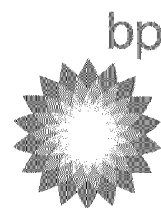


Group Defined Practice



GDP 4.4-0002

Incident Investigation

14 October 2009  
Operating Practice  
S&O Health, Safety & Environment (HSE)



<b>Issue Date</b>	14 October 2009
<b>Revision Date</b>	14 October 2009
<b>Next Review Date</b>	14 October 2012
<b>Content Owner</b>	Steve Flynn, Group Head of Discipline – HSSE
<b>Approver for Issue to BP</b>	Mark Bly, Group Head of Safety & Operations

Copyright © 2009 BP International Ltd. All rights reserved.

This document and any data or information generated from its use, are classified, as a minimum, BP Internal. Distribution is intended for BP authorized recipients only. The information contained in this document is subject to the terms and conditions of the agreement or contract under which this document was supplied to the recipient's organization. None of the information contained in this document shall be disclosed outside the recipient's own organization, unless the terms of such agreement or contract expressly allow, or unless disclosure is required by law.



## Table of Contents

	Foreword .....	4
1	Introduction.....	4
2	Scope .....	5
3	General Requirements and Recommendations .....	5
4	Appointing and Mobilizing the Incident Investigation Team .....	7
5	Conducting the Investigation .....	8
6	Reporting the Findings .....	10
7	Acting on the Findings.....	11
	Annex 1 Sample Terms of Reference (TOR) for Local Site Investigation Team .....	13
	Annex 2 Severity Matrixes .....	14
	Annex 3 Proforma for Incident Investigation Report.....	20
	Annex 4 Investigation Lessons Learned Summary .....	20
	Annex 5 Standard Usage Definitions .....	20
	Annex 6 Acronyms and Symbols.....	23
	Annex 7 References.....	24
	Annex 8 How This Practice Supports Delivery of OMS.....	25
	Revision Log.....	25



## Foreword

This practice was issued as an implementation draft in January 2008. The style and format has been simplified and many common requirements have been moved to [GDP 0.0-0001 Implementation of Group Defined Practices](#) to provide focus on the technical content.

## 1 Introduction

BP openly investigates HSSE related incidents with the primary intention of reducing risk across operations. The BP Root Cause Analysis (RCA) process supports this practice and reduces risks when properly applied. The reduction of risk can be achieved by adherence to this practice in identifying those systemic failures within the management systems and applying appropriate corrective actions.

Systemic root causes are best identified, addressed and corrected through Root Cause Analysis (RCA) methodology. BP's RCA methodology utilizes the [RD 4.4-0001 Comprehensive List of Causes \(CLC\)](#). Utilization of BP's RCA process requires basic root cause specialist training or Master Root Cause Specialist (MRCS) training.

This practice:

- Establishes a consistent approach for investigating incidents.
- Assists in improving the quality of investigations.
- Supplements and aids a methodical examination of an incident that did, or could have, resulted in physical harm to people or damage to property or the environment.
- Focuses on identifying the facts and circumstances related to the incident, determining the causes and developing remedial actions to control the risks.
- Provides the requirements and recommendations for establishing incident investigation teams, conducting the incident investigation and reporting the findings of the incident investigation.
- Facilitates the sharing of investigation findings to prevent or reduce the risk of future incidents.

### 1.1 Applicability

This practice applies group-wide, and is not limited to entities operating on Operating Management System (OMS). Its applicability is further set out (for example in relation to joint ventures, contractors and acquisitions) in [GDP 0.0-0001](#).

### 1.2 Conformance, Deviation and Legal Compliance

[GDP 0.0-0001](#) sets out:

- The date(s) by which actions are required for transition to conformance to this practice.
- The processes for endorsement of extensions and deviations from the requirements of this practice.

In the event of a conflict between this practice and applicable legal and regulatory requirements, the applicable legal and regulatory requirements shall be followed. If this practice creates a higher obligation, it shall be followed as long as full compliance with applicable legal and regulatory requirements is also achieved.

### 1.3 Administration

[GDP 0.0-0001](#) sets out the processes and accountabilities for ownership, approval, document control, review, amendment and interpretation of this practice. The identity of the approver, content owner and document administrator are shown in the [Group OMS Library](#).



## 2 Scope

This practice sets out BP's required approach for an incident investigation. This practice applies to all incidents that require reporting under the [GDP 4.4-0001 Reporting HSSE and Operational Incidents](#).

This practice is intended for use by BP leaders, including:

- Leaders in both segment and group functions.
- Supervisors to whom incidents are reported and who then take initial actions.
- Health, Safety, Security and Environment (HSSE) teams.
- Those individuals who support the incident investigation process.

This practice does not apply to:

- [OpenTalk](#) or any other investigation of allegations or concerns by Group Compliance & Ethics (GC&E) or an independent monitor. However, depending on the outcome, such investigations could lead to an incident investigation.
- Any incident that may involve murder, suicide or death by natural causes. However, if it is established that none of these were involved, then this practice applies.
- Any incident that involves suspected illegal behaviour (or a suspected [Code of Conduct](#) violation) that would not typically be associated with an HSSE or operational incident.
- Any disciplinary inquiry or proceedings.

## 3 General Requirements and Recommendations

### 3.1 Requirements

- BP entities shall investigate any incident that requires reporting under the [GDP 4.4-0001](#) in accordance with the requirements of this practice. A list of the reporting and recording categories to which this applies is available at [Group HSSE Reporting](#).
- The level and type of investigation required for an incident is outlined in [Annex 2.1](#) and [Annex 2.2](#). If an incident has different types of HSSE and business impacts the most stringent investigation requirements apply. For instance, an incident with classification level A for environment and level H for health, safety and security is investigated using level A requirements in [Annex 2.1](#).
- BP RCA investigations shall utilize the [RD 4.4-0001 Comprehensive List of Causes \(CLC\)](#). Utilization of BP's RCA process requires basic root cause specialist training or Master Root Cause Specialist (MRCS) training.

*A BP RCA investigation is one undertaken by a team using BP's CLC process for:*

- > *Gathering evidence and undertaking interviews.*
  - > *Utilising human factor analysis tools (as applicable). (See [5.2.D](#))*
  - > *Determining the root causes through the identification of critical factors.*
  - > *Determining possible immediate and system causes and subsequent use of the 5-Why technique to identify underlying systemic causes.*
  - > *Developing proposed corrective actions.*
  - > *Submitting an incident investigation report.*
- The BP entity leader accountable for the area or operation where the incident occurs shall request the segment or function head of HSSE for approval of any exceptions from the requirements of [3.1B](#) above. The BP entity leader may request an exception for an incident that appears to be a special case for the following reasons:



- > The location of the incident.
- > The nature of BP's relationship to the incident (e.g., the involvement of other parties).
- > The nature of other investigations taking place or the possibility of a joint investigation with a governmental authority or other parties.
- > The potential for litigation or regulatory action.

When an exception is requested, the relevant head of HSSE shall determine whether to conduct an investigation, and if so, when and how to do so. If an exception is approved, the decision of the segment or function head of HSSE as to whether, when and how to investigate the incident shall replace the requirements of this practice for that specific incident. The relevant head of HSSE shall inform the group safety adviser-incident investigation of any exceptions for incidents at level A-E.

If a BP entity wishes to systematically depart from the requirements of this practice, the appropriate route for obtaining approval to do so is the deviation provision in 1.2.

### 3.2 Supporting Recommendations

- A. BP entities should seek to identify causes which BP is able to influence and / or which provide an opportunity for learning. The incident investigation should not examine causes that BP is unable to influence.

