

PERSISTENCIA Y DEGRADABILIDAD

Se anticipa que esta sustancia sea fácilmente biodegradable. Después de un derrame, los componentes más volátiles de la gasolina se pierden rápidamente, con la concurrente disolución de éstos y demás constituyentes en el agua. Factores tales como las condiciones ambientales locales (temperatura, viento, acción de mezcla o del oleaje, tipo de suelos, etc.), fotooxidación, biodegradación y adsorción a sedimentos suspendidos, pueden contribuir a la alteración por exposición a la intemperie de la gasolina derramada. La acuosolubilidad de la gasolina sin plomo no oxigenada, en base al análisis del benceno, tolueno, etilbenceno + xilenos y naftaleno, se ha reportado ser 112 mg/l. También hay datos disponibles de solubilidad sobre componentes de la gasolina considerados individualmente.

POTENCIAL DE BIOACUMULARSE

factor de bioconcentración: No Hay Datos Disponibles.
 octanol/agua, coeficiente de partición: 2 - 7


SECCIÓN 13 CONSIDERACIONES ACERCA DE LA ELIMINACIÓN FINAL

Use la sustancia o material para el propósito para el cual estaba destinada o recíclala de ser posible. Este material, si hay que desecharlo, talvez cumpla los criterios que clasifican un desecho peligroso según la definición de leyes y reglamentos internacionales, nacionales o locales. Verificar la reglamentación gubernamental y con las autoridades locales sobre la manera aprobada para desechar este material.

SECCIÓN 14 INFORMACIÓN SOBRE EL TRANSPORTE

La descripción que aparece talvez no sea aplicable a todas las situaciones de los envíos. Consulte el 49CFR, o los correspondientes Reglamentos para Artículos Peligrosos con el fin de buscar requisitos adicionales para la descripción (por ejemplo, el nombre técnico) y requisitos de envío específicos en cuanto a la modalidad o a la cantidad.

Descripción de Embarque del DOT: UN1203, GASOLINE, 3, II; OPTIONAL DISCLOSURE: UN1203, GASOLINE, 3, II, MARINE POLLUTANT (GASOLINE)

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Descripción de Envío IMO/IMDG: UN1203, GASOLINE, 3, II, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (GASOLINE)

Descripción de embarque ICAO/IATA: UN1203, GASOLINE, 3, II

Transporte a granel de acuerdo con el Anexo II de MARPOL 73/78 y el código IBC:
No corresponde

SECCIÓN 15 INFORMACIÓN REGULATORIA

CATEGORÍAS DE ACUERDO CON LA Sección 311/312 DE LA EPCRA:

(Agudos) en la Salud:	SÍ	1. Efectos Inmediatos	
		2. Efectos Retrasados (Crónicos) en la Salud:	SÍ
		3. Peligro de incendio:	SÍ
		4. Peligro por Liberación Súbita de Presión:	NO
		5. Peligro por Reactividad:	NO

LISTAS REGULATORIAS BUSCADAS:


01-1-IARC Grupo 1	03-EPCRA 313
01-2A-IARC Grupo 2A	04-CA Proposition 65
01-2B-IARC Grupo 2B	05-MA RTK
02-NTP Carcinogen	06-NJ RTK
	07-PA RTK

Los siguientes componentes de esta sustancia se encuentran en las listas reglamentarias que se indican.

Naftaleno	01-2B, 02, 03, 04, 05, 06, 07
Ciclohexano	03, 05, 06, 07
Heptano	05, 06, 07
Tolueno (metilbenceno)	03, 04, 05, 06, 07
Etilbenceno	01-2B, 03, 04, 05, 06, 07
Metilciclohexano	05, 06, 07
Hexano	03, 05, 06, 07
Butano	05, 06, 07
xileno (contiene los isómeros o-, m-, y p-xileno en cantidades variables)	03, 05, 06, 07
pentano, 2,2,4-trimetil- (isooctano)	05, 06, 07
Etanol	01-1, 02, 04, 05, 06, 07
Gasolina	01-2B, 06, 07
Benceno	01-1, 02, 03, 04, 05, 06, 07

CANTIDADES REPORTABLES CERCLA(RQ)/EPCRA 302 CANTIDADES DE PLANIFICACIÓN DEL UMBRAL(TPQ):

Componente	Cantidad Reportable del Componente	Cantidad de Planeación Umbral	de del	Cantidad Reportable (RQ) del Producto

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		Componente	
Benceno	10 lbs	Ninguno	186 lbs
Ciclohexano	1000 lbs	Ninguno	34188 lbs
Etilbenceno	1000 lbs	Ninguno	34964 lbs
Hexano	5000 lbs	Ninguno	129149 lbs
Naftaleno	100 lbs	Ninguno	4000 lbs
pentano, 2,2,4-trimetil- (isooctano)	1000 lbs	Ninguno	6270 lbs
Tolueno (metilbenceno)	1000 lbs	Ninguno	2627 lbs
xileno (contiene los isómeros o-, m-, y p-xileno en cantidades variables)	100 lbs	Ninguno	649 lbs

INVENTARIOS QUÍMICOS:

Todos los componentes cumplen con los siguientes requisitos de inventario de productos químicos: AICS (Australia), DSL (Canadá), EINECS (Union Europea), ENCS (Japón), IECS (China), KECI (Corea), PICCS (Filipinas), TSCA (Estados Unidos).


SECCIÓN 16 OTRA INFORMACIÓN

EVALUACIONES DE LA NFPA: Salud: 1 Inflamabilidad: 4 Reactividad: 0

EVALUACIONES HMIS: Salud: 2* Inflamabilidad: 4 Reactividad: 0
(0-Mínimo, 1-Leve, 2-Moderado, 3-Alto, 4-Extremo, PPE:- recomendación del Índice de Equipo de Protección Personal, *- Indicador del Efecto Crónico). Estos valores se obtienen utilizando las pautas o las evaluaciones publicadas elaboradas por la Asociación Nacional de Protección Contra Incendios (NFPA) o por la Asociación Nacional de Pinturas y Recubrimientos (en lo que respecta a las clasificaciones del Sistema de Identificación de Materiales Peligrosos (HMIS)).

