



Appendix M

Emergency Response Management Plan

**Vista Gold Australia Pty Ltd
Mount Todd Project Area**



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1 Introduction

The Mt Todd Project Area (MTPA) is a brownfield/disturbed site that was historically mined for gold between the 1990s until 2000. The MTPA is located approximately 55 kilometres (km) northwest of Katherine and 250 km south of Darwin. The Northern Territory (NT) has a sub-tropical climate with distinct wet and dry seasons. A number of creeks and/or rivers are located within the mining lease. The area surrounding the mining lease is rural and sparsely populated. The Werenbun community is the closest residential area located approximately 6.5 km from the MTPA. The Stuart Highway, the main arterial road in the region, is located west of the site.

1.1 Purpose

This Plan forms part of the Environmental Management System (EMS) for the MTPA and is considered a working document. It will be updated following formal assessment by Department of Primary Industry and Resources (DPIR) as part of the mining authorisation process.

The Emergency Response Management Plan (ERMP) has been prepared to provide a response framework to specific emergencies at the MTPA. It is accepted that should implemented mitigation measures at the site fail, Vista Gold will operate in accordance with this ERMP, notifying relevant stakeholders and regulators as detailed.

The ERMP forms part of the Environmental Management Plan (EMP) and Mine Management Plan (MMP). However, the document has been developed as a standalone plan to facilitate responses to emergencies. It covers the construction and operation phases and its purpose is to:

- Provide a process for identifying, assessing and managing emergencies to minimise impact to human health and surrounding environment;
- Provide internal and external reporting requirements for emergencies; and
- Review and assess historical and/or industry specific incidents to inform future management of emergencies (subsequent ERMP revisions through the Mining Management Plan process).

1.2 Objective

The ERMP outlines standardised responses to ensure emergency situations are captured sufficiently. The main objectives of the ERMP are:

- Outline potential emergency situations;
- Identify initial responses (emergency response);
- Provide communication requirements;
- Establish requirements for site representatives;
- Provide statutory reporting requirements; and
- Provide investigation framework (where applicable).

1.3 Emergency Situations

The most likely emergency situation pertaining to activities throughout the LOM are:

- Fire/explosion – Building/machinery, environment;
- Human Health – Injured person;
- Human Health – Fatality;
- Sacred Site/Restricted Work Area Interference;
- Structural Failure;
- Hazardous Substance Release;
- Vehicle Incident; and
- Rescue from Heights.

1.4 Emergency Team Structure and Responsibility

The emergency response process will be managed by the site Emergency Response Team (ERT) which will consist of dedicated staff. All personnel within the ERT will undergo regular training and participate in regular mock and desktop exercises. The ERT includes members who are currently situated on site, a summary of the roles and responsibilities are provided in TABLE 1-1 Emergency Team Responsibilities.

Table 1-1 Emergency Team Responsibilities

Emergency Team Position	Responsibilities
Emergency Response Team Coordinator	<p>The ERT Coordinator is responsible for the implementation of the ERP and Emergency Team. The ERT Coordinator will:</p> <ul style="list-style-type: none"> • Ensure sufficiently trained resources are available on-site to deal with potential and actual emergency situations; • Monitor site radio communications for emergency situations; • Communicate with Emergency Response Team Members and/or Field Team Member; • Implement the ERP and capture all information relating to the situation; • Provide the 'All Clear' over UHF and to Muster Points; • Undertake and/or manage investigations into emergency situations or remedial works; • Maintain up to date Emergency Response Team members rosters and associated contact details; • Provide training to Emergency Response Team members; • Provide summary of incidents, actions and responses to the HSE Manager; • Provide tool-box talks as required to summarise emergency responses and details of any historical and/or industry specific incidents which have occurred, and management measures used; and • Review and approve modifications to the ERP annually and/or after an emergency situation.
Emergency Response Team	<p>The Emergency Response Team (ERT) will often be the first response for the majority of emergency situations. The ERT responsibilities include:</p> <ul style="list-style-type: none"> • First response coordinator to capture emergency and/or commence response. • Communicate with ERT Coordinator; • Provision of first aid to injured site personnel;



Emergency Team Position	Responsibilities
	<ul style="list-style-type: none">• Safety of all site personnel (including employees, subcontractors and visitors) within their areas;• Undertaking a roll call at Muster Points; and• Provide accurate and updates to all site personnel.
Medical Services Provider	<p>The Medical Services Provider (MSP) will provide immediate first aid as required and establish additional measures required (i.e. external emergency response).</p> <ul style="list-style-type: none">• The MSP will provide tool-box talks on topical issues as required.
Site Personnel	<ul style="list-style-type: none">• All site personnel including employees, subcontractors and visitors are responsible for:• Complying with Site Induction requirements and Emergency Response Team instructions; and• Ceasing activities and leaving work areas in a safe condition as required; and• Reporting to local Muster Points and returning to work when the 'all clear' instruction is provided.

2 Emergency Management

The MTPA, based on current known data will have a life of around 20 years inclusive of construction, operations and closure. Construction is anticipated to take two years. The mine is scheduled to operate for an additional 13 to 14 years, and closure and rehabilitation of the mine is expected to take four years.

2.1 Education and Training

Vista Gold will ensure that ERT personnel receive appropriate emergency response training and this will continue throughout the LOM. Vista Gold will look into the requirements for its ERT to participate in Mines Rescue Competitions to enhance their skills and capabilities. Records of training content and attendance will be maintained by the Training Department.

2.1.1 Site Induction

All personnel coming to site will be required to sit through an inducted for all activity phases throughout the LOM. Elements relating to emergency response that personnel need to be aware of and will be incorporated in the site induction will include:

- Summary of potential emergency situations;
- Site personnel requirements; and
- Detail of Muster Points.

2.1.2 Safety Moments

Following any significant incident at the MTPA (including near misses with significant potential) a safety moment will be produced by Area Supervisors with assistance from Health Safety & Environment (HSE) team members. The Safety Moment will include a picture of the incident (where relevant), summary of events leading up to the incident, root cause and future management measures or recommendations.

2.1.3 Toolbox Talks

The ERT Coordinator will provide tool-box talks to the workforce as required. The tool-box talks will summarise emergency responses and details of any historical and/or industry specific incidents which have occurred, and management measures implemented.

2.1.4 Task Specific Procedures and JSAs

Operational personnel will be trained in area specific procedures and Job Safety Analysis (JSA)s to ensure emergency response requirements for some tasks are identified e.g. work at heights, confined space entry. Procedure and JSA training will also include aspects of emergency response.

2.1.5 Emergency Response Team

ERT members will undertake regular training covering key emergency situations such as fire, vehicle incidents, height rescue, structural failure, hazardous substances and advanced first aid or medical treatment associated with emergency situations that may occur at the Project. The ERT Coordinator will



be responsible for scheduling training and ensuring ERT members meet minimum competency requirements.

Desktop and mock exercises will be conducted to test ERP procedures, processes and personnel roles. Desktop exercises can nominally be carried out every 6 months with a mock exercise carried out annually.

2.2 Emergency Communications

Mobile phone reception is poor in some parts of the MTPA. Vista Gold will investigate whether phone reception boosters will be suitable to expand emergency communication capability around the site.

Generally emergency communication will be through Ultra High Frequency (UHF) radio (with booster relays where required) using a dedicated emergency channel (Channel 12) or nominated by the emergency response coordinator.

High density work areas, such as the processing plant, will have manually activated alarms installed for a quick response to an emergency. This alarm will be directed to the processing plant operation room and the emergency response coordinator.

2.2.1 Emergency Protocol

The sections below outline the protocol to follow in case of an emergency.

1. Emergency Raised.

When an emergency is raised via the emergency channel /alarm the information provided requires to be clear and concise stating the following:

- Your name;
- Location of the incident;
- Description of the incident scene; and
- Best route to be used to approach the incident location and.
- If safe to do so, render assistance or first aid if required until the Emergency Response Team (ERT) have arrived.
- Once the ERT have arrived evacuate the location and assemble to Muster Point(s) or to a safe location.

2. Assess Incident

Each work area will have a dedicated Emergency Response Team Member who will be appropriately trained to assess incidents and undertake required protocols in accordance with this plan. Incidents will be assessed and investigated as per Section 3 of this document.

3. All Clear

The Emergency Response Team (ERT) coordinator is responsible for closing out incidents and providing the 'All Clear' radio call to all site personnel and Muster Points effected.

4. Re-entry



Once the all clear signal has been given, personnel may return to their work areas. In most situations a debrief will be held following the incident.

5. Debrief

The ERT coordinator will schedule and undertake a debrief meeting following the incident. The meeting shall include ERT and site personnel directly involved with the incident. The debrief meeting will be undertaken to:

- Assess response times and effectiveness;
- Undertake a step-by-step assessment of individuals actions and appropriateness; and
- Identify additional management measures and/or responses for future incidents.
- The ERT coordinator will update the ERMP and provide a briefing to the Project Management Team.

2.2.2 Emergency Contacts

Mobile phone coverage will be upgraded during the construction phase. Until then, communication at the site will continue to be undertake via UHF radio (with booster relays where required) throughout the LOM. A summary of external emergency contacts is detailed in *TABLE 2-1 Summary of Emergency Contacts*.

Table 2-1 Summary of Emergency Contacts.

Contact	Number	Assistance
Fire / Police / Ambulance	000/112	Priority response to emergencies
Katherine Police Station	131 444 / 8973 8000	Non-urgent enquires
Katherine Fire Brigade	8973 8014	Non-urgent enquires
Katherine Hospital Emergency Dept.	8973 9188	Medical assistance
Royal Flying Doctors / Care Flight	000/112	Medical Evacuation

2.3 Remote Journey Management

A check-out / check-in board will be established at the mine site to assist in logging the locations of remote site work. Remote locations that are outside of the MTPA are visited.

Prior to remote journeys a trip plan will be submitted to the team Supervisor and Safety Officer a minimum of 24 hours if possible before departure.

The trip plan will contain the following:

- Itinerary – estimated departure and arrival time.
- Communications Procedure – call-in scheduled communications.
- Nominated Job Safety Contact – call in contact.
- Map of Locality – including locations to be visited and estimated times of arrival.
- Vehicle Information – registration, type and model.

- Personnel Information – names and skills (first aid training).
- Communications Details – satellite phone, mobiles, spot (if using), pastoralist or roadhouse.

Once the information is received, the Safety Officer must make sure they are briefed on all aspects of the trip plan. The communications procedure and emergency response procedure should be explained to all personnel going into the field with any queries or questions brought up at this briefing.

2.3.1 Remote Communications Procedure

A summary of the remote communications procedure is detailed in TABLE 2-2 Remote Communications Procedure. THE procedure outlines the processes to be undertaken throughout remote works and if communications are not maintained.

Table 2-2 Remote Communications Procedure.

Step	Details
Step 1	<p>If a scheduled call in is not received within 30 minutes (remote area) the Job Safety Contact must undertake the following procedure.</p> <ul style="list-style-type: none"> • Attempt to call the nominated contact number. If contact made Job Safety Contact is to confirm the location and status of the person and the estimated time of arrival at destination. The Job Safety Contact is to confirm a time for the person to call when they arrive at destination or confirm next call in time and details. The Job Safety Contact must record the actions taken in the Safety Call In Escalation Log (template in Attachment M1). • If no contact then proceed to Step 2.
Step 2	<p>Job Safety Contact to call the persons nominated contact number.</p> <ul style="list-style-type: none"> • If contact is made inform the person of missed call in, establish a reason for missed call in, establish estimated arrival time at destination and establish a call in schedule. The Job Safety Contact must record the actions taken in the Safety Call In Escalation Log. • If no contact made, try alternative number if travelling in a group. The Job Safety Contact must record the actions taken in the Safety Call In Escalation Log. • If no contact is made after three consecutive attempts then inform the Safety Officer and proceed to Step 3.
Step 3	<p>Job Safety Contact and Safety Officer to work together and:</p> <ul style="list-style-type: none"> • Contact next of kin and/or all other persons who may know whereabouts of person and establish last known contact. • Establish potential location of team from trip plan and/or last call in. • The Job Safety Contact must record the actions taken in the Safety Call In Escalation Log. <p>If unable to establish location and safety of person then proceed to Step 4.</p>
Step 4	<p>If the team cannot be located then the Safety Officer is to inform the HSE Manager. The HSE Manager to inform the Mine Manager/General Manager who is to contact the Police providing details of the estimated location based on information gathered during Step 3. Vista Gold to liaise with Police and Emergency Services to establish and provide emergency response personal to join a search and rescue team. The Job Safety Contact must record the actions taken in the Safety Call In Escalation Log.</p>



2.4 Muster Points

During emergencies and emergency training exercises, personnel will be required to evacuate to a place of safety. Designated areas will be established across the site based on being the least hazardous in the event of an emergency.

In the event of an evacuation, all personnel will cease work immediately; leave all equipment in a safe condition, before walking calmly and quickly toward the nearest muster point.

2.5 Incident Reporting

All incidents will be reported in one form or another. Notifiable incidents will be reported to the Regulators and non-reportable incidents will managed through internal processes.

2.5.1 Safety Incidents

Under the Work Health and Safety (National Uniform Legislation) Act it is a requirement to notify NT WorkSafe if certain incidents occur in the workplace. Notifiable incidents that are reportable under the WHS Act are:

- The death of a person – whether an employee, contractor or member of public;
- A serious injury or illness; or
- A dangerous incident required to notify NT WorkSafe immediately after becoming aware a notifiable incident in their workplace

The operator is required to notify NT WorkSafe immediately after becoming aware a notifiable incident in their workplace.

2.5.2 Environmental Incidents

All environmental incidents on site will be reported as per the requirements of Environmental Incident Reporting under Section 29 of the *Mining Management Act*. Any environmental incident deemed to be of any significant nature will be detailed in a formal Incident Report and submitted to the DPIR. Under Section 29 an incident must be reported as soon as practicable. Vista Gold will provide a verbal report of an incident within 24 hours and provide a written report within 7 days unless instructed by the Department otherwise.

All environmental incidents off site, but are associated with Vista Gold's activities at the MTPA will be reported to the NT EPA under Section 14 of the *Waste Management and Pollution Control Act*. Notification must be received by the EPA within 24hrs. A written response must be received by the EPA within 7days. A summary of incident reporting requirements is provided in Table 2-3 below.



Table 2-3 Regulatory Body Reporting Requirements.

Entity	Trigger	Timeframe and Contact Details	Incident Reporting Details
NT Environmental Protection Authority (NT EPA)	<p>An Incident which causes, or is threatening or may threaten to cause pollution resulting in material environmental harm or serious harm.</p> <p>Qualifying triggers requiring submittal of a Section 14 Incident Report to the NT EPA are any of the following:</p> <ul style="list-style-type: none"> • Is not trivial or negligible in nature; and/or • Consists of an environmental nuisance of a high impact or on a wide scale; and/or • Results, or is likely to result in \$50,000 or more in taking action to prevent or minimise environmental harm or rehabilitate the environment; or results in actual or potential loss or damage to value of \$50,000 or more of the prescribed amount (whichever is the greater). 	<p><24 hrs post incident</p> <p>ntepa@nt.gov.au pollution@nt.gov.au</p> <p>Written response to the EPA within 7 days.</p>	<p>Section 14 Incident Reporting Form requires the following details and is included in 0:</p> <ul style="list-style-type: none"> • Incident causing or threatening to cause pollution; • Date & time; • How the pollution has occurred, is occurring or may occur; • Attempts made to prevent, reduce, control, rectify, investigate and/or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident; and • Operator details; and • The form is to be signed by the HSEC Manager and/or General Manager for submission.
Department of Primary Industry and Resources (DPIR)	<p>An Incident which causes minor environmental impact with some minor actual or potential harm to the environment.</p>	<p>As soon as practicable.</p> <p>mineral.info@nt.gov.au</p>	<p>The Section 29 Notification of Environmental Incident Form requires the following details and is included in 0:</p> <ul style="list-style-type: none"> • Site and operator details; • Location occurred and area impacted (GPS coordinates); • Date and time; • Description of incident; • Emergency and remedial actions taken; • Nature of impact and severity; • Current situation; • Details of sampling undertaken; and • Notification status internally and externally; and



			<ul style="list-style-type: none"> • The form is to be signed by the HSEC Manager and/or General Manager for submission.
NT WorkSafe	<p>Incident which results in either:</p> <ul style="list-style-type: none"> • Death of a person; • Serious injury or illness; or • Dangerous incident. 	<p>Notification to NT WorkSafe immediately.</p> <p>Tel: 1800 019 115 ntworksafe@nt.gov.au <u>u</u></p> <p>Notification form submitted within 48hrs</p>	<p>The NT WorkSafe Incident Notification Form requires the following details and is included in 0:</p> <ul style="list-style-type: none"> • Person submitting details; • Incident details including date, time and human injury details; • Work activity being undertaken at the time of incident; • Witness(es) details; • Details of injured / deceased persons; • Summary of injury or illness; • Future remedial actions; and • The form is to be signed by the HSEC Manager and/or General Manager for submission.
Aboriginal Areas Protection Authority	Entrance and/or damage of sacred site or restricted works area.	<p>As soon as practicable.</p> <p>Tel:(08) 8999 5511</p>	<p>No standard notification form is available. However, the following should be provided within the initial notification:</p> <ul style="list-style-type: none"> • Location of the site (grid reference); • AAPA certificate pertaining to the site; • Summary of damage; • Name and organisation of discoverer; • Type and method of interference (exposed and/or damaged); and • Photograph of damage.
Heritage Branch	Discovery or damage to items of heritage value.	<p>As soon as practicable</p> <p>Tel: (08) 8999 5039</p>	Seek advice from the Heritage Council.

2.6 Environmental Investigations

Several of the most likely emergency situations have the potential to cause environmental impacts to soil, surface water and/or groundwater. Investigations into the extent of the impact and recommendations for remediating areas will be determined in accordance with the following environmental investigation framework.

Environmental investigations will be undertaken to a level that is representative to the environmental risk (i.e. not all investigations will include the sampling of groundwater) and significance or consequence level in line with Project incident reporting and risk management system.

2.6.1 Sampling, Analysis and Quality Plan

The Environmental Officer will develop a Sampling, Analysis and Quality Plan (SAQP). However, in incidents which involve discharge and / or spills into flowing watercourses initial sampling will be undertaken as a priority.

The SAQP will contain sufficient information to undertake an investigation to assess the presence and nature of contamination. The document will be designed to provide detail to a sufficient level that can be understood and audited by a third party. The contents of the SAQP will include:

- Introduction;
 - Incident summary and
 - Investigation objectives;
- Environmental Setting;
 - Location and extent;
 - Vegetation;
 - Geology;
 - Surface Water; and
 - Groundwater;
- Data Quality Objectives;
 - Basis of assessment
 - Adopted investigation levels
- Sampling, Analysis and Quality Programme;
 - Soil;
 - Groundwater; and
- Surface Water.

The quantity of sampling locations will be determined with reference to industry documentation for the investigation of contaminated land as detailed below:

- NEPC (2013) National Environmental Protection (Assessment of Site Contamination) Measure (NEPM) Amendment No. 1 - Schedule B1, Guideline on Investigation Levels for Soil and Groundwater (NEPM 2013);

- Australian Standard AS 4482.1–2005. Guide to the investigation and sampling of sites with potentially contaminated soil - Part 1: Non-volatile and semi-volatile compounds; and
- Australian Standard AS 4482.1–1999. Guide to the sampling and investigation of potentially contaminated soil - Part 2: Volatile substances.

The investigation of surface water and groundwater requires a baseline and/or up gradient position to assess against in addition to adopted investigation levels. If the impact is detected outside of the investigation locations, additional sample locations will be supplemented into the investigation.

Incident investigations will adopt assessment criteria relevant to the location and/or receptor(s). The investigation levels will be developed with reference to the following:

- Northern Territory Environmental Protection Authority (NTEPA), Northern Territory Contaminated Land Guideline, June 2017, Version 1.0.
- NTEPA, Guidelines for Consultants Reporting on Environmental Issues, January 2013.
- Australian Standard AS 4482.1-2005. Guide to the investigation and sampling of sites with potentially contaminated soil - Part 1: Non-volatile and semi-volatile compounds.
- Australian Standard AS 4482.2-1999. Guide to the sampling and investigation of potentially contaminated soil - Part 2: Volatile substances.
- CRC CARE (2011) Health Screening Levels for petroleum hydrocarbons in soil and groundwater. Technical report series No. 10. Cooperative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE). Friebel, E. and Nadebaum, P, 2011; and
- NEPC (2013) National Environmental Protection (Assessment of Site Contamination) Measure (NEPM) Amendment No. 1 - Schedule B1, Guideline on Investigation Levels for Soil and Groundwater (NEPM 2013).

2.6.2 Site Investigation

Personnel who have sufficient experience and knowledge of contaminated land sampling and quality control / quality assurance will undertake the site investigation. Sufficient information will be collected throughout the site investigation and development of the SAQP to facilitate an assessment of the impact and can include field notes, bore/soil logs, photographs and equipment calibration certificates.

2.6.3 Site Investigation Report

The Incident Assessment Report (IAR) will provide a summary of the SAQP, site investigation and provide analysis and interpretation of environmental risk. The report will summarise recommendations to address potential ongoing environmental risk and classify wastes if soils are to be removed from the Project. The contents of the IAR will include:

- **Introduction:**
 - Incident Summary; and
 - Investigation Objective.
- **Environmental Setting:**
 - Location and Extents;
 - Vegetation;

- Geology;
- Surface Water; and
- Groundwater.

- **Data Quality Objectives:**
 - Basis of Assessment; and
 - Adopted Investigation Levels.

- **Sampling, Analysis and Quality Programme:**
 - Soil;
 - Groundwater; and
 - Surface Water.

- **Field Investigation(S):**
 - Fieldwork Methodology
 - Laboratory Analysis Program

- **Results:**
 - Soil
 - Groundwater
 - Surface Water
 - QA/QC

- **Discussion:**

- **Recommendations:**

2.7 Spill prevention and response

This section provides an overview of the processes in place for spill prevention and response on site in order to minimise impacts on the surrounding environment.

2.7.1 Preventive Controls

- All supervisors and personnel working directly with chemicals and hydrocarbons will undertake training in spill prevention and response on site.

- Construction machinery and equipment will:
 - Have the appropriate licence and certificates;
 - Be checked daily by the operator before using, as part of the Daily Plant Inspection Checklist (pre starts) to identify any leakages;
 - Be accompanied by a service and maintenance record.
 - Portable equipment such as generators must be placed on drip trays with rain protection, which will be checked and cleaned on a regular basis;
 - All hazardous chemicals and dangerous goods should be stored appropriately as per the Dangerous Goods and Hazardous Substances Management Sub Plan;
 - If cracked hydraulic hoses are identified, operation shall be suspended immediately until hoses can be replaced;

- Regular maintenance of plant and equipment should only be carried out in designated servicing locations.

2.7.2 Managing Spills

The management of spills on site will be determined by the spill the severity of the event. In the event of a spill, the following spill response steps will be undertaken; Table 2-4 will be a guide to determine the classification of a spill.

- The workers present at the time of the spill and will respond immediately by contacting their direct supervisor and minimising the area of contamination by containing the spill;
- The supervisor will notify the Environmental Department (on the same day for level 1 spills and immediately for all level 2 and 3 spills);
- All level 1 spills should be cleaned up immediately by the responsible work area. Clean up measures for level 2 and 3 spills may need to be coordinated by the Emergency Response Coordinator;
- Where the spill is reportable, Incident Reports shall be completed as per time frame outlined in TABLE 2-3 Regulatory Body Reporting Requirements.;
- Spill kits shall always be fully stocked and placed in appropriate locations around the MTPA, including hazardous materials storage areas, waste management areas, vehicle and equipment wash down areas, equipment servicing areas and fuel delivery and handling areas;
- Spillages must be cleaned up using dry methods that minimise the release of wastes or contaminants;
- Spill clean-up materials will be classified as regulated waste and will be disposed of appropriately.

Table 2-4 Oil spill classifications

		Spill (L)		
		<20 L	20–200 L	>200 L
Hydrocarbon		<20 L	20–200 L	>200 L
Sewage		<1000 L	1000–10 000 L	>10 000 L
Non-hazardous chemical e.g. many paints and detergents		<20 L	20–200 L	>200 L
Hazardous chemical as per Safe Work classification		<2 L	2–20 L	>20 L
Contaminated water <i>where water quality exceeds Discharge Criteria</i>		<1000 L	1000–10 000 L	>10 000 L
Receiving environment	Bund or contained impervious area	Not reportable*	Not reportable*	Level 1
	Compacted or sealed surface (<i>hardstand, road or work area</i>)**	Not reportable*	Level 1	Level 2
	Permeable surfaces or retention pond/sump (land based)	Level 1	Level 2	Level 3
	Nearshore, shoreline, waterway, marine environment (<i>not sensitive</i>)	Level 2	Level 2	Level 3
	Sensitive ecosystem*** (<i>reef systems, intertidal range, seabird habitats, creeks</i>)	Level 2	Level 3	Level 3

2.7.3 Monitoring

The Environmental Checklist will be used to monitor all dangerous goods and hazardous substances storages on the project site and will outline any spill incidents. Spill response equipment will be monitored on a weekly basis to check they are adequately equipped.

2.7.4 Corrective Actions

Should an incident requiring corrective action occur the following will be undertaken:

- The Project Manager and Contractor will be verbally notified pending more detailed analysis and written confirmation;
- The environmental team will raise an Incident Report and undertake a detailed investigation commenced by the SHES Manager to determine the cause of the problem and necessary remedial measures to prevent its recurrence;
- When determined, remedial measures will be implemented and the Incident Report closed out by the Contractor's Site SHES Manager, with a copy to the Project Manager;
- Toolbox talks and environmental alerts will be used to communicate the incident and the corrective action to OPS-1 workers. Where necessary training will be undertaken to address the issue and prevent recurrence.



2.7.5 Basic Reporting Requirements

Any Incident Report compiled as a result of a spill will contain the following information for the Contractor:

- Name of the person reporting the spill and their contact information;
- Time of spill;
- Time of detection of spill;
- Type of product spilled;
- Amount of product spilled;
- Location of spill and area affected;
- Source of spill;
- Medium affected (soil, surface water, marine);
- Type of accident (collision, rupture, overflow);
- If the spill is contained and, if not, where it is flowing;
- Clean-up efforts already underway;
- Action taken or to be taken to prevent future occurrence (with target dates)

3 Incident Response Process

Emergency response actions have been predetermined to facilitate the management of incidents at the Project. Incidents may include one or more response plans and they should be used in unison as required. The responses covered include:

- ***Figure 3-1 Fire/Explosion Emergency Response Flow Chart;***
- ***Figure 3-2 Human Health – Injured Person Emergency Response Flow Chart;***
- ***Figure 3-3 Human Health – Fatality;***
- ***Figure 3-4 Sacred Site / Restricted Work Area Interference;***
- ***Figure 3-5 Structural Failure;***
- ***Figure 3-6 Hazardous Substances Release;***
- ***Figure 3-7 Vehicle Incident;***
- ***Figure 3-8 Rescue from Height***

Figure 3-1 Fire/Explosion Emergency Response Flow Chart

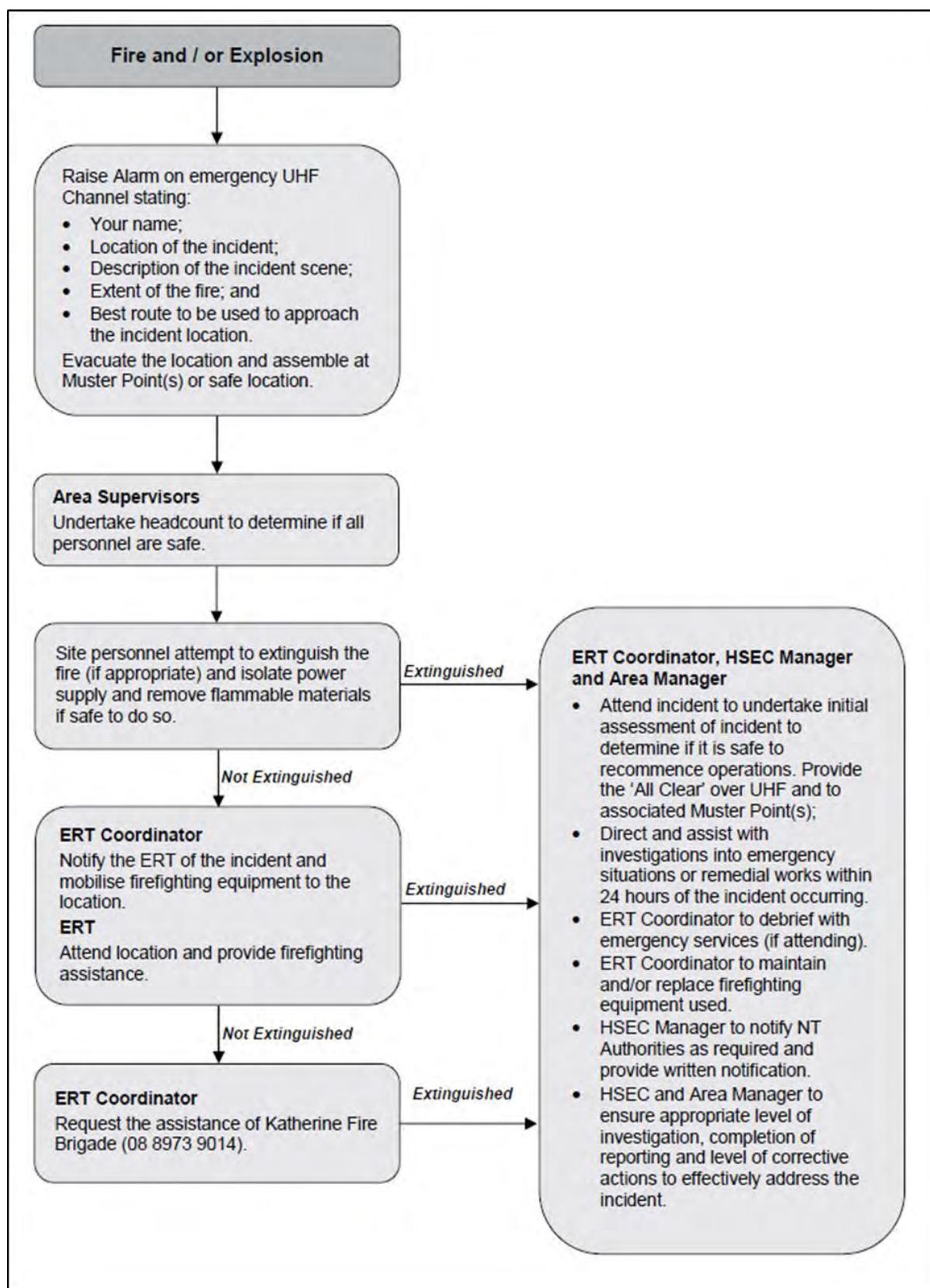


Figure 3-2 Human Health – Injured Person Emergency Response Flow Chart

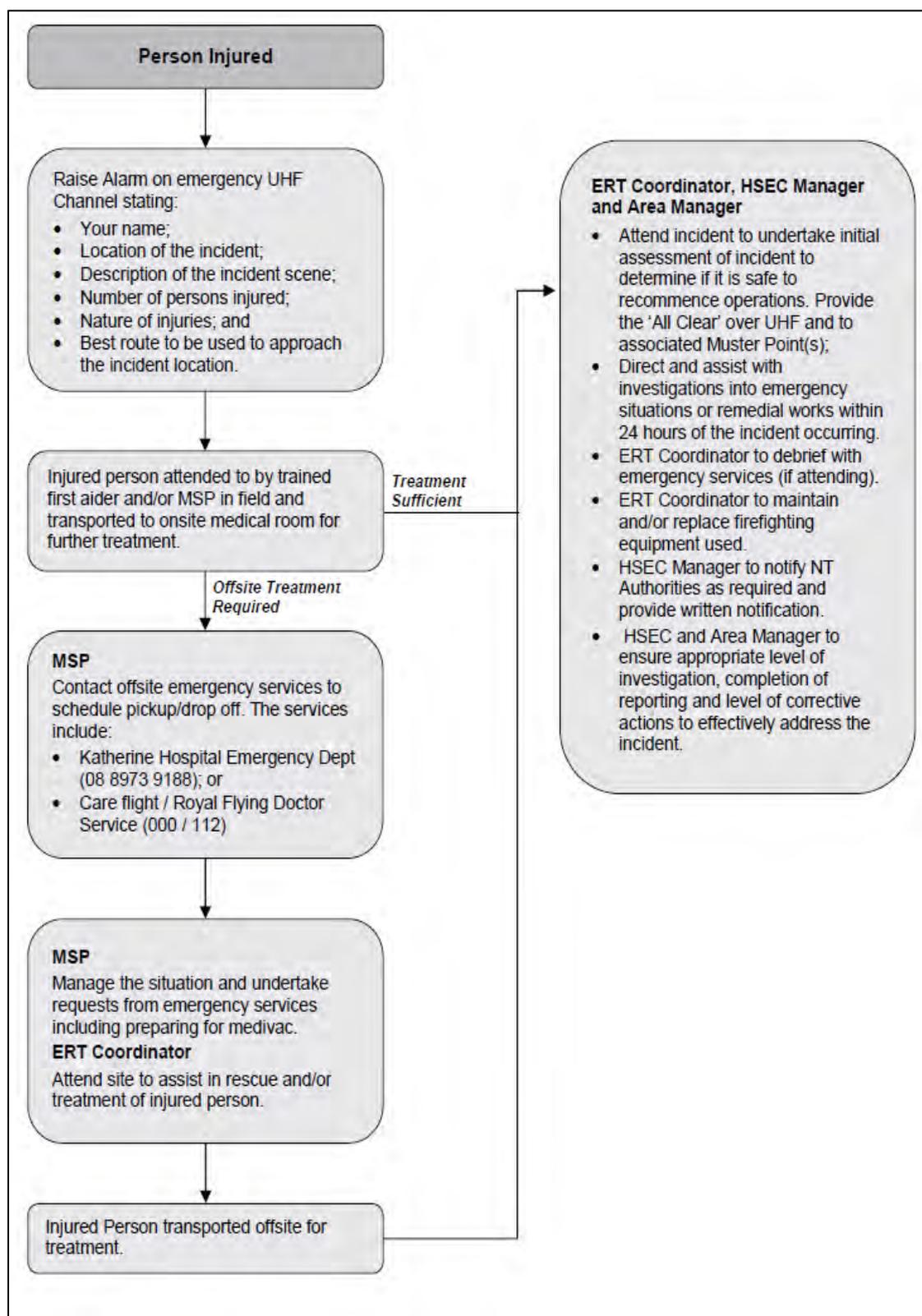


Figure 3-3 Human Health – Fatality

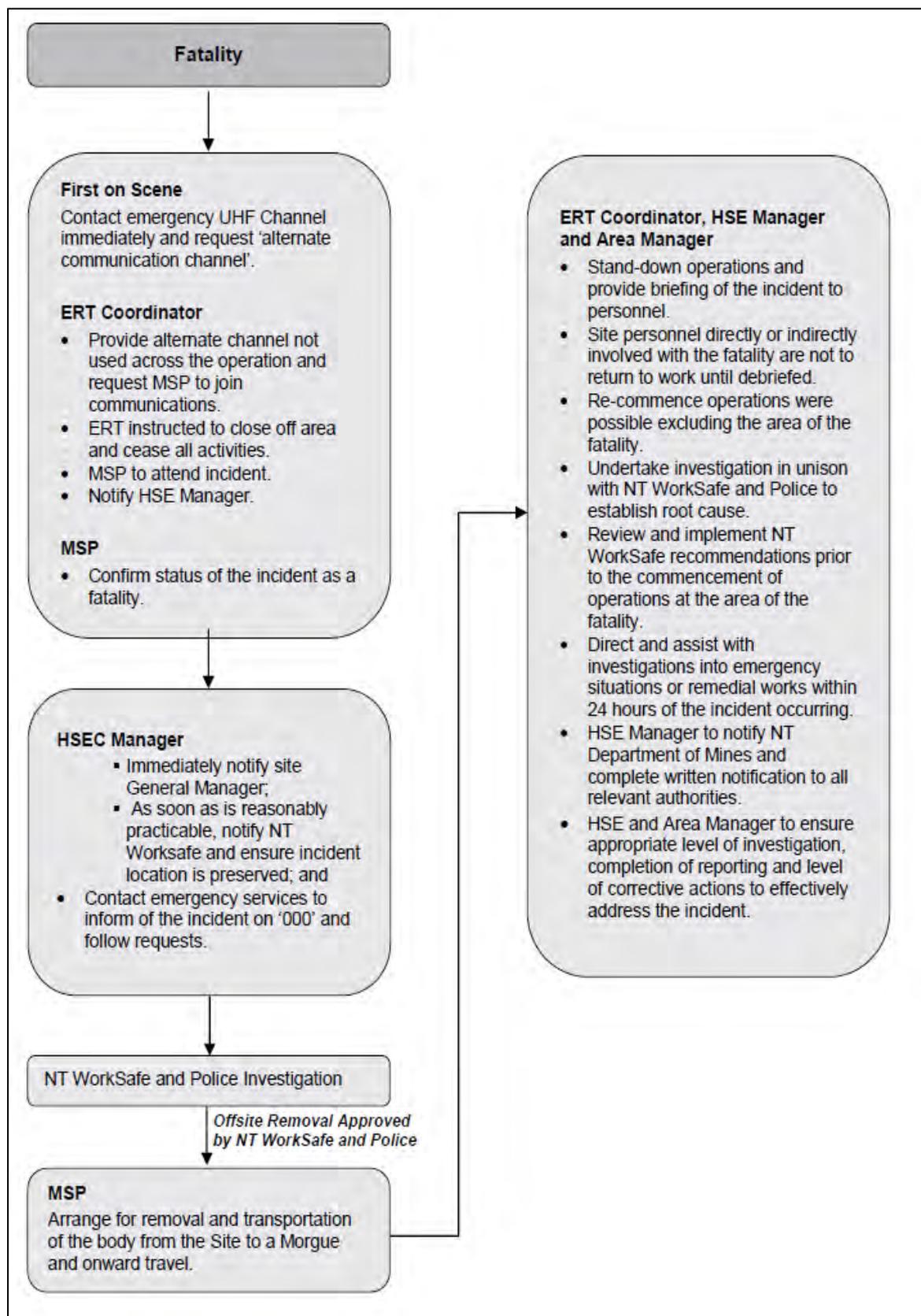


Figure 3-4 Sacred Site / Restricted Work Area Interference

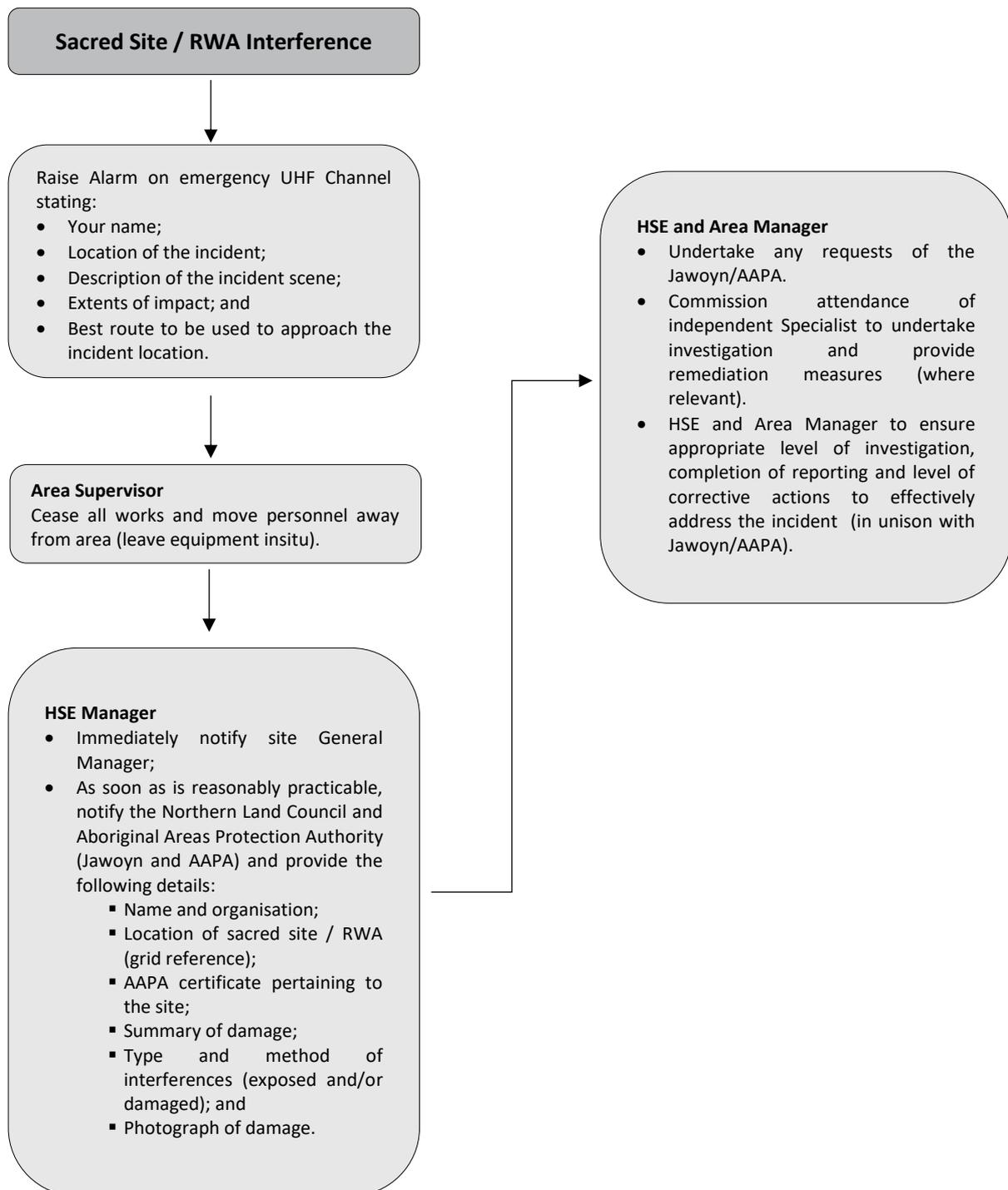


Figure 3-5 Structural Failure

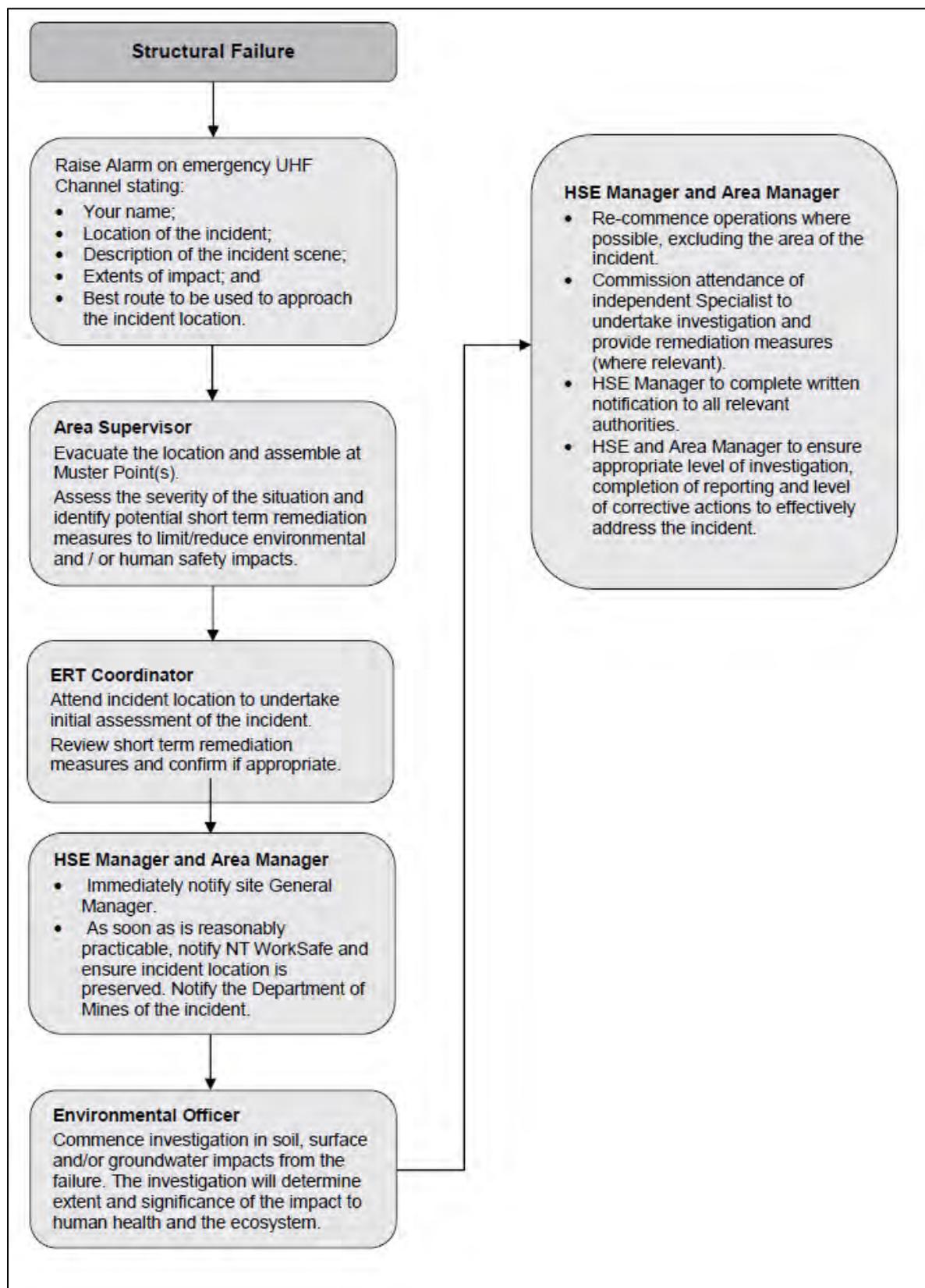


Figure 3-6 Hazardous Substances Release

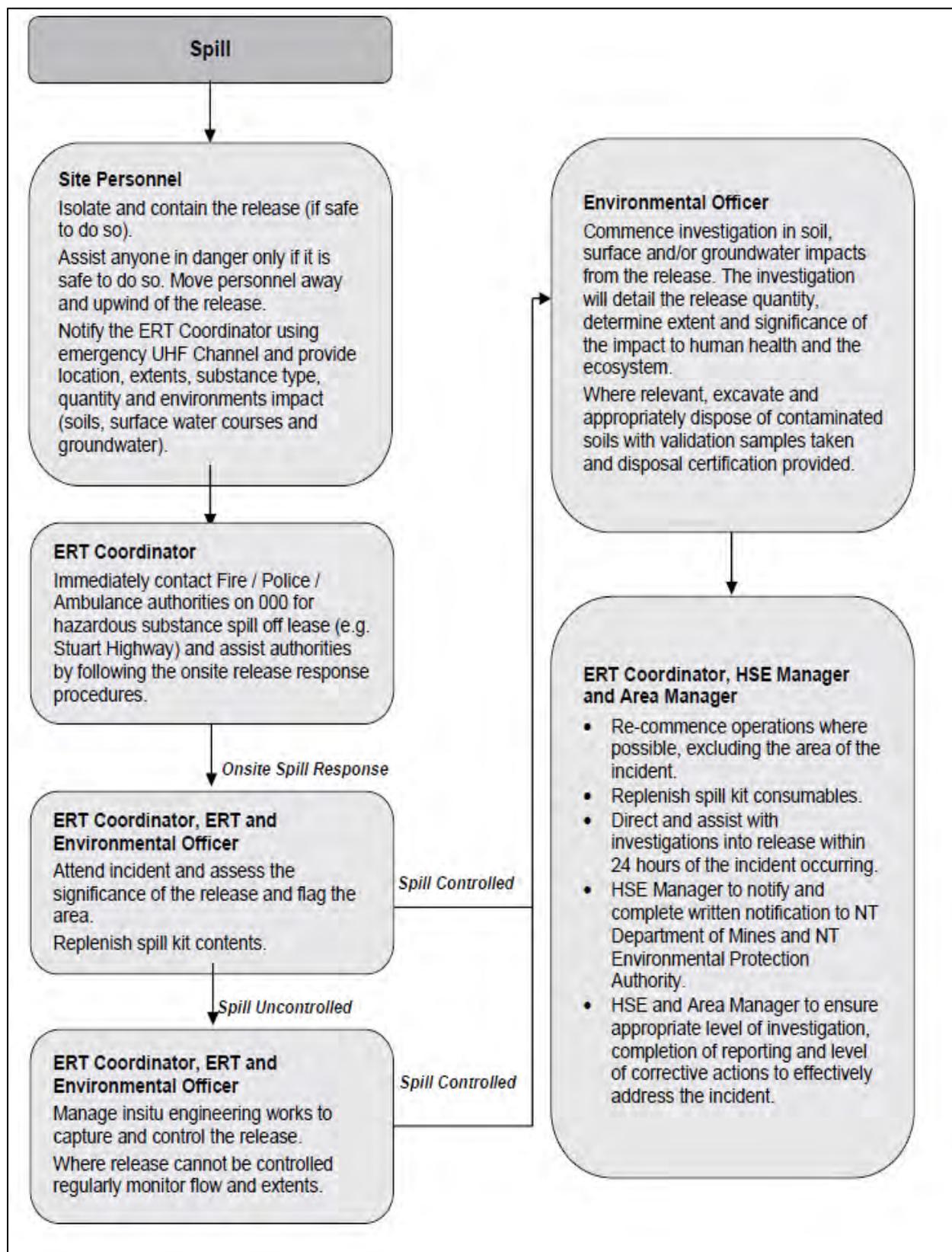


Figure 3-7 Vehicle Incident

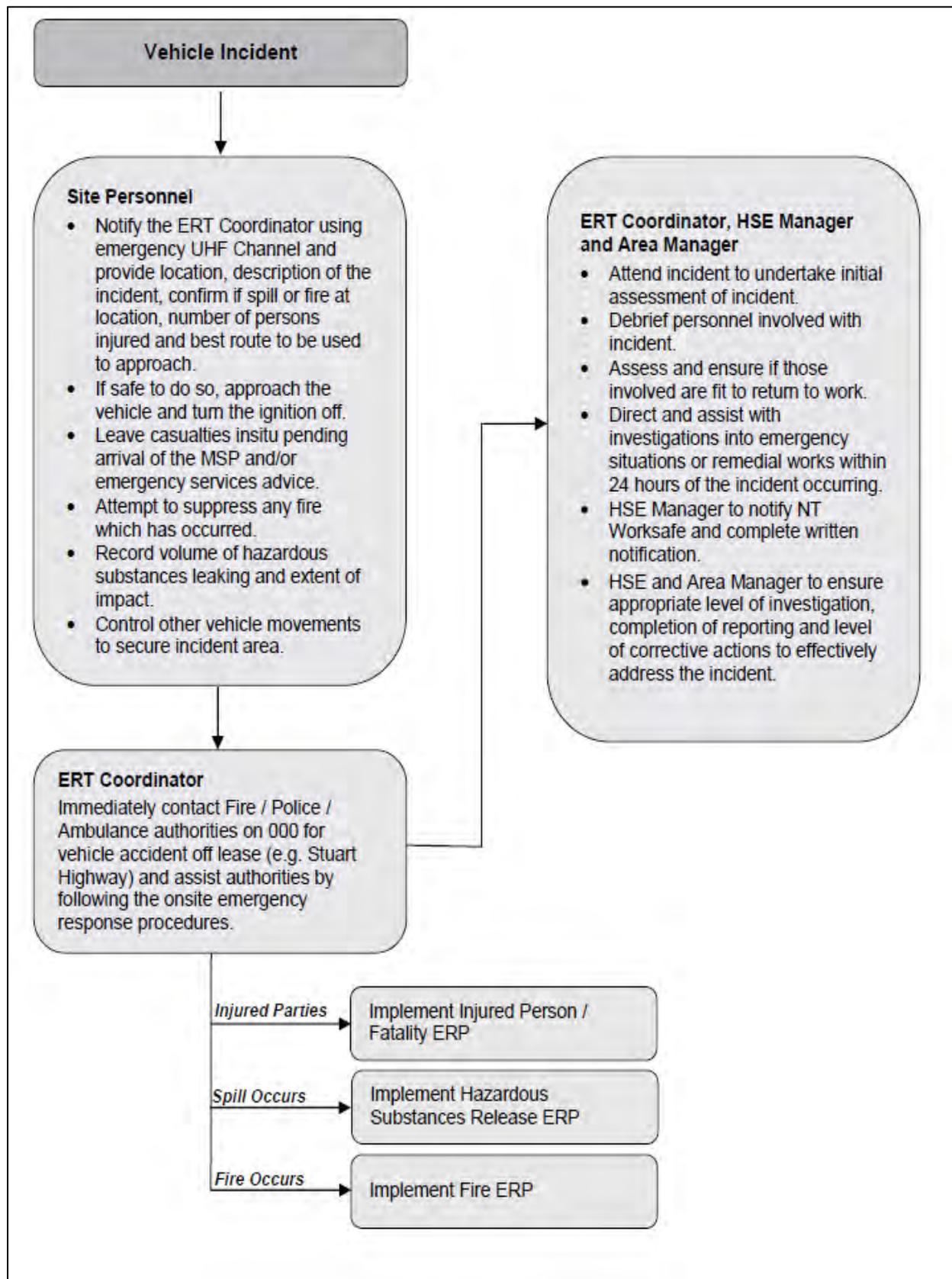
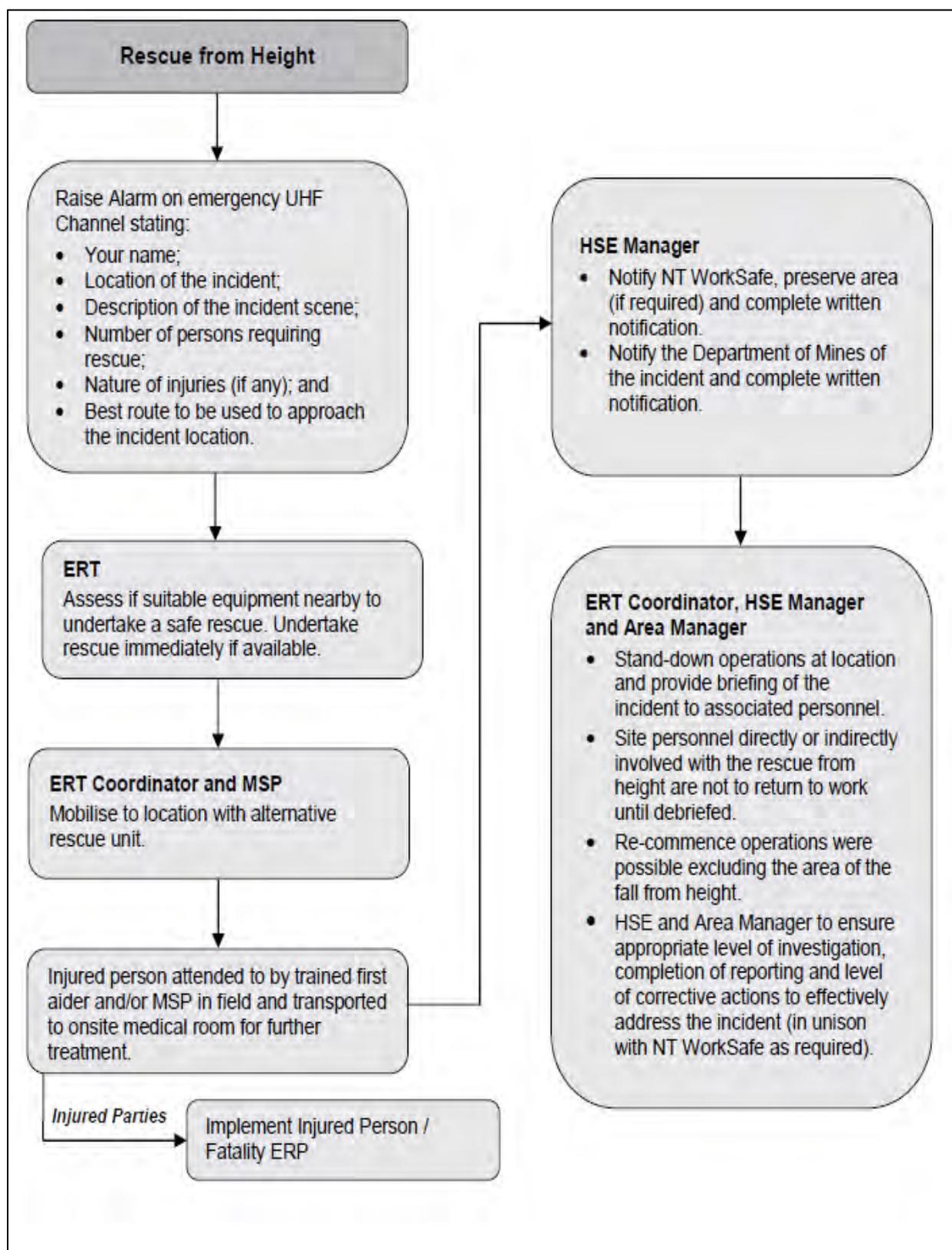


Figure 3-8 Rescue from Height





Attachments



Attachment M1– **Safety Call in Escalation Log**



Attachment M2– Incident Report Template

SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

Date and Time of Notification:	
Person / Company:	
Incident:	

(a) the incident causing or threatening to cause pollution	
(b) the place where the incident occurred	
(c) the date and time of the incident	
(d) how the pollution has occurred, is occurring or may occur	
(e) the attempts made to prevent, reduce, control, rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident	
(f) the identity of the person notifying the NT EPA	

Attachment M3– **Notification of an Environmental Incident Form**

Notification of an Environmental Incident

Forward completed form to:	Mining Operations Department of Primary Industry and Resources Email: mineral.info@nt.gov.au (preferred) Fax: (08) 8999 6527
All environmental incidents are to be reported in accordance with section 29 <i>Mining Management Act</i> (MMA)	

NAME OF MINING SITE		
NAME OF OPERATOR		
DATE AND TIME OF INCIDENT		
NAME OF PERSON NOTIFYING		
POSITION/TITLE		
CONTACT PERSON		
CONTACT DETAILS	Business:	Mobile
	Fax:	E-mail:
INCIDENT LOCATION (use GPS co-ordinates, attach map etc. as appropriate)		
DESCRIPTION OF INCIDENT Attach photographs etc where available		
NATURE OF ACTUAL/POTENTIAL IMPACT (Volume of spillage, area impacted wildlife/vegetation/erosion, etc.)		

Notification of an Environmental Incident

ENVIRONMENTAL DETAILS

EMERGENCY AND REMEDIAL ACTIONS TAKEN	
CURRENT SITUATION (Potential/ongoing/ceased etc.)	
DETAILS OF ANY SAMPLES TAKEN (when/where/type/number/time for availability of results etc. Include plans of sampling locations where possible)	

OPERATOR INTERNAL REPORTING

Has the incident been reported internally? YES / NO If so, to whom	Name:
	Position:
Operator reference number (where applicable/available)	

HAS THE DEPARTMENT BEEN NOTIFIED EARLIER?	<input type="checkbox"/> YES <input type="checkbox"/> NO
WHO WAS NOTIFIED	
HOW (phone/email/fax)	
WHEN (date and time)	
BY WHOM	

Signed: _____ Date: _____ Time: _____

NAME: _____

POSITION: _____

OFFICE USE ONLY	
RECEIVED BY	
DATE	TIME

Attachment M4– **Incident Notification Form**

Incident notification form

Sections 35 to 39 of the *Work Health and Safety (National Uniform Legislation) Act 2011* (WHS (NUL) Act) requires a PCBU to notify NT WorkSafe as soon as reasonably practicable after an incident has occurred on **1800 019 115**. A reference number will be provided to the notifier over the phone.

In addition to immediate phone notification, if requested a PCBU must complete an incident notification form and email it to NT WorkSafe at ntworksafe@nt.gov.au within **48 hours** after the incident. The reference number must be included on the form.

For more information, refer to the NT WorkSafe bulletin - Incident notifications.

Reference Number:		Date:	
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Person submitting details (if completing form by hand, please print **BLOCK** letters)

Name:		Position:	
Name of employer/self-employed person notifying:			
ABN:			
Business address: (Not postal address)			
Suburb:	State:	Postcode:	
Work number::	Mobile number:		
Email address:			

Incident details

Date of incident:		Time of incident: (am/pm)	
Death of a person	<input type="checkbox"/>	Serious injury or illness	<input type="checkbox"/>
		Dangerous incident	<input type="checkbox"/>
Name of employer of any Injured or deceased person(s) if different from above: i.e.: subcontractor			
ABN:			
Address or location where the incident occurred:			
Describe the specific location of the incident:			

Work activity being undertaken at the time of the incident:

Provide a description of work being undertaken at the time of the incident including identifying any plant, substance and equipment involved

Witnesses

Name of person(s) who saw the incident or was first on the scene

--

Details of injured/deceased person(s)

Full name:			
Date of birth:		Occupation/Job title:	
Direct worker <input type="checkbox"/>	Contractor <input type="checkbox"/>	Member of public <input type="checkbox"/>	Other <input type="checkbox"/>
Address:			
Suburb:		State:	Postcode:
Work number:		Mobile number:	
Email address:			

Injury/Illness

Provide a description of any injury or illness

--

Did the person receive treatment following the injury/illness? If yes, describe treatment below Yes No

--

Action

Describe any Action taken/intended, if any, to prevent recurrence of the incident

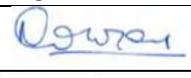
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Notifier declaration

I have submitted this form electronically (signature is not required)	<input type="checkbox"/>
Notifier signature:	Date:

File Name: *Appendix M - Emergency Response Plan.docx*

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
REV 0	Kiara Crook	James Hill		Nicole Conroy		06/09/2017
REV 1	James Hill	Jill Woodworth		Jill Woodworth		16/11/2017
REV 2	Brent Murdoch	John Rozelle		Brent Murdoch		31/11/2018

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