



Delta Petroleum Corporation

**Emergency Contingency
Plans**



Delta Petroleum Corporation

Emergency Contingency Plans

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	Plan Owner	Plan Custodian
Approved By:	Regional General Manager	Regional Org. Manager
Signature:		
Date Signed:		

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Amendments

Document Information

Document Ref:	Title:	Issue Number
<i>ECP1</i>	Bomb Threat Emergency Response Procedures	01
<i>ECP2</i>	Fire Emergency Response Plan	01
<i>ECP3</i>	Hurricane Contingency Plan	01
<i>ECP4</i>	Inland Spill Emergency Response Plan	01
<i>ECP5</i>	Vehicle Accident Emergency Response Procedures	01

Amendment Revision History

Amendment/ Revision #	Amendment (description)	Date Entered	By (initials and job title)
			CC – Regional Org. Manager

To make an amendment:

1. Insert the new amendments and update footnote with revision Number.
2. Remove and destroy old pages.
3. Keep the Amendment Instruction Sheet, giving the reason for the amendment, at the back of the manual.
4. Complete the Amendment Record.

Note:

1. An amendment is normally effected by the update of the electronic PDF master copy by the Regional Org. Manager. DELTA personnel will be advised of the changes for direct reference to the electronic read-only version. Only in exceptional circumstances will hand written amendments be allowed. A concession for this should be obtained from the Plan Owner.
2. Additions or significant changes to the text are indicated by lines drawn in the margin of the page (redlining). Margin lines from the previous amendments are deleted when the page is amended again. Minor editorial changes such as spelling corrections are not indicated.
3. All queries on amendments must be addressed to the DELTA Regional Org. Manager.



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Delta Petroleum Corporation

**BOMB THREAT EMERGENCY RESPONSE
PROCEDURES**

Document Number : DELTA: ECP1

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BOMB THREAT EMERGENCY RESPONSE PROCEDURES

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INTRODUCTION

These guidelines outline procedures to be followed in depots in the event that a bomb threat of any nature is discovered or received

Depots

For bomb threats in a depot (or depot vehicle), the procedures below should be followed, however additionally the following applies if it can be done safely:

- Switch off all electrical equipment
- Close all main valves on tanks
- Order all vehicles (except vehicle suspected of containing the bomb) to leave the area
- Follow instructions given by Depot Supervisor
- Do not return for any reason until you are told it is safe to do so.

Vehicles

Where Delta vehicles delivering product are involved in the 'BOMB THREAT', then only if it is safe to do so, the vehicle should be taken to an isolated area and parked until the police force arrive.

If the above cannot be done, the driver of the vehicle should try to evacuate the surroundings by warning everyone of the possible danger at hand. The driver should stand by to assist the authorities in whatsoever way possible.

Important Under no circumstances should any information be given to the media unless authorised by the Delta Regional General Manager

Reports

Following a bomb threat a complete report should be made of the incident including any comments by the local police. This report should be marked confidential and copied to the Delta Regional General Manager

PARTICULARS OF A BOMB CALL

This form should be used for particulars of a bomb call

This sheet is to be kept by the telephone operator at all times.

DATE: TIME: CALL TAKEN BY:

SOURCE OF CALL (if known): 1. Payphone 2. Private Telephone Number:

.....

EXACT WORDS SPOKEN

.....
.....
.....
.....

ASK THE CALLER:

Where is the Bomb?

When is it due to go off?

What does it look like?

Why are you making this threat?

Who are the organizers?

Where are you speaking from?

NOTE SPEECH (tick as applicable):

Male Female Adult Child Disguised

Slow Normal Rapid Excited

Soft Loud Broken Sincere

Estimated Age:..... Nationality/Dialect:

BACKGROUND NOISES:

REMARKS (include any other information thought relevant):

.....

ACTION TAKEN BY PERSON TAKING CALL (who did you inform?)

.....



Delta Petroleum Corporation

Fire Emergency Response Plan

Document Number : DELTA: ECP2

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EMERGENCY RESPONSE PROCEDURES FOR FIRE

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INTRODUCTION

These plans outline the emergency procedures to be followed in the event of a fire or fire alarm, at any of the Delta locations.