Número(s) de Producto(s) Adicional(es): CPS201024, CPS201050, CPS201051, CPS201058, CPS201060, CPS201061, CPS201066, CPS201068, CPS201069, CPS201071, CPS201072, CPS201078, CPS201081, CPS201084, CPS201085, CPS201088, CPS201091, CPS201092, CPS201094, CPS201096, CPS201097, CPS201098, CPS201101, CPS201103, CPS201114, CPS201117, CPS201193, CPS201213, CPS201214, CPS201215, CPS201233, CPS201234, CPS201235, CPS201263, CPS201264, CPS201265, CPS201274, CPS201275, CPS201276, CPS201283, CPS201284, CPS201285, CPS201293, CPS201294, CPS201295, CPS201853, CPS201854, CPS201861, CPS201862, CPS201863, CPS204006, CPS204007, CPS204008, CPS204009, CPS204014, CPS204015, CPS204026, CPS204027, CPS204050, CPS204051, CPS204074, CPS204075, CPS204092, CPS204093, CPS204108, CPS204109, CPS204120, CPS204121, CPS204144, CPS204145, CPS204168, CPS204169, CPS204192, CPS204193, CPS204204, CPS204205, CPS204211, CPS204216, CPS204217, CPS204228, CPS204229, CPS204252, CPS204253, CPS204276, CPS204277, CPS204294, CPS204295, CPS204327, CPS204328, CPS204329, CPS204351, CPS204353, CPS204355, CPS204357, CPS204362, CPS204363, CPS204368, CPS204369, CPS204374, CPS204375, CPS204380, CPS204381, CPS204386, CPS204387, CPS204392, CPS204393, CPS204398, CPS204399, CPS204404, CPS204405, CPS204410, CPS204411, CPS204416, CPS204417, CPS204422, CPS204423, CPS204428, CPS204429, CPS204434, CPS204435, CPS204440, CPS204441, CPS204443, CPS204447, CPS204451, CPS204455, CPS204459, CPS204463, CPS204470, CPS204471, CPS204488, CPS204489, CPS204506, CPS204507, CPS204524, CPS204525, CPS204542, CPS204543, CPS204560, CPS204561, CPS204578, CPS204579, CPS204596, CPS204597, CPS204614, CPS204615, CPS204632, CPS204633, CPS204650, CPS204651, CPS204668, CPS204669, CPS204683, CPS204694, CPS204695, CPS204700, CPS204701, CPS204706, CPS204707, CPS204712, CPS204713, CPS204725, CPS204726, CPS204731, CPS204732, CPS204741, CPS241768

DECLARACIÓN DE REVISIÓN: Esta revisión actualiza las siguientes secciones de esta Hoja de Datos de Seguridad (SDS): 1-16

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ABREVIATURAS QUE PUEDEN HABER SIDO UTILIZADAS EN ESTE DOCUMENTO:

TLV - Valor Limite Umbral	TWA - Tiempo Promedio Ponderado
STEL - Limite de Exposición a Corto Plazo	PEL - Limite Permisible de Exposición
GHS - Sistema mundialmente armonizado	CAS - Número del Servicio de Abstractos Químicos
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Hoja de Datos de Seguridad
HMSIS - Sistema de Información sobre materiales peligrosos	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - Nuevo Limite de Exposición Química	EPA - Agencia de Protección Ambiental
SCBA - Aparato de respiración autónoma	

Preparados de acuerdo con el 29 CFR 1910.1200 (2012) por Chevron Energy Technology Company, 8001 Bollinger Canyon Road San Ramon, CA 94583.

La anterior información se basa en los datos que conocemos y que se cree eran correctos en la fecha de la presente comunicación. Ya que esta información se puede aplicar en condiciones que están fuera de nuestro control y con las cuales talvez no estemos familiarizados y en vista de que los datos que se hayan publicado posteriormente a la fecha de la presente talvez sugieran modificaciones a la información, no asumimos responsabilidad alguna por los resultados de su uso. Esta información se suministra a condición de que la persona que la reciba tome su propia determinación sobre la idoneidad de la sustancia o material para su propósito particular.

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1


APPENDIX VII - Safety Data Sheet for Sodium Hypochlorite in Solution ¹²

AQUA HS AL 12%p/v
FICHA DE DATOS DE SEGURIDAD (MSDS)


EMPRESA CERTIFICADA
ISO 9001-2008

SECCIÓN 1 - IDENTIFICACIÓN DE LA SUSTANCIA/FABRICANTE	
NOMBRE:	AQUA HS AL 12% p/v
USO DEL PRODUCTO:	DESINFECTANTE CLORADO
INGREDIENTE ACTIVO:	SOLUCIÓN DE HIPOCLORITO DE SODIO AL 12% p/v
FABRICANTE:	RC QUÍMICA REPRESENTACIONES, S.A.
DIRECCIÓN:	4 Av. D-55 Zona 8 de Mixco, Sector B-5 Ciudad San Cristóbal, Guatemala.
TELÉFONO:	(502) 2381-0202
FECHA DE REVISIÓN:	Diciembre 2017
SECCIÓN 2 - COMPOSICIÓN SOBRE LOS INGREDIENTES PELIGROSOS	
IDENTIDAD QUÍMICA	CAS #
HIPOCLORITO DE SODIO	7681-52-9
	PORCENTAJE (%)
	12 p/v
SECCIÓN 3 - IDENTIFICACIÓN DE LOS RIESGOS	
COTACTO PRIMARIO: Contacto con la piel.	
<p>N.F.P.A.</p>	
<p>OJOS: Puede causar irritación, enrojecimiento y quemaduras.</p> <p>INHALACIÓN: La inhalación continua puede producir mareos, náuseas e irritación en las vías respiratorias.</p> <p>INGESTIÓN: Puede producir dolor abdominal, irritación en la garganta y náuseas. Puede quemar el tracto digestivo.</p> <p>PIEL: Produce resequedad en la piel, enrojecimiento e irritación. Puede producir quemaduras en la piel.</p>	
SECCIÓN 4 - PRIMEROS AUXILIOS	
<p>OJOS: Lavar con agua por un mínimo de 15 minutos con los párpados bien abiertos.</p> <p>INHALACIÓN: Sacar a la víctima al aire fresco. Si la respiración es dificultosa, suministrar oxígeno.</p> <p>INGESTIÓN: Si la persona está consciente dar a beber abundante agua, de preferencia leche. No induzca al vómito.</p> <p>PIEL: Lavar con abundante agua y jabón.</p> <p>En cualquiera de los casos anteriores si los síntomas persisten prestar asistencia médica inmediata.</p>	

¹² SDS Hipoclorito de Sodio – Source – RC Química

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

SECCIÓN 5 - MEDIDAS DE LUCHA CONTRA INCENDIOS	
Medios de extinción adecuados:	Usar un método adecuado de extinción a los alrededores.
Medios de extinción no adecuados:	No aplica.
Riesgos especiales en caso de incendio:	Por sí solo no es inflamable. Pero el fuego de los alrededores puede calentar la solución y generar gases tóxicos además de inflar el recipiente y corre el riesgo de explosión.
Equipo de protección personal:	Usar equipo de protección completo contra incendios. Y equipo de protección contra gases.
SECCIÓN 6 - MEDIDAS A TOMAR EN CASO DE DERRAME ACCIDENTAL	
Precaución personal:	Equipo de protección personal: mascarilla, guates, lentes de seguridad, botas de hule y ropa adecuada para evitar el contacto con la piel.
Precauciones para el medio ambiente:	No permitir el ingreso a fuentes de agua de consumo humano.
Métodos y procedimientos de limpieza:	Ventilar el área. Usar equipo de protección personal completo. Lavar con abundante agua en caso de que el derrame sea leve, de lo contrario absorba el derrame con material inerte (arena, arcilla, etc.), puede reducir desechos con agentes de bisulfitos o sal ferrosa, luego deseché como sea permitido por las autoridades locales.
SECCIÓN 7 - MANIPULACIÓN Y ALMACENAMIENTO	
Manipulación:	Utilice con el debido equipo de protección. Deseche los envases al terminar el producto, ya que este al entrar en contacto con algunos otros productos podría presentar una reacción violenta. Al momento de utilizar el producto asegúrese de que no sean áreas con mala ventilación, ya que a altas concentraciones podría causar daños en el tracto respiratorio.
Almacenamiento:	Almacenar en lugares frescos y secos. Alejado de agentes incompatibles como ácidos o reductores. Mantenga fuera del alcance de los niños.
SECCIÓN 8 - CONTROL DE EXPOSICIÓN/PROTECCIÓN PERSONAL	
Ventilación:	Manipular en recintos ventilados adecuadamente, ya sea ventilación normal o mecánica.
Protección respiratoria:	Mascara con filtro para vapores de cloro, en lugares con mala ventilación.
Ropa y equipo protector:	Guantes y ropa de nitrilo o caucho, para evitar contacto directo con la piel.
Protección de ojos:	Gafas de seguridad para evitar riesgos por salpicaduras.
SECCIÓN 9 - PROPIEDADES FÍSICOQUÍMICAS DEL PRODUCTO:	
Aspecto:	Líquido
Color:	Amarillo libre de impurezas
Olor:	Cloro
pH:	12.5 - 13.5
Densidad (15 - 20°C):	1.10 - 1.20 g/mL

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1

Temperatura de ebullición: 110 °C		
Solubilidad en agua: Soluble		
SECCIÓN 10 - ESTABILIDAD Y REACTIVIDAD		
Estabilidad Química: Se descompone lentamente al contacto con el aire, esto afecta directamente en la concentración del producto.		
Descomposición peligrosa de derivados: Cuando es calentado, puede emitir vapores tóxicos de cloro ácido hipocloroso y ácido clorhídrico.		
Incompatibilidad: Amoníaco, aminas, sales de amonio, metales oxidables, ácidos y jabones.		
Polimerización peligrosa: No ocurrirá.		
SECCIÓN 11 - INFORMACIÓN TOXICOLÓGICA		
TOXICIDAD: Los efectos tóxicos del hipoclorito de sodio, se deben al alto grado de corrosión que puede llegar a provocar y también puede causar daño en el tracto respiratorio si inhala los vapores que desprende.		
Para el ingrediente activo al 12%		
LD50(Oral, rata): Aproximadamente 12mg/kg.		
Conejo, ojo: 10mg produce irritación moderada.		
SECCIÓN 12 - INFORMACIÓN ECOLÓGICA		
No permitir que ingrese producto concentrado a fuentes de agua, ya que por su alta alcalinidad, podría resultar nocivo para la vida acuática.		
SECCIÓN 13 - CONSIDERACIÓN SOBRE SU DISPOSICIÓN		
Ventile el área. El personal que lo recoja debe de contar el debido equipo de seguridad. Recoja el líquido con material inerte. Lavar el remanente con abundante agua controlando el pH. Reduzca el desecho con agentes como bisulfitos o soluciones de sal ferrosa. Luego diluya. Deseche como sea permitido por las autoridades locales.		
SECCIÓN 14 - INFORMACIÓN DE TRANSPORTE		
CLASIFICACION DEL DOT: (8) Líquido Corrosivo		
SECCIÓN 15 - INFORMACIÓN REGULATORIA		
Ninguna determinada.		
SECCIÓN 16 - OTRA INFORMACIÓN		
La información contenida en esta MSDS es correcta y proporcionada para el uso del producto descrito, sin embargo, el DEPARTAMENTO DE CONTROL DE CALIDAD no se hace responsable por el posible uso correcto o incorrecto que se le dé a dicha información. Es obligación del usuario la interpretación y aplicación de la información proporcionada.		
PREPARADO POR: DEPARTAMENTO DE CONTROL DE CALIDAD	TEL: (502) 2381-0202 Ext 117 controldecaldad@rcquimica.com	
TELÉFONOS DE EMERGENCIA:		
GUATEMALA Bomberos: 122, 123, 911 Centro de Toxicología: (502) 2251-3560 (502) 2230-0807 1-801-0029832 info@rcquimica.com	EL SALVADOR Bomberos: 911,(503)25557300 Centro de Toxicología: (503) 2205-71-97 elsalvador@rcquimica.com	HONDURAS Bomberos/ Emergencias 911 honduras@rcquimica.com
NICARAGUA Bomberos: 115 y 120 Centro de Toxicología: (505) 2289-71-50 (505) 2289-33-28 nicaragua@rcquimica.com	COSTA RICA San José, Costa Rica Emergencias: 911 Centro de Toxicología (506) 2223-1028 costarica@rcquimica.com	

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
	INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE	December-2019	1


APPENDIX VIII - Muriatic Acid Safety Data Sheet ¹³

ACIDO MURIÁTICO


FICHA DE DATOS DE SEGURIDAD (MSDS)

EMPRESA CERTIFICADA
ISO 9001-2008


SECCIÓN 1 - IDENTIFICACIÓN DE LA SUSTANCIA/FABRICANTE		
NOMBRE:	Ácido Muriático	
USO DEL PRODUCTO:	Varios	
INGREDIENTE ACTIVO:	Ácido Clorhídrico	
FABRICANTE:	RC QUÍMICA REPRESENTACIONES, S.A.	
DIRECCIÓN:	4 Av. 0-55 Zona 8 de Mixco, Sector B-5 Ciudad San Cristóbal, Guatemala.	
TELÉFONO:	(502) 2381-0202	
FECHA DE REVISIÓN:	Octubre 2016	
SECCIÓN 2 - COMPOSICIÓN SOBRE LOS INGREDIENTES PELIGROSOS		
IDENTIDAD QUÍMICA	CAS#	PORCENTAJE %
Ácido Clorhídrico 30 - 34%	7647 - 01 - 0	30 - 34
SECCIÓN 3 - IDENTIFICACIÓN DE LOS RIESGOS		
<p>COTACTO PRIMARIO: Contacto con la piel.</p> <p style="text-align: center;">N.F.P.A.</p> <div style="display: flex; justify-content: center; align-items: center;"> <div style="margin-right: 20px;"> <p>RIESGO A LA SALUD</p> <p>4 Fatal 3 Extremadamente peligroso 2 Peligroso 1 Menor riesgo 0 No es peligroso</p> </div> <div style="margin-right: 20px;"> <p>RIESGO DE AMBIENTE</p> <p>OXI Oxidante ACID Ácido ALC Alambros CORR Corrosivo NF No es reactivo con agua HAB Material explosivo</p> </div> <div style="text-align: center;"> </div> <div> <p>INFLAMABILIDAD</p> <p>4 Extremadamente inflamable 3 Inflamable 2 Combustible 1 Combustible en caliente 0 No es inflamable</p> <p>REACTIVIDAD</p> <p>4 Puede causar explosión severa 3 Puede causar explosión de una fuente de calor 2 Puede causar explosión 1 Inestable en caliente 0 Estable</p> </div> </div>		
OJOS:	Puede causar quemaduras severas y ceguera permanente.	
INHALACIÓN:	La inhalación continua puede producir mareos, náuseas y falta de coordinación. Quemaduras en el tracto respiratorio y edema pulmonar.	
INGESTIÓN:	Produce quemaduras severas en el tracto digestivo, vómitos, mareos y puede ser fatal.	
PIEL:	Produce quemaduras graves en la piel y puede provocar amputaciones.	
SECCIÓN 4 - PRIMEROS AUXILIOS		
OJOS:	Lavar con agua por un mínimo de 15 minutos con los párpados bien abiertos. En lo posible con una solución de bicarbonato de sodio.	
INHALACIÓN:	Sacar a la persona al aire fresco, si es necesario brindar respiración artificial y mantener en reposo.	
INGESTIÓN:	Si la persona está consciente dar a beber abundante agua y de preferencia leche. No induzca al vómito. Se puede suministrar un poco de leche de magnesia para aliviar el ardor en la garganta. Su ingestión puede ser fatal.	
PIEL:	Remover la ropa contaminada y lavar el área afectada con agua y jabón.	
*En cualquiera de los casos si los síntomas persisten brindar atención médica inmediata.		

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
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SECCIÓN 5 - MEDIDAS DE LUCHA CONTRA INCENDIOS	
Medios de extinción adecuados:	Polvo seco, espuma, CO ₂ , Neblina de agua.
Medios de extinción no adecuados:	N.D.
Riesgos especiales en caso de incendio:	No es un producto inflamable, pero se pueden producir gases tóxicos si se encuentra en medio de un incendio.
Equipo de protección personal:	Usar equipo de protección autónomo, y ropa adecuada para evitar contacto directo con la piel. Retirar al personal que no cuente con el EPP adecuado.
SECCIÓN 6 - MEDIDAS A TOMAR EN CASO DE DERRAME ACCIDENTAL	
Precaución personal:	Utilice EPP para su manipulación, no manipular cerca de metales así como de materiales oxidantes.
Precauciones para el medio ambiente:	Realizar un manejo adecuado para evitar el derrame y contaminación de corrientes de agua. Baja considerablemente el pH del agua, lo que puede ser fatal para la vida acuática.
Métodos y procedimientos de limpieza:	Construir un dique localizado, con trapos u otro material inerte del que se pueda disponer inmediatamente (siempre que no sea metálico). Absorber el derrame con material inerte (arena, arcilla, etc.), luego colocarlo en un contenedor para neutralizarlo y posteriormente desecharlo como sea permitido por las autoridades locales. En cantidades menores, se puede lavar con abundante agua. La neutralización se puede realizar con bicarbonato de sodio (provocará abundante espuma, cuando la espuma cese, significa que está neutralizado), soda ash o soda cáustica en solución. *Todo el personal que no cuente con el EPP adecuado, debe ser retirado del lugar.
SECCIÓN 7 - MANIPULACIÓN Y ALMACENAMIENTO	
Manipulación:	Verifique que el envase no tenga fugas. No sacudir el envase. En el momento de transportar el envase, no debe ser lanzado de un operario a otro. Y utilizar el equipo de protección personal para manipular el producto.
Almacenamiento:	Almacenar en lugares frescos, secos y seguros. Mantenga fuera del alcance de los niños. No almacenar cerca de productos oxidantes y el envase bien cerrado.
SECCIÓN 8 - CONTROL DE EXPOSICIÓN/PROTECCIÓN PERSONAL	
Ventilación:	Verificar que exista una ventilación adecuada en el lugar donde se usará el producto porque puede existir acumulación de vapores.
Protección respiratoria:	Utilizar la mascarilla adecuada (gases), se debe utilizar la <i>full-face</i> .
Ropa y equipo protector:	Guantes para evitar el contacto con la piel, gabacha de vinil, botas de hule.
Protección de ojos:	Gafas de seguridad para evitar riesgos por salpicaduras. Si y sólo si se cuenta con la máscara <i>full-face</i> , no se requerirá el uso de lentes.
Medidas de higiene:	Lavarse bien con agua y jabón después de utilizar el producto y antes de realizar otra actividad.

	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
INTERMARIS	ROATAN CRUISE TERMINAL	GENERAL DIRECTORATE OF THE MERCHANT MARINE		December-2019	1

SECCIÓN 9 - PROPIEDADES FÍSICOQUÍMICAS DEL PRODUCTO:		
Aspecto:	Líquido	pH: 0 - 1
Color:	Claro a amarillo	Densidad (15 - 20°C): 1.16 - 1.18 g/mL
Olor:	No aplica	Solubilidad en agua: Completa
SECCIÓN 10 - ESTABILIDAD Y REACTIVIDAD		
Estabilidad Química:	Estable en condiciones normales de almacenaje.	
Descomposición peligrosa de derivados:	Puede liberar vapores tóxicos.	
Incompatibilidad:	Oxidantes, halógenos, percloratos, peróxidos	
Polimerización peligrosa:	No ocurrirá.	
SECCIÓN 11 - INFORMACIÓN TOXICOLÓGICA		
La inhalación de los vapores puede causar tos, inflamación de la nariz y garganta. La ingestión puede causar un dolor inmediato y quemaduras en la boca y tracto gastrointestinal, la ingestión puede ser fatal. En contacto con la piel puede causar dolor y quemaduras graves. El contacto con los ojos puede causar quemaduras graves y daños permanentes.		
SECCIÓN 12 - INFORMACIÓN ECOLÓGICA		
Es fatal para la vida acuática. No permitir que ingrese a los drenajes públicos y fuentes de agua.		
SECCIÓN 13 - CONSIDERACIÓN SOBRE SU DISPOSICIÓN		
Absorber en algún material inerte (arena, arcilla, etc.) y ponerlo en un envase para su neutralización y posterior desecho como sea permitido por las autoridades locales. En cantidades pequeñas puede ser lavado con abundante agua, aunque se recomienda neutralizar cualquier cantidad antes de ser lavada con agua.		
SECCIÓN 14 - INFORMACIÓN DE TRANSPORTE		
Clasificación del DOT: 8 (Material Corrosivo)		
SECCIÓN 15 - INFORMACIÓN REGULATORIA		
Ninguna determinada.		
SECCIÓN 16 - OTRA INFORMACIÓN		
La información contenida en esta MSDS es correcta y proporcionada para el uso del producto descrito, sin embargo, el DEPARTAMENTO DE CONTROL DE CALIDAD no se hace responsable por el posible uso correcto o incorrecto que se le dé a dicha información. Es obligación del usuario la interpretación y aplicación de la información proporcionada.		
		TEL.: (502) 2381-0202 Ext. 117 controldecalidad@rcquimica.com
PREPARADO POR: DEPARTAMENTO DE CONTROL DE CALIDAD		
TELÉFONOS DE EMERGENCIA:		
GUATEMALA	EL SALVADOR	HONDURAS
Bomberos: 122, 123, 911	Bomberos: 911, (503) 25557300	Bomberos: 198
Centro de (502) 2251-3560	Centro de (503) 2205-71-97	Cruz Roja: 195
Toxicología: (502) 2230-0807	Toxicología:	
1-801-0029832		
info@rcquimica.com	elsalvador@rcquimica.com	honduras@rcquimica.com
NICARAGUA	COSTA RICA	
Bomberos: 115 y 120	San José, Costa Rica	
Centro de (505) 2289-71-50	Emergencias: 911	
Toxicología: (505) 2289-33-28	Bomberos, C.N.L. (Intoxicaciones), Cruz Roja	
nicaragua@rcquimica.com	costarica@rcquimica.com	

	Plan de Contingencia Ante Derrame de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas			ROATAN CRUISE TERMINAL	
	Elaborado por	Revisado por	Aprobado por	Fecha	Revisión
	INTERMARIS	ROATAN CRUISE TERMINAL	DIRECCIÓN GENERAL DE MARINA MERCANTE	Diciembre-2019	1

APPENDIX IX - Roatan Cruise Terminal Environmental Management System

ROATÁN CRUISE TERMINAL ENVIRONMENTAL MANAGEMENT SYSTEM

ROATÁN CRUISE TERMINAL ENVIRONMENTAL POLICY

Roatán Cruise Terminal is located in a fairly unique location characterized by a very sensitive environment; being one of its major attractions that the port is close to Bay Islands' coral reef ecosystem which is part of the Mesoamerican Barrier Reef System: the Atlantic Ocean's largest reef and the second largest barrier reef of the world.

Consequently **Roatán Cruise Terminal** is committed to a sustainable management of the environment. The cruise port will contribute to meeting the needs of the present generation while preserving the environment for future generations to come, by carrying out its operations making every effort to avoid altering or damaging existing ecosystems. If despite all these efforts **Roatán Cruise Terminal's** own operations caused any damage to the environment or to any infrastructure in the port's area of influence, **Roatán Cruise Terminal** would be responsible to remediate the damage at its own expense. **Roatán Cruise Terminal** adheres to the following principles:

Compliance

Roatán Cruise Terminal will make every effort to comply with all current and valid environmental laws and regulations that apply to **Roatán Cruise Terminal** and will implement environmental operating procedures to help ensure compliance. These procedures will be based upon those conditions imposed by all Environmental Licenses granted to **Roatán Cruise Terminal** that are current and valid. (see Annex EP-1 for a list of the conditions and the environmental operating procedures implementing them).

Prevention

Roatán Cruise Terminal makes every effort to implement environmental operating procedures designed to prevent activities and/or conditions that could negatively impact the environment.

Environmental education and awareness raising

Roatán Cruise Terminal promotes an Environmental Education and Awareness Raising Program. The general goal of this program is stressing the significance of the Bay Islands' ecosystems and resources. This program is aimed to continue improving environmental behavior in both cruise ship visitors (including crew members) and the local population.

Roatán Cruise Terminal has implemented an environmental training program using the Environmental Licenses conditions as the basis in order to enable each employee to carry out those environmental operating procedures of which they are responsible for to undertake.

Continuous improvement


Roatán Cruise Terminal has established a system for controlling the implementation of all environmental operating procedures. **Roatán Cruise Terminal** Environmental Management System will be periodically updated.

ENVIRONMENTAL MANAGEMENT SYSTEM

Roatán Cruise Terminal (RCT) Environmental Management System (EMS) is integrated by a set of environmental operating procedures designed to implement RCT's Environmental Policy. Detailed semiannual work plans will be developed for each environmental operating procedure. The environmental operating procedures integrating RCT's EMS are described below:

SOLID WASTES MANAGEMENT

1. Solid wastes generated by the terminal's operation and management are temporarily disposed in appropriate receptacles conveniently located along Mahogany Bay Cruise Center. New garbage bins with

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recycling motif have been placed strategically throughout the installation, separating cans, plastics and trash.


RCT maintenance collects these wastes and stores them at a designated area which also has separation areas for cans, plastics and trash. Solid wastes are collected daily by the Municipality. Wastes' incineration is not carried out in the facilities.

WASTEWATER MANAGEMENT

2. Dry urinals have been installed in all bathrooms at the Cay. Pending are the urinals at the Plaza which will be installed in the future and properly cleaned and maintained.
3. The systematic cleaning of the restaurants' grease traps are controlled by frequent inspections, which are scheduled in the semiannual work plans. Each restaurant should keep records proving that regular grease trap cleaning has been carried out to provide evidence to General Management.
4. In general, cooking oil should be disposed of separately in sealed non-recyclable containers or similar and not discharged into the wastewater collection system. Regular inspections will be scheduled in the semiannual work plans to assure tenants' compliance. Each restaurant should keep records proving that this has been carried out to provide evidence to General Management.
5. The effluents from the wastewater treatment plant should comply with the Technical Standards Regulating Wastewater discharge into Receiving water bodies and Sewerage Systems. Monthly tests are conducted through a certified laboratory on mainland Honduras for effluent of both plants and reviewed by Health & Sanitation Supervisor for compliance.
6. Treatment plant effluents are used for irrigation of surrounding green areas, using the most appropriate irrigation technique consistent with the discharge volume and proper distribution of the irrigation flow, establishing an appropriate leaching field to infiltrate the effluents in the event of an unexpected excess. The effluents are properly disinfected before discharging into the irrigation system.
7. The monitoring and control of the wastewater treatment plant's operational parameters (COD, BOD, Total Solids, Sedimentable Solids, Turbidity, Color, Odor, Nitrates, Ammoniacal Nitrogen, Phosphates, Total Phosphate, pH, Oils and Grease and Fecal Coliforms) is conducted twice a year and presented to Secretary of Natural Resources and Environment.
8. RCT has implemented an effective preventive as well as corrective maintenance program for the wastewater treatment plant (WWTP). RCT has hired a third party to control both wastewater treatment systems at the Cay and the Plaza, keeping an operator managing the WWTP by filling out daily logs and reporting eventualities.
9. Signs should be installed in the area irrigated with reused water, indicating that irrigation is carried out with this kind of water.

WATER MANAGEMENT

10. Rainwater catchment should be used in order to conserve water.
 - 10.1 Appropriate solids separation/filtering systems as well as disinfection systems have been implemented. Rain filters have been placed throughout the Plaza gutters that duly separate organics from the water collected in the cistern.


	Contingency Plan for Spills of Fuels and Harmful and Potentially Hazardous Substances			ROATAN CRUISE TERMINAL	
	Prepared by	Reviewed by	Approved by	Date	Review
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10.2 Roofs, gutters and rainwater collection pipes are cleaned regularly as part of maintenance works of the facilities, especially before the rainy season.

11. In all bathrooms and other points of public use of water, signs have been installed indicating that water is not suitable for drinking.
12. RCT has developed and implemented an effective preventive as well as corrective maintenance program for the potable water system. The potabilization system includes a 10 micron filter, a 5 micron filter, 2 UV lamps and an automated chlorination system to potabilize the water at the MBCC facility. Water storage tanks are maintained and cleaned on a basis with detergents that do not affect water's organoleptic characteristics. In addition, these tanks are coated with a product certified NSF61 for potable water and they are also checked for its physical conditions.
13. The personnel at work during the project's operating stage shall have access to water for human consumption that meets the quality standards set forth in the National Technical Standard for the Quality of Potable Water.
14. If drilling a well is required within the project area, RCT shall request the permit for exploitation of groundwater resources to the General Office of Water Resources through SERNA's General Secretariat. In addition, RCT shall submit to SERNA pump test data, and water quality tests conducted by a qualified laboratory. Currently, RCT does not have plans to drill a well and is currently purchasing the water used at its facility.
15. The storm water system is appropriately managed. A preventive as well as corrective maintenance program has been established by implementing the following operating procedures:
 - 15.1 Measures have been established to prevent discharges into the storm water collection system of liquids and solid wastes which could pollute storm water and/or create foul odors when the storm water collectors are dry.
 - 15.2 Carries out periodic cleanups of sediments and other organic material that accumulates in the storm water ditches and drainage pipes. Maintenance records are kept by means of a log. Any organic material removed is transformed into compost.
16. RCT cleans and maintains the culverts located under the terminal access road.

TERRESTRIAL ENVIRONMENT MANAGEMENT


17. Spaces allocated as green areas shall be respected and set aside for such purpose. Reforestation of this area has been done only with fast-growing native species. The area surrounding the Treatment Plaza at the Plaza has been reforested with local species that harmonize with the surrounding area, serving as a natural barrier. This area is periodically maintained. The landscape is well maintained to guarantee the survival of the plants integrating the landscape. New areas for reforestation are being chosen and will be worked on biannually.
18. For landscape maintenance, only appropriate agrochemical products can be used. RCT has implemented the use of a garlic based organic product to maintain its gardens.

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19. The introduction of domestic animals such as cats and/or dogs is not allowed.
20. Disturbing, damaging and /or exploiting terrestrial flora and/or fauna species from within the facility, especially those catalogued as endangered, is not allowed. RCT provides all of their employees a briefing every 6 months regarding respectful treatment of flora and fauna.
21. Only taxis and tour buses in good technical conditions are allowed to enter the facilities.

MANAGEMENT OF THE COASTAL AND MARINE ENVIRONMENTS

22. Destroying mangroves in the wetland near the bay will not be permitted under any circumstances. The already implemented RCT's mangrove restoration project is appropriately managed and monitored. New mangroves are to be planted once a year and a follow up will be presented to the SERNA.
23. Disturbing, damaging, and/ or exploiting species from the aquatic flora and/or fauna present in the zone is not allowed. Those species catalogued as endangered, should be especially controlled to prevent those activities.
24. Fishing from the pier and from the vessels docked in the pier is not allowed.
25. Only properly authorized small painting and/or scraping works on Cruise Ships while docked at the pier should be carried out. These works should strictly follow the environmental operational procedures established in Annex PS.
26. In washing a Ship is authorized by RCT, only clean water should be used for this purpose.
27. Lighting of the pier should always be in working order.
28. RCT has requested and been authorized permission by the General Directorate of the Merchant Marine to install buoys and to operate the dock, guaranteeing all stipulations or recommendations that this institution requested are complied with.
29. It is strictly forbidden to pollute water bodies within the RCT's area of influence with domestic solid wastes, oils, machinery grease or other pollutants generated by RCT.
30. Systematic clean-ups of the coastal area in RCT are carried out, especially in the immediate area of influence of RCT. Volunteers are involved in these clean-ups when required. Special days like Earth Day, should be used as motivation to involve crew members if appropriate.
31. Underwater clean-ups in the pier's area of influence should be carried out at least twice a year: at the end of high season and before high season. Volunteer divers should/could be involved.
32. In general no servicing of any type will be allowed to vessels docked in the pier. More specifically:
 - 32.1 No provisioning of any type including the use of containers or trailers
 - 32.2 No waste of any kind is to be removed from either the dock side or water side to a barge
 - 32.3 No garbage removal of any type from either the dock side or water side to a barge.

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- 32.4 No Grey Water removal from either the dock side or water side to a barge.
- 32.5 No Sewage/Black water removal from either the dock side or water side to a barge.
- 32.6 No Oil and Oily Substances removal from either the dock side or water side to a barge.
- 32.7 No refueling either by dock side or by a vessel or barge on the water side.
- 32.8 No vehicles of any type should be allowed to access the dock, unless specifically authorized by the General Manager.
- 32.9 No water servicing of any type allowed while docked at the pier.

- 33. RCT has assigned a pilot boat to oversee cruise ship maneuvers within Dixon Cove bay to avoid accidents or collisions capable of damaging the ecosystem in the vicinity of the bay.
- 34. RCT has set up and maintained the approved navigational aid system for incoming and outgoing cruise ships.
- 35. RCT would assist Government authorities in the development of a baseline to be used for declaring Cordelia Bank a Protected Marine Area, integrating all zoning and boundary and guideline issues into an area management to be subsequently executed by local authorities. Given its size, which covers approximately 12 km², the Cordelia Bank is an area of influence for the only two national interest projects: the Royal Caribbean and Carnival Lines piers. Accordingly, these two projects will, together with the Government, seek synergies toward attaining protected area status for the Cordelia Bank.

FIRE CONTINGENCY PLAN

- 36. The Contingency Plan has been approved by the Fire Brigade in Roatan. It reflects the strategies and activities that must be executed in case of an eventuality.

Consider possible disasters:

- a) Fires
- b) Hurricanes and floods
- c) Earthquakes
- d) Oil spills
- e) Landslides

The Fire Brigade of Roatan has done the following activities:


- a) Revise and approve the Contingency Plan elaborated by RCT.
- b) Inspection of the facilities with the purpose of guaranteeing the existence of the prevention and fire contingencies.
- c) RCT annually requests a record from the Fire Brigade which states compliance with all measures requested.

OIL SPILL CONTINGENCY PLAN

Facilities

- 37. If temporary storage of machinery fuel is required, the following guidelines:

- a) The fuel is stored in holding tanks equipped with containment berms. These containment berms should be water-tight and their walls should be sufficiently high to hold 110 % of the storage tank volume.

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- b) Absorbent material is kept at hand for use in the event of a spill or leak. Any used, hydrocarbon-containing absorbent material shall be disposed on at a location approved by the Roatán Municipality.

38. It is strictly forbidden to intentionally spill hydrocarbons on the ground (pier area or in the vicinity of the beach) or in water bodies.

Vessels

All Cruise Ships comply with the discharge limits established by MARPOL for bilge waters and have pollution prevention equipment for machinery space bilges of ships approved in accordance with International Maritime Organization guidelines and specifications for pollution prevention equipment for machinery space bilges of ships. Consequently oil and oily waters cannot be possibly discharged while in port. Only accidental oil spills can occur from a Cruise Ship while docked in the pier.

For dealing with accidental oil spills all Cruise Ships have their own approved Shipboard Oil Pollution Emergency Plan (SOPEP) written in accordance with the requirements of Regulation 37 of Annex I of the International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 relating thereto.

These Emergency Plans include contacting and coordinating with IMO's National Operational Contact Points when an oil spill occurs. (See Annex O-1)

Role of the Cruise Ship Port in case of accidental oil spills from a vessel docked at the pier


39. To report immediately to the ship any signs of oil spill if the ship has not detected it yet.
40. To monitor/record the spill with the surveillance cameras and security staff.
41. To support the ship in contacting IMO's National Operational Contact Points and local authorities.
42. To support the ship with staff if required.

ENVIRONMENTAL EDUCATION AND AWARENESS RAISING

43. RCT will promote an Environmental Education and Awareness Raising Program. The general goal of this program is stressing the significance of the Bay Islands' ecosystems and resources. This program has been already submitted and approved as a separate document and is aimed to continue improving environmental behavior in both cruise ship visitors (including crew members) and the local population.
44. RCT will implement an environmental training program using the Environmental Licenses conditions as the basis in order to enable each employee to carry out those environmental operating procedures of which they are responsible for to undertake. RCT staff shall be made aware of the importance of caring for protected areas, plant species and fauna, with a view to preventing any such species from being cut down, harmed, captured or hunted within the project area.

OTHER ENVIRONMENTAL ASPECTS


45. To record meteorological data obtained from the meteorological station.

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46. RCT shall ensure compliance with the provisions of the Code of Health, Labor Code, and associated regulations.
47. RCT staff use the necessary protective equipment, depending on the activity to be performed. For the above purpose, staff receives training on the importance and proper use of personal protection equipment.
48. RCT has installed at least three first-aid kits with the necessary implements in each work environment. Such kits have been properly placed, outfitted and labeled to ensure easy access by personnel.
49. RCT shall compensate for environmental damage to the ecosystem through the annual payment of a fee in the amount of US\$ 84,032.31.

CONTROLLING AND REPORTING

50. RCT shall supervise its own environmental monitoring efforts in order to verify compliance with the environmental control measures established by SERNA, preparing and submitting the complete semiannual Environmental Measure Compliance Reports (ICMA) based on Form DECA-019, and coordinating any activities requested by DECA and the Municipal Environmental Unit during control and follow up inspections.
51. Additional to the Environmental Measures established by SERNA, RCT will have to comply also with any recommendations that the Environmental Municipal Unit in Roatan establishes, product of controls and monitoring activities that they conduct in the facilities, which will have to be incorporated to the ICMA's.
52. RCT shall keep a copy of all documents evidencing compliance with environmental measures and legal operating requirements, including a log of all environmental monitoring activities.
53. An Environmental Committee will be established integrated by the General Manager, the Maintenance Manager and the Environmental Advisor. This Committee will develop a detailed work plan; will review twice a year on the progress in implementing the Environmental Management System.
54. It is RCT's responsibility that all its employees implement the established in the Environmental Control Measures, for this reason, all personnel involved in the operation should have knowledge of all of the obligations.
55. Any environmental damage caused to the surrounding areas or to the nearby facilities of the project due to operational activities will be responsibility of RCT. RCT will be responsible for all due repairs.
56. RCT's Environmental Management System will be updated once a year.

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APPENDIX X - Sample Letter of Maintenance Work Request

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**To: Port Captain
Isla Roatan, HN**

**From: Guest Services Manager
CARNIVAL VISTA**

Date: 9-Jan-2019

Subject: Authorization while in Port

We kindly request the authorization for the following:

- 1) Lowering and maneuvering of lifeboat(s) & rescue boat(s) into the water, alongside the ship, for the purpose of maintenance and general lifeboat drills.
- 2) Conduct Hot Works inside the vessel & open decks. All work will be under the supervision of our Fire Patrol Team.
- 3) Washing of the ship's decks and side shells with eco-friendly products, MARPOL Annex V approved chemicals & with fresh water.
- 4) Painting of side shell and open decks with HEMPEL HEMPATEX ENAMEL 5GAL WHITE 56360-100000 & HEMPEL HEMPATEX HI-BUILD 20LT WHITE 46410-12170 as per attached guideline.
All necessary precautions will be taken

Your kind assistance in this request will be greatly appreciated.

Best Regards,