*If a critical factor in an incident is a natural or external event such as a hurricane or a pandemic, this practice does not require BP entities to examine the causes of the hurricane or pandemic. However, if BP assets or procedures were designed to withstand a hurricane or other natural event, but failed to do so, this practice requires the BP entity to identify the causes of that failure. A review of the effectiveness of crisis response procedures in responding to such incidents is also appropriate. However, such a review would be considered outside the scope of this practice and would not be expected to utilize BP RCA techniques.*

*If a critical factor is the conduct of a member of the public, BP would not seek to identify the causes of that conduct. An example is if a vehicle veered off a road and crashed into a BP asset, then BP would not seek to identify the cause of the behavior of the driver of that vehicle. However, BP would seek to identify the causes of other critical factors within BP's control, such as the absence of barriers between the road and the BP asset.*

- B. When the BP entity leader requests an exception for levels A-E, the segment head of HSSE (or functional equivalent) should consult BP legal and / or other relevant functions (e.g., security). The relevant head of HSSE should also consult the group safety adviser-incident investigation on any proposal not to undertake a BP RCA investigation where this practice would otherwise require such an investigation.

*The GDP 4.4-0001 requires the local management promptly advise BP legal of any incident classified at actual severity level A-E. This also includes any other incident if litigation or regulatory action is possible. This requirement enables BP legal to advise on the BP entity's response to the incident, including investigation and any need to seek an exception from 3.1 of this practice.*

- C. Conduct of the investigation of an incident may be affected by the rights of the insurers of an asset or risk affected by an incident or other parties. Insurance policies may have limitations or exclusions from coverage. The BP entity should check the insurance policy as soon as possible. They should also confirm whether any notifications are required to third parties, and seek advice from an insurance adviser and from BP legal on protecting BP's position during the investigation.



## **4 Appointing and Mobilizing the Incident Investigation Team**

### **4.1 Requirements**

The BP entity shall meet the following requirements for any investigation to which this practice applies:

- A. For any fatality investigation, there shall be both an investigation team leader and a MRCS. Both of these individuals shall be external to the BP entity affected, and selected by the segment head of HSSE (or functional equivalent). The investigation team leader shall be trained as an investigation manager by the group safety advisor - incident investigation. The MRCS for fatalities shall have been trained as MRCS by the group safety advisor - incident investigation.
- B. For a non-fatality incident requiring a BP RCA investigation, the BP entity leader with accountability for the area or operation where the incident occurred (or their delegate) selects the investigation team and leader.
- C. People directly or indirectly involved in an incident A-E shall not be selected as members of the incident investigation team.
- D. The investigation team leader for a level A-E HSSE incident (except a fatality as described in 4.1A) shall be trained as an MRCS or have an MRCS on the team.
- E. Investigation teams for level A-E business impact or level F HSSE incidents shall have at least one member trained to at least a basic RCA level.
- F. An incident investigation team assigned to investigate a level A-F security incident shall include a security professional nominated or approved by the group head of Security.
- G. Level A-E marine incident investigations required by this practice shall be brought to the attention of BP group marine authority.
- H. Investigation teams for level G incidents shall have at least one member trained to at least a basic RCA level if BP's RCA investigation process is utilized.
- I. For level H incidents that are not safety-related HiPos, the level of investigation shall be determined within the BP entity. However, if RCA is used, BP's RCA process shall be used, and only people formally trained in CLC shall use this technique. Utilization of BP's RCA process requires basic root cause or MRCS training.
- J. For any investigation team, the BP entity leader with accountability for the area or operation where the incident occurred or his or her delegate (who may be the investigation team leader) shall appoint investigation team members with necessary expertise.
- K. BP entity leaders shall verify that trained persons (e.g., basic RCA and MRCS) are available to perform BP's RCA investigations.
- L. Incident investigation team members shall be given the resources to complete the incident investigation.
- M. The incident investigation team shall consult with BP legal at the initiation of all investigations of level A-E incidents, and any other incident where the possibility of regulatory action or litigation is identified.
- N. For level A-E incidents and for HiPos, the BP entity leader with accountability for the area or operation where the incident occurred shall agree to the Terms of Reference (TOR) for the investigation with the investigation team leader. The BP entity leader shall issue the TOR to guide the incident investigation activities. (See [Annex 1](#) for a sample.)
- O. Once the TOR is agreed on for an investigation, the BP entity shall not determine the content or conclusions of the investigation. The incident investigation team will make this determination.