PROCEDURES

Depots and Plants

- The persons discovering the fire should shout **“FIRE, FIRE, FIRE!”** and immediately attempt to put out the fire.
- The fire alarm is to be sounded, and the Fire Department telephoned. The local Delta Emergency Response team is to be contacted and details of the fire given. Local management will then inform Head Office shortly afterwards.
- On hearing the alarm (siren) all loading must stop and all valves on all pipelines, tanks etc. must be closed.
- All windows on buildings are to be closed.
- All buildings are to be evacuated, and staff members are to report to their appointed fire stations and take action as detailed for fire drill.
- All electrical supply sources are to be isolated. Main switches must be turned off by persons identified to do so.
- Vehicles are to be removed from the facility only if it is safe to do so; this includes vehicles loaded with product. Ignition keys are to be left in the vehicles. All vehicles are to be parked with the front of the vehicle facing out.
- The area must be closed to traffic, only allowing the relevant personnel on the scene.
- Staff assigned to man fire extinguishers and water hoses will take up position and attack the fire on being directed by the team leader. It is expected that staff who have been trained as responders will get hold of fire extinguishers and without putting themselves at risk in any way, use them to extinguish the fire on instructions from their team leaders.
- All staff not assigned specific duties must evacuate the facility and gather at the designated Assembly Point for a head count and to receive further instructions.
- If the extent of the fire is such that the installation personnel are unable to cope with the fire, then the senior person on the scene should take the necessary precautions to contain the fire until the arrival of the fire department and then work in conjunction with them.
- In the absence of an ambulance, and where one is required urgently, a suitable company vehicle may be used as an ambulance (see also MEDICAL EMERGENCY PLAN regarding the treatment of injured personnel).

A list of emergency telephone numbers is contained in Appendix I

During a Tanker Discharge

In the event of a fire starting in the depot during a tanker discharge, immediate steps must be taken to shut down operations.

- Notify the ship to stop pumping and then close all valves. The ship will be advised of the emergency and placed on standby.
- Initiate the Fire plan
- Immediately notify the Operations Manager, who will notify the Delta Crisis Team and activate the Delta Crisis Plan.

Refer to ISGOTT Ver 5.1 for further guidance

Offices and Warehouses

In the event of a fire in the office or warehouse, the following action should be taken.

- The person discovering fire or smoke should activate the nearest fire alarm
- Make a short attempt to put out the fire using a fire extinguisher
- On hearing the alarm other staff should evacuate the building in accordance with the emergency evacuation procedures.

The building wardens should check to ensure that all persons have been cleared from the

building, and that the local emergency services have been notified.

Fire Outside of Normal Working Hours.

Should a fire start when the facility is closed and there is just the security on the premises, the following steps should be taken by the security.

- Make a short attempt to put out the fire.
- Call the fire department at the numbers posted.
- Contact the Operations Manager or other persons on the Emergency Call-Out List.
- Switch off the mains electricity switch if appropriate
- Secure any open gates, except the entrance in front of the building. All keys must be readily available to open any gate if required to do so by the Fire Brigade.
- Call other Delta staff on the Call-Out List or as directed by the Regional Operations Manager
- Prevent pilferage or theft of the Company's property

POST FIRE PROCEDURES

Depots

After the fire has been extinguished to the satisfaction of the Regional Operations Manager, the fire team leaders will ensure that hoses are drained, hung until dry, and eventually put away in their respective fire boxes, and that unused fire extinguishers are returned to their correct

positions. The Regional Operations Manager will arrange for all used extinguishers to be recharged.

Offices at Depots and Warehouses

Following the fire, all staff will await the instructions of the nominated Fire Controller as to whether entry to the building is permitted. Building Wardens in conjunction with the local fire department will assess damages, and prepare a report to management.

In the event of a false alarm, the nominated Fire Controller will signal the all clear (following a complete investigation as to the nature of the alarm) for re-entry to the building.

FIRE PLAN

The fire plan should be clear, up-to-date, and copies posted near the facility entrance, and in the office in a clear area. For offices and warehouses, the plan must be posted in a clear area visible to all persons entering the building.

Fire Team

The complete fire team shall consist of the Fire Controller, Fire Action Team Members, and Office Wardens.

Duties of the Operations Superintendent

- Controls all company staff on the premises and co-ordinates all activities to ensure the preservation of life, and minimise loss of assets and environmental damage.
- To be the focal point for liaison between the company and the relevant authorities: Fire Department, Police, Hospitals, and Government etc.
- To inform Delta Manager or other member of the Delta Crisis Response Team as soon as is practical.
- To maintain a diary with the timings to assist in the inquiry. It may necessary to write this immediately after the incident.
- Ensure that the safe guards are taken against security breaches.
- A suitable spokesperson should be chosen to represent the company to the media, under the control of the Delta Regional General Manager.

Duties of the Fire Action Teams

Team Leaders:

- Ensure that the fire department has been telephoned.
- Assist the Fire Controller as requested.
- Lead the fire team as directed by the Fire Controller.
- Act to ensure the preservation of life and minimise loss of assets.
- Ensure that contractors cease work and follow evacuation instructions.

Team Members:

- Stop and secure work activity e.g. filling operations, tank transfers
- Ensure cash and documents are secure
- Conduct a headcount
- Provide First Aid
- Shut all tank valves
- Start the fire pump
- Isolate electricity
- Contain and extinguish fire if it is safe to do so
- Maintain a record of events
- Once their duties have been completed, all staff members are to report to the assembly point(s) as given in the Appendix

FIRE DRILLS

Fire drills will be conducted as per the local legislation and the Delta HSSE Plan. For fire drills, the following will apply;

- The siren will be activated.
- Response by leaders and team members should be made as per instructions, already outlined.
- A head count will be conducted and recorded.
- Fire Teams will act under the guidance of the Fire Controller and Team Leaders.
- No water should be applied until a command is given to do so. In the case of contractors, team leaders must ensure that they cease working and obey instructions as laid down for contractors in the event of a fire.
- At the completion of the drill one long blast will signal the “All Clear”
- Hoses must be drained, and hung until dry, rolled and put away in their respective boxes along with the nozzles. Under no circumstances must hoses be rolled wet.
- A short critique of the exercise and a record of actions
- At the end of the fire drill team members are to return to their respective jobs
- The Operations Supervisor will make arrangements for any extinguishers used to be recharged.

Periodic Check of the Fire System

The fire system will be checked in accordance with the Preventative Maintenance Schedule. In addition to the required checks, the following must also be carried out

- The fire pump is to be checked daily. Batteries, fuel level, water level, oil level are the points to be attended to. The pump is to be started daily and run for a period on not less than five (5) minutes.
- Once weekly the fire hydrant system will be tested. On completion of the test the water storage tank is to be refilled to capacity and the filler stopcock turned off. A record is to be kept of these checks.

REPORTS

For any fire there must be an immediate notification of the Regional General Manager. Following this an initial written report is to be submitted within 24 hours. A full TRIPOD analysis will be required for serious incident within 15 days and a completed report within 30 days. All recommendations must be tracked and completed

EMERGENCY EVACUATION PLAN

On hearing the alarm all persons within the facility including contractors and visitors shall:

- Secure any critical work which itself could result in a fire, injury or damage to the environment.
- Proceed quickly (walk don't run) to the nearest emergency exit. Use handrails and take steps one at a time when using stairs. Use the left side of the stairway leaving the right side clear.
- Operations Supervisors shall ensure that all persons have evacuated the building.
- Contractors, visitors and staff who are not members of an emergency response team shall proceed to the Assembly Point(s).
- A head count will be performed at the Assembly Point(s) and a report on any persons who are unaccounted for supplied to the Emergency Controller.
- The Emergency Controller will coordinate the appropriate emergency response plan.

Location of Emergency Exits

Area	Specific location
Office	
Depot Perimeter	

Refer to site plan posted in this area for your current location.

Summary of Evacuation Actions

Position	Equipment Required	Immediate Action
Operations <i>Superintendent</i>	Reflective vest Bull Horn PPE	<ol style="list-style-type: none"> 1. Determine nature of the emergency and activate the appropriate plan. 2. Notify Delta management. 3. Ensure that all persons have vacated the building. 4. Perform head count. 5. Ensure emergency services have been contacted
First Aider	First Aid Vest First Aid Kit	<ol style="list-style-type: none"> 6. Provide First Aid assistance 7. Liaise with ambulance personnel
Emergency Response Team	PPE	<ol style="list-style-type: none"> 8. Proceed to their designated Assembly Point. 9. Carry out instruction of Operations Supervisor
Contractor/Visitor		<ol style="list-style-type: none"> 10. Secure work 11. Proceed to Assembly Point

Appendix I: Emergency Contact Numbers

Company / Agency Name	Location	Contact Number	Contact Name



Delta Petroleum Corporation

Hurricane Contingency Plan

Document Number : DELTA: ECP3

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HURRICANE EMERGENCY RESPONSE PROCEDURES

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Hurricane Emergency Response Procedures

This document is an integral part of the Delta Health and Safety Management System (Delta HSSE MS).

Scope of Plans

These plans outline procedures to be followed in the event of an emergency, from the initial first actions described in Part 2. The content is applicable to all operations of Delta Petroleum Corporation (Delta).

Exercise/Testing

These plans should be reviewed and tested at the start of the hurricane season and at least once during the season

Introduction

To be completed after the plan is finalized.

Key issues to be considered:

What are all of the areas to be managed in the preparatory phase?

- Main facility
- Offshore Berth
- Retail Outlets
- Off Island facilities
- Ships – strategy for third party ships at berth or whose schedules may be impacted, strategy for own ship security during the event
- Security of critical documents and supplies
- Liaison with relevant authorities
- Procurement of critical supplies – PPE, supplies for securing facilities and equipment, supplies for staff welfare post event
- Policy on staff assistance post event – emergency accommodation, staff loans etc;
- Critical spares that may be required post event – list and strategy – minimum supplies
- Liaison with authorities
- Liaison with key customers
- Identification of staff roles, competencies and responsibilities
- Identification of contractors and prearrangements

Key issues post event

- Contact with key staff – COMMUNICATION assuming phone systems are out
- Staff welfare provisions at office
- Staff assistance policy
- Business Continuity and maintenance of controls under adverse conditions
- Heightened security risk – strategy to manage?
- Key customer requirements

INTRODUCTION

This procedure addresses the preparation for and response to a hurricane emergency. The Delta Crisis Management Team will coordinate the timing of the response.

Hurricane season extends from June to November each year; however the hurricane activity usually intensifies during the months of August and September.

PURPOSE

The purpose of this procedure is to prepare personnel and equipment well in advance of the approach of a tropical storm or hurricane by:

- Educating all personnel in the steps and tasks required to safely secure all work areas and property.
- Assigning specific duties to groups of personnel, which will enable all preparations to be effected in a safe and timely manner.
- Making sufficient resources and information available to personnel in order to minimise the effect of any damage that may result from the impact of a hurricane and to return the business to normal operation as soon as possible after the hurricane has passed.

DEFINITIONS

This section is designed to provide staff with an understanding of the terminology used to describe hurricanes and other associated weather conditions.

1. BULLETIN

This is issued when a significant weather system is detected in the area.

2. ADVISORY

This is issued at regular intervals as the system's advance is monitored. At this stage it is still more than 72 hours away.

3. WATCH

This is issued when the system has advanced and developed considerably, Hurricane conditions are a real possibility, though not imminent as the system is between 24 to 48 hours away.

4. WARNING

This is issued once it has been established that the system is expected to affect the island within 24 hours.

This information can be used as the basis for determining the level and the timing of a response.

Weather Systems

A tropical cyclone is a generic term for all circulating weather systems which rotate in a counter clockwise direction in the northern hemisphere over tropical waters. Tropical cyclones are classified as follows:

- Tropical depression - A tropical system with a defined circulation but with winds of less than 39 mph (33 knots).
- Tropical Storm - A tropical system with a circulation and winds of 39 - 73 mph (34-63 knots)
- Hurricane - An intense tropical storm with maximum sustained winds greater than 74 mph (64 knots). In size the storm may range from 50 – 1000 miles wide.
- The eye - The relatively calm area near the centre around which the strongest winds blow. As the eye passes, light winds rapidly give way to very severe winds from the opposite direction.
- Storm Surge - The rise of water (as high as 10 - 20 feet) above normal sea level, brought about by the strong winds and low pressure in the storm.

Hurricane Classification

Hurricanes are classified based on their sustained wind force:

Table 1 - Hurricane Classification

Category	Wind speed Km/h	Wind speed Mph	Associated Storm Surge	Extent of Damage
1	119 - 153	74 - 95	Approx. 1.5m (4 - 5 ft)	Usually minimum
2	154 - 177	96 - 110	Approx. 2.25m (6 - 8 ft)	Moderate
3	178 - 209	111 - 130	Approx. 2.6m (9 - 12 ft)	Extensive
4	210 - 249	131 - 155	Approx. 4.5m(13 - 18 ft)	Extreme
5	>249	>155	>5.5m (Over 18 ft)	Catastrophic

PREPARATIONS

Due to the labour intensive nature of hurricane preparations, the decision to initiate the Hurricane Procedure must be timely, preferably taken at the Watch stage. Hurricane preparation activities will focus on both the facilities and the office.

Office

The decision to close operations will be made by senior management. The items listed below will comprise the actions to be taken in the closure operation. **See Hurricane Checklist.**

Tanks / Tank farms

Isolate all storage tanks by closing the valves/bleeds at the tank. This is to minimise the spillage of product should connecting pipelines rupture during the hurricane. Dip hatches should be locked in position. Empty or out of service tanks should have their manhole covers replaced and be filled with water to a height of approximately four (4) feet.

Tanks under construction must be secured by an appropriate method as directed by engineering or technical staff.

All tank farm drain and interceptor main valves must be closed and left in that position.

Loose Objects

Wherever possible, loose objects must be secured/stored in an enclosed room. These rooms can include the warehouse, maintenance workshop, etc. The types of objects to be secured include ladders, metal sheets, hand portable extinguishers, lengths of pipe, drums, pieces of wood, etc. Loose pipe should be stored on any available pipe rack and secured with rope.

The chariot fire extinguishers should be secured with rope to any permanent structure in the area or removed into any spare storage area. Only if absolutely necessary should they be removed from the immediate area to which they are deployed, as they may be required in the event of a fire emergency.

Loading Gantry

Padlock product valves and secure the loading arms to the gantry structure. Properly secure the flexible stairway with rope.

Road Tankers (RTWs) and other company vehicles

Ensure that the RTWs are filled with the appropriate product and parked facing outwards at a non-flooding location.

If the normal parking area is known to be flood prone, then an alternative location should be arranged at a safe and secure site e.g. a Military or Police compound, Airport, etc.

Other company vehicles should be parked in secure locations, windows rolled up, doors locked and keys secured.

LPG plant

Shut all valves and secure all loose items, e.g. tools, equipment, etc. Secure LPG cylinders with rope and fasten to a permanent structure in the immediate vicinity. LPG vehicles are to be treated as other RTWs.

Cylinder and Drum storage areas

Provide extra chocks for full drums. Place empty drums in a horizontal position and secure with rope. Drums of used oil should be emptied into available slop tanks and the empty drums stored as above. Maintain minimum number of empty drums and cylinders/reduce number of empty drums and cylinders on site during hurricane season.

All condemned cylinders will be secured with rope and fastened to a permanent structure.

Electrical Power

In all areas such as the loading rack, pump bay, warehouse and maintenance workshop, electrical power should be turned off prior to the impact of the hurricane.

Offices

Office personnel are required to secure their individual equipment and information. For offices the following precautions are to be taken:

- Securely lock all windows and draw curtains/shutters if fitted.
- Move files and other documents away from the window.
- Lock away all records and documents in filing cabinets.
- Treat computers, fax machines etc. as for electrical equipment.
- All fixed electrical equipment e.g. refrigerators must be unplugged.
- As offices are likely to flood, all documents and sensitive equipment should be elevated from ground level.

Electrical & Computer Equipment

All electrical and electronic equipment e.g. computers, typewriters, fax machines and photocopying machines must be turned off and their plugs removed from the power supply. Modern electronic telephones should also be safely stored. It is recommended that this type of equipment be stored in plastic bags and placed in locations that are high enough to prevent flood damage. Electrical main switches should be turned off before final closure of the building.

IMPACT

It is expected that depots and offices will be unmanned during the period of impact of the hurricane. In the unfortunate event that personnel remain at any of these sites during the hurricane they will be required to select a safe area and stay inside the building. Company management must be notified of such a development.

For personal safety these personnel should only venture out after the local Emergency Relief Organisation or Meteorological Service has given the "All Clear"

RECOVERY

The time taken to return to normal business operation will depend on the extent of the hurricane damage and the efficiency with which the recovery stage is managed.

Post-Impact

This response will only be activated after an official clearance has been given.

The worst possible cases are likely to involve a disruption of communications i.e. telephone and travel by road. When the "All Clear" is given, management and selected employees are required to report to the Delta compound as soon as personal circumstances allow. The reconnaissance groups will survey the damage and report their findings to the Crisis Centre at Delta

Management will instruct employees on how to proceed in order to normalise operations.

The local Emergency Relief Organisation will be informed of the status of the facility and the ability to resume supply operations via the Crisis Centre.

Recovery Period

During this period a number of steps must be taken:

1. Notify personnel of the business situation and next steps
2. Assist in the clearing of roads leading to the depot facility
3. Make a thorough inspection of all depot facilities and vehicles, and determine the extent of any damage. Decide if depot operation is possible either in full or in part
4. Take photographs for reporting and insurance claim purposes
5. Re-open closed buildings and facilities once feasible to do so
6. Clean up oil spills and clear drains. Using interceptors, start the run off of flood water (ensuring no pollution)
7. Spray vehicles with fresh water if available to remove any accumulated salt water (corrosion control).
8. Take inventory. Carry out stock-taking on all bulk products stored
9. Report abnormal losses immediately
10. Make contact with utility companies and other critical agencies (e.g. hospitals etc.) to ascertain their requirements
11. Return equipment to normal locations (Office & Depot)
12. Critique response operations and prepare report

APPENDICES

Appendix 1 - Depot Personnel

Name	Job Title	Assigned Role

Duties

Appendix 2 - Pre-impact – Main Facility

Activity	Assigned to	Status
Ensure that emergency equipment and materials are available (See Appendix 11)		
Secure tank farm area and interceptors		
Secure all loose items and equipment on the depot compound		
Ensure that portable radios are properly charged		
Ensure that both full and empty drums are secured		
Secure LPG Plant i.e. cylinders and equipment		
Ensure that power to the plant is turned off		
Secure loading gantry		
Check standby generator and fire pump and ensure that adequate fuel supplies are available		
Ensure that all maintenance equipment is properly locked away and secure the Maintenance Workshop		
Ensure that RTWs are secure and that all master switches are turned off		

Appendix 3 - Pre-impact – Retail Outlets

Activity	Assigned to	Status
Ensure that emergency equipment and materials are available (See Appendix 11)		
Secure tanks and interceptors		
Secure all loose items and equipment		
Secure pumps		
Secure shop windows and doors		
Secure LPG cylinders and racks		
Ensure that power to the outlet is turned off		
Secure fire equipment		
Check standby generator and fire pump and ensure that adequate fuel supplies are available		
Ensure that all maintenance equipment is properly locked away and secure		
Ensure that product storage tanks are full		

Appendix 4 - Pre-impact – Key Customer facilities – 1 checklist per customer, assign to team

Activity	Assigned to	Status
Contact key customers		
Arrange to full storage tanks		
Check site and arrange with customer to resolve any potential issues that may cause damage to storage or environmental problems– loose equipment, cleanup of interceptor, removal of waste etc;		
Confirm post event contact details and possible fuel requirements		

Appendix 5 - Key Customer Information

Customer Name	Contact Name	Location	Contact Number

Appendix 6 - Pre-impact – Hospitality and welfare arrangements for staff

Activity	Assigned to	Status
<p>Procure food supplies to be held at facility to accommodate staff working post event :</p> <p>Starches – granola bars, dry cereals, crackers, cookies, canned pasta</p> <p>Meats and proteins – canned corned beef, sardines, tuna, ham, luncheon meat, sausages</p> <p>Vegetables – canned vegetables and beans</p> <p>Spreads – jams, peanut butter, non-refrigerated margarine</p> <p>Soups – tinned or dried packaged soup mixes</p>		
<p>Personal Protective Equipment – supply of coveralls, water boots, safety shoes, rain gear, gloves, hard hats etc; DETERMINE NUMBER REQUIRED!</p>		

Appendix 7 - Pre-impact – Security of critical documents and items needed to operate post-event

Activity	Assigned to	Status
List critical documents and security arrangements – legal documents, stock data, sales data, receivables, staff contact information, etc;		
List critical stationery requirements – manual invoices, pens, stationery ...		

Appendix 9 - Post impact

Activity	Assigned to	Status
Evaluate damage to depot location and make an assessment on the ability to resume normal business		
Arrange repairs to damaged equipment		
Check all pipelines and valves for breaks and/or leaks		
Check all electrical systems and equipment and assess the damage if any		
Carry out the necessary repairs to the electrical systems and equipment		
Ensure that the fire water pumps and standby generators are functioning correctly		
Obtain contract labour to assist as required		
Ensure that security is maintained		
Make arrangements for the restart of product deliveries		

Appendix 10 – Hurricane Preparation Chart

The ticks indicate the suggested phase at which to begin the named hurricane preparation operation. The timing of activities should be modified with regard to the availability of personnel and other resources.

	Bulletin	Advisory	Watch	Warning
Tanks/tank farm			✓	✓
Loose objects		✓	✓	
Loading Gantries				✓
RTWs & other company vehicles			✓	✓
LPG Plants			✓	
Cylinder and Drum Storage		✓		
Offices			✓	✓
Electrical & Computer				✓

Appendix 11 - Emergency Supplies and Equipment:

The following supplies and equipment must be maintained at the facility:

Office Supplies

First Aid Kit	Fresh drinking water	Polyethylene Sheets	Torch lights
Water for toilet flushing	Masking/duct tape	Plastic covers	Dry rations
Disposable plates/cups/ forks	Supply of batteries	Large plastic bags	Battery operated radio

Facility

Tools (hammer, saw, axe, etc.)	Raincoats	Safety torch lights	Gloves
Charged 2-way radios	Shovels	Rope	Rubber boots

Appendix 12 - Hurricane Checklist - Depot Operations

Please tick off these items as they are completed.

Item	<u>Checked</u>
1. Stock up on essential items listed in Appendix 11	<input type="checkbox"/>
2. Portable radios and cellular phones charged	<input type="checkbox"/>
3. Loose items collected and secured	<input type="checkbox"/>
4. Product tanks isolated and interceptor valves closed	<input type="checkbox"/>
5. Tanks under construction secured	<input type="checkbox"/>
6. Shutters erected on buildings	<input type="checkbox"/>
7. Fire pump and standby generator checked	<input type="checkbox"/>
8. Drums placed to lie horizontal and secured with rope	<input type="checkbox"/>
9. LPG Plant, including equipment and cylinders secured	<input type="checkbox"/>
10. Loading arms secured to gantry and product valves locked	<input type="checkbox"/>
11. RTWs loaded with product and parked in secure, non-flooding areas	<input type="checkbox"/>
12. Other company vehicles secured	<input type="checkbox"/>
13. Tank gauges taken and recorded	<input type="checkbox"/>
14. Electrical mains switched off	<input type="checkbox"/>



Delta Petroleum Corporation

Inland Spill Emergency Response Plan

Document Number : DELTA: ECP4

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INLAND SPILL EMERGENCY RESPONSE PLAN
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INTRODUCTION

These plans address emergency procedures to be followed in the event of a spill on land, controlled by Delta or third party. Typical examples would be spills in depots and during inland transportation of product.

(Reference is also made to the Marine Oil Spill Contingency Plan)

ASSESSMENT OF THE SPILL

In determining the procedures for dealing with an inland spill, the following criteria needs to immediately evaluated

- The source of the spill, and the maximum potential quantity of product that could be lost in the event the spill cannot be contained.
- The type of product and the hazards associated with it. Occasionally the spill may involve multiple products, in which case the worst-case properties for each product (toxicity, flammability etc.) should be taken into account. Refer to the MSDS for Product advice.
- The sensitivity of the local environment surrounding the location of the spill. This would include the possibility groundwater contamination, damage to the local wildlife, soil type, etc.

CONTROLLING THE SPILL

Once the source of the spill has been evaluated, every effort should be made to stop further spilling. For tanks that are leaking from the bottom, a water bottom should be introduced and maintained or temporarily made available while the product is transferred to other storage tanks. For leaks occurring from a vehicle storage tank, refer to SECTION 1 - VEHICLE ACCIDENTS. For broken pipelines, the flow through the pipe should be stopped, and the situation evaluated to see whether clearing of the pipeline is feasible (depends on the amount of product being lost by the depressurised line).

Spills outside of a Delta Depot should be immediately reported to the local Delta Office. Where the spill is spreading uncontrollably or poses a hazard to the public health, mobilize the local emergency services (Police, Fire Brigade) and the Local Delta Emergency Response System through the Delta Representative on the scene. In the event that there is a possible contamination to the local groundwater, the Water Authority should be immediately contacted.

The area should be secured and persons made available to control the area from the public. Persons working in the area should ensure that they are adequately protected with the appropriate personal protective equipment, as outlined in the MSDS. Further advice may be obtained from Delta Regional Operations Consultant.

UNDER NO CIRCUMSTANCES SHOULD ANY STATEMENT BE MADE TO THE PRESS UNLESS BY A SPOKESPERSON AUTHORISED BY THE DELTA CEO.

The spill should be prevented from spreading by creating temporary earthen bunds (use polyethylene sheeting if available, for impermeability) or by using oil spill booms if available and appropriate. Care should be taken in using equipment around flammable products. An explosimeter should be made available to check the surrounding area for explosive atmospheres, and if necessary, there may need to be an evacuation of the area, coordinated by the local Police.

Should the situation get out of control, immediately contact the Delta Crisis Response Team as outlined in the Delta Crisis Management and Response Booklet and Delta Crisis Contact Booklet for further assistance.

REMOVAL OF THE SPILL

Once the spill flow has been controlled, the next stage is to remove the spilt product and any contamination to the local area. Specific technical advice on pumping products may be obtained from Delta Regional Operations Consultant. Prior to the removal of the product, an assessment on the quantity of spilt product should be made and adequate storage provided for its removal (e.g. vehicle tank compartments, or other storage tanks in case of depot spills).

The urgency of the removal of the spill is primarily dependent on the rate at which product may be lost into the ground, but also on the damage to the local environment in allowing the product to seep into the ground.

The disposal of contaminated soil should be fully assessed to comply with local legislation and within the guidelines of the Waste Management Guide (1996) and the Guide for the Risk-Based Management of Potentially Contaminated Land (2000).

REPORTING THE SPILL

All spills in excess of one litre are to be reported to Delta using the Delta incident report form. Clearly a spill resulting in emergency deployment of resources will require a more thorough investigation including a TRIPOD analysis. This will include the cause of the spill (including violations to procedures), its size, cost of cleanup (including loss of product), damages to health or property, and any long-term impact to the environment as a result of the spill. The local Manager should also report any damage to Delta's reputation, as reported in the local media.



Delta Petroleum Corporation

VEHICLE ACCIDENT EMERGENCY RESPONSE PROCEDURES

Document Number : DELTA: ECP5

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VEHICLE ACCIDENT EMERGENCY RESPONSE PROCEDURES

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INTRODUCTION

These plans address emergency procedures in dealing with vehicle accidents, both for company and contracted vehicles, for Delta. The notification procedures for this plan will follow the model and requirement of the Delta Crisis Plan .

PROCEDURES

General

In the event of a vehicle accident the following instructions should be adhered to by the driver of the vehicle, if able, or by the local Delta Supervisor on arrival at the scene of the accident:

- Prevent any worsening of the situation created by the original accident by deploying warning devices (pylons, flags) to warn oncoming motorists. While securing the area, summon help. By contacting or asking someone to contact the emergency numbers list, which will also be listed on the side of the vehicle.
- Render assistance to any person concerned but it **MUST** be made clear that the help given is of a voluntary nature and is not an admission of liability. No expense whatever is to be incurred by a driver rendering such assistance. Where necessary, apply first aid techniques to injured persons and immediately contact local medical emergency services (refer to Medical Emergency Plan)
- Employees of the company **MUST not** admit liability
- The driver should give his/her name, the vehicle owner's name and address and the registration mark of the vehicle to anyone having reasonable grounds for requesting them (Police Officers or authorised Insurance Representatives).
- Report the accident to the Police as soon as reasonably practicable. In any case, within twenty-four (24) hours of the accident. Where personal injury has occurred, the accident must be reported immediately to the Police.
- Where personal injury has occurred, the senior Delta representative must ensure that the driver has produced the vehicle's certificate of insurance at the time to the police or to anyone who has reason for seeing it. Failing this it **MUST** be ensured that it is taken to the nearest Police Station within twenty-four (24) hours, together with the license of the driver involved.
- In the case of company vehicles, a copy of the certificate of insurance must be available on the vehicle. Copies of the certificate of insurance can be obtained from the local Delta office.
- In cases of Vehicle accidents the Operation Supervisor must accompany the driver to the company doctor where a Drug and Alcohol tests and a general check of the drivers physical condition will be done. The results of such test will form part of the information submitted as part of the accident investigation.

- Such test will include tests for alcohol, cocaine and marijuana and should be conducted no more than 2hrs after the incident, in the event that the driver is injured to an extent which precludes the test being done the test shall be performed as soon as reasonably practicable.

Accidents involving Vehicles Transporting White Oils

Should a vehicle transporting white oils be involved in an accident, an assessment of the cargo tank should be made, and if found to be leaking the following additional action should be taken:

- Where appropriate move the vehicle to a safe place, and if the time permits remove the fire extinguisher and locate in a convenient location. The tank should be plugged if possible. If the leak can be stopped securely, the vehicle should be driven without delay to the customer or to the depot, whichever is nearer, then discharged immediately.
- Enlist help of the local Delta Emergency Response System, Fire Brigade and where necessary, the local water authority (refer to Annex 1). Prevent product entering drains, sewers, watercourses etc. by using the emergency Spill Kit found in the road tanker or any other material as a barrier. The emergency spill equipment housed at the depot is to be brought to the scene by the fastest available means. Keep the general public away from the vehicle spillage and take precaution to prevent fire, including extinguishing or removing naked lights, cigarettes etc. In the case of motor gasoline and other white oils, if the product is not flowing and has ceased to leak request the fire brigade apply a covering blanket of foam to reduce the amount of vapours being released.
- Where possible, reduce the leakage by transferring product to empty compartments. In the case of motor gasoline and other white oils, DO NOT use the PTO pump on the vehicle. Only air driven pumps are suitable for transferring product to a good vehicle.
- Refer to the TREM card provided in the vehicle for further handling advice.

In the event that the situation is out of control, local management should contact Delta or Emergency Response System for further assistance.

Accidents Involving Vehicles Transporting LPG

Vehicles with bulk LPG tanks should be inspected for damage and if found to be leaking the following additional action should be taken:

- Leaking vehicles should not be moved under any circumstances.
- Drivers **SHOULD NOT** leave their vehicles unattended, unless **IMMINENT** danger is perceived. Enlist help to also contact the local Delta Emergency System, and the Fire Brigade
- Should there be a small leak in the tank, an attempt should be made to plug the leak with wood.

- Should there be a leak from pipework try to isolate the section by closing the

The following particulars should be obtained after the accident:	
The time of the accident	
The name of the road and neighborhood in which the accident occurred.	
Sketch a plan with measurements showing the position of the parties concerned and the course of action taken by them leading up to the accident.	
Weather and road conditions.	
Speed of the company vehicle and estimated speed of the other party.	
Names and addresses of witnesses. It is most important that these be obtained.	
Full particulars of any physical injury and the names and addresses of those concerned.	
Registration numbers of other parties.	
Where possible the names and addresses of the other party's insurance company should be recorded.	
Details of any spillage that occurred, including quantities and methods used to ensure the complete spill were removed from the local area.	
The vehicle accident report must be completed and handed in within twenty-four (24) of the accident occurring (including contractor's vehicles). Care must be taken to give the full information under each heading in the report	
Every accident, however small, which involved a spillage, must be reported immediately.	
Should the company vehicles suffer damage to the extent that it cannot be moved under its own power, the local DELTA office must be advised as soon as possible and give particulars of the damage.	

valve if possible.

- If the leak cannot be checked (depending on the size of the of the leak) the area should be secured by controlling all sources of ignition, i.e. motor vehicles, in the

immediate area should not be moved or allowed in the vicinity of the leaking vehicle. Any naked flames/spark causing agents in the area should be removed.

Vehicles transporting LPG cylinders should be assessed for damage, and any leaking cylinders quickly moved from the scene to a safe area. Every effort should be made to keep the general public away from the remaining area, and to secure the remaining cylinders. The local Delta office should immediately make arrangements to transfer the remaining stock of cylinders to another vehicle.

In incidents involving bulk and cylinder vehicles technical assistance MUST be requested as soon as practical.

Appendix I: Accident Reports Checklist