#### 4.2 Supporting Recommendations

- A. Practitioners of BP's RCA process should serve on a rotational basis within the BP entity after training to develop and maintain the skilful application of BP's RCA investigative techniques.
- B. Local site procedures should identify the expected make-up of the incident investigation team. Generally, teams should be multi-level and cross-functional in membership, and draw on relevant subject matter experts.
- C. BP legal should be consulted on the arrangements for appointing any person from outside BP (e.g., someone with a relevant area of expertise) to participate in the investigation, whether as a team member or as a provider of expert opinion.
- D. The incident investigation team should not be responsible for managing any post-incident activities other than the incident investigation itself.
- E. Level A-E investigations should be initiated within 48 hours. Initiation is defined as the start of the process to appoint an investigation team leader and establish an investigation team.
- F. The BP entity leader and the investigation team leader should agree on a proposed timeline for completion of the investigation. This agreed timeline should be included in the TOR. In order to ensure quality investigations, the time to complete investigations may vary based upon factors such as the complexity of the incident, access to witnesses, engineering evaluations and legal considerations. Generally, however, an RCA incident investigation and report should be completed within 30 days of the incident.
- G. If the investigation needs to be extended beyond the agreement in the TOR, the investigation team leader should document the reasons for extending the investigation. For level E and above, actual or potential incidents, key stakeholders should be made aware of such delays (e.g., the affected BP entity leader and segment head of HSSE).
- H. The investigation team leader (or MRCS or basic root cause specialist) should brief the incident investigation team members who have not been trained on incident investigation tools and techniques before the incident investigation starts.

*The Basic RCA may be taught by a third party contractor, if approved by the safety advisor - incident investigation. However, Human Factors Analysis Tools used by BP cannot be taught by third party contractors. At the date of issue of this practice, certain contractual limitations apply as to who can provide training on the use of the Human Factors Analysis Tools.*

*It is not the purpose of the incident investigation under this practice to support or facilitate any BP disciplinary inquiry. However, in some circumstances (and subject to guidance from BP legal and / or Human Resources [HR]), it may be appropriate or necessary for an incident report and other documents produced by an incident investigation team to be seen by participants in such an inquiry or any proceedings that may result from those inquiries.*

### 5 Conducting the Investigation

Following any incident, the [GDP 4.4-0001](#) requires the classification and reporting of the incident. This section outlines the requirements for the investigation of incidents based on the initial assigned classification.

#### 5.1 Requirements

The BP entity shall meet the following requirements for any investigation for which this practice applies:





- A. Annex 2.1 and Annex 2.2 shall be used to select the type of investigation. This selection is subject to the exceptions process described in 3.1.
- B. The incident investigation team shall conduct the sole BP RCA investigation, pursuing any reasonable line of inquiry to establish evidence addressing what happened, how it happened and why it happened.
- C. Incident investigation documents shall be managed in accordance with the applicable requirements of the BP Global Information Handling Standard.
- D. Where the incident occurs at a location owned or operated by BP, the BP entity leader shall confirm that the incident scene is properly preserved, including relevant process unit data (unless it is unsafe to do so) and shall notify the investigation team when they may access the scene for investigation. Wherever the location of the incident, the investigation team shall not investigate in circumstances where it may be unsafe to do so. It shall be the responsibility of the investigation team leader (with help from the BP entity leader as requested) to ensure the safety of the investigation team members during the investigation.
- E. The incident scene (including machinery and access to plant, equipment and materials) shall be released for resumption of work only at the direction of the incident investigation team. This shall be done (with advice from BP legal as needed and) at the direction or with the concurrence of any involved regulatory or law enforcement bodies.
- F. The incident investigation team shall maintain the confidentiality of the investigation materials and information, control the flow of information regarding the incident investigation and release the information only when they find it prudent or necessary to do so, or where release is required by law.

## 5.2 Supporting Recommendations

- A. The incident investigation team should consult with the BP entity leader and the security professional in the case of a security incident if there is any doubt as to the correct classification of a document, under the BP Global Information Handling Standard.
- B. The investigation team leader should periodically update the BP entity leader with accountability for the area or operation where the incident occurs, as necessary to maintain site operations and fulfill other responsibilities. In some jurisdictions, such as the US, UK and Australia, a legal privilege may cover certain documents produced by the incident investigation team. Legal privilege may mean, in some circumstances, that the documents require special handling as well as being confidential to BP. Legal advice is necessary from the very start of the investigation process regarding this possibility.
- C. Additional cause mapping techniques, such as Root Cause Failure Analysis (RCFA), can be used to augment evidence gathering prior to the use of the RCA CLC technique. RCFA may be appropriate during incident investigations where engineering causes need to be identified.
- D. Human Factors Analysis Tools (HFAT) Antecedent-Behaviour-Consequence (ABC) Analysis and Human Error Analysis (HEA) should be used to augment the RCA.  
*Done properly, these tools are utilized to better understand why people behave as they do. This understanding provides a quality root cause analysis when using the CLC technique.*
- E. BP's checklist for investigating fatigue-related incidents should, when appropriate, be used to augment the investigation. It will enable investigators to carry out an in-depth analysis and determine (for any incident) whether fatigue may have been an underlying (system) cause.



## 6 Reporting the Findings

### 6.1 Requirements

The BP entity shall meet the following requirements for any investigation for which this practice applies:

- A. An incident investigation report utilizing BP's format (see [Annex 3](#)) shall be made of the incident investigation team's findings and conclusions whenever BP's RCA process is utilized. The investigation team leader shall consult with the security professional team member when determining the distribution list for any report of a security related incident.
- B. The incident investigation report shall include proposed corrective actions for consideration by the BP entity (See [7.1](#)). The BP entity shall document exceptional circumstances where proposed corrective actions are not necessary or not possible.
- C. For any level A-E or HiPo BP RCA investigation, the BP entity shall record in the designated [BP Global HSSE Information System](#) the critical factors, CLC immediate and system causes categories (from [RD 4.4-0001](#), and the corrective actions accepted (with or without modifications) by the BP entity (See [7.1](#)). This also includes assigning the responsible party and target dates. This requirement applies except for information classified as 'BP Confidential' or higher under the [BP Global Information Handling Standard](#). (See also [5.2 A](#).)
- D. If BP's RCA process is not utilised (as allowed by [Annex 2.1](#) and [Annex 2.2](#) or under the [3.1](#) exceptions process), the findings and any recommendations resulting from the process shall still be documented.
- E. The incident investigation report shall be retained for 10 years, or for any longer period of time that is required by applicable law or by the [BP Global Document Management Policy](#). Documents and materials gathered or produced by the investigation team shall be transferred to the BP entity at the end of the investigation and retained in accordance with BP entity procedures until BP legal confirms that their retention is no longer necessary.

*The records management part of BP's intranet is located at <http://recordsinfo.bpweb.bp.com>. The policy, retention and regional Programs tabs on the records management page can be used to find BP's policies and requirements, and the programs and document retention schedules applicable to specific locations, such as North America.*

### 6.2 Supporting Recommendations

- A. The incident investigation report should reflect the findings of the incident investigation team and should represent a consensus among incident investigation team members.
- B. The report should not include paperwork generated as part of the investigation methodology (i.e., Human Factors Analysis Tools paperwork). The report should not include other 'insights' that are not directly related to the identified critical factors, immediate causes, system causes or systemic root causes. Timelines should be included, but only listing those items directly related to the incident.
- C. Each BP entity should establish expectations for the nature and extent of information required in incident investigation reports based on each level of incident severity.
- D. The proposed corrective actions should be specific, measurable, actionable and practical, and be able to be completed in a reasonable timeframe.
- E. The proposed corrective actions should be reviewed with the BP entity prior to the issuance of the report to identify any factual errors or omissions, determine applicability,



authorization for implementation and to check that implementation by the BP entity would be consistent with applicable legal and regulatory requirements.

*Maintaining legal and regulatory compliance is a line management accountability, and is not the responsibility of the investigation team.*

- F. BP entities should have a process for reviewing RCA incident investigation report quality prior to final issuing of the report and provide feedback to the investigation team leader for consideration.
- G. During the investigation, the investigation team may identify matters that are of concern to the team, but that are not causally relevant to the incident being investigated. Such matters should not be included in the investigation report, but should be communicated separately to the BP entity leader.

## **7 Acting on the Findings**

### **7.1 Requirements**

The BP entity shall meet the following requirements for any investigation for which this practice applies:

- A. All investigation findings and proposed corrective actions shall be reviewed with the BP entity leader with accountability for the area or operation where the incident occurred. For levels G and H incidents that are not safety HiPos, the review may be with the BP entity leader's delegate.
- B. The BP entity shall determine which of the proposed corrective actions shall be accepted, which shall be accepted with modification and which shall be rejected. Any changes to proposed corrective actions shall be documented, along with the reasons for those changes, and retained within the business. It is the responsibility of the BP entity to review any proposed corrective actions having implications beyond the authority of the BP entity and inform and follow through as required on any of these items.
- C. For those actions accepted (with or without modification) by the BP entity, the BP entity shall establish a schedule and assign personnel to complete those actions.
- D. The BP entity shall obtain progress reports from assigned personnel and verify the completion of the tasks required to meet the proposed corrective action.
- E. If any proposed corrective action in the report is beyond the authority of the BP entity to accept or implement, the BP entity shall copy the report to the person(s) who would be able to accept or implement that action. For the proposed corrective action, requirements A to D in this section apply to that person(s) instead of to the BP entity. Whenever requested by the BP entity, that person shall update the BP entity on the steps taken and progress made in respect to requirements A to D for that proposed corrective action.

*This requirement modifies requirements A to D to verify that proposed corrective actions are acted on by people with authority to take action, without assuming that it will be within the authority of the BP entity who appointed the investigation team to do so. For example, some corrective actions may involve modifying Strategic Performance Unit (SPU) procedures, or significant unplanned expenditure, which may be a level of authority "above" that of the BP entity).*

- F. The BP entity shall complete an investigation summary report after the investigation is completed for any Major Incident Announcement (MIA) or HiPo investigation using the template in [Annex 4](#), and circulate to the applicable MIA and HiPo distribution list. Group S&O shall post the summary report to the [Group Major Incident Reporting website](#).



## 7.2 Supporting Recommendations

- A. BP entity leaders should put procedures in place that describe the process for communicating report findings across the BP entity.
- B. BP entities should use corrective actions to improve the local management system.
- C. For level A-E, externally led incidents, the BP entity should provide documented feedback to the relevant segment or function head of HSSE or designated alternate and to the investigation team leader to help them to identify areas for improvement for future investigations. Similar feedback should be considered for other incidents.

*The BP entity should regard the feedback process as a leadership opportunity through which they can assist incident investigation team members in developing their incident investigation skills. This feedback could include, but not be limited to, items such as:*

- > *Communication with BP entity.*
- > *Team effectiveness.*
- > *Quality of reports and recommendations.*
- > *Better collection of evidence.*
- > *Any other items that would improve future investigation.*

**Annex 1 Sample Terms of Reference (TOR) for Local Site Investigation Team**

*This sample TOR assumes the full application of the practice requirements: in special cases / exceptions, substantial departure from the sample TOR could be required.*

**Terms of Reference - Local Site Investigation Teams**

- Establish a timeline for the completion of the investigation and issuance of the investigation report (and the lessons learned summary, if applicable).
- The incident investigation team shall limit their investigation to the incident, and the conditions and circumstances leading to the incident. They shall avoid doing a general safety audit.
- The incident investigation team shall pursue any reasonable line of inquiry to establish evidence addressing what happened, how it happened and why it happened.
- The investigation team leader shall provide periodic updates to the BP entity leader on the progress and findings of the incident investigation. Other than any disclosure authorised by the BP entity leader or required by law, or as is necessary for the purposes of the investigation, all investigation team members shall maintain strict confidentiality regarding the progress and content of their investigation.
- The investigation team leader shall identify the team members with the assistance of the BP entity leader and BP Legal and utilize the appropriate legal counsel during the investigation. (Note that for some investigations, the investigation team leader is required to consult BP Legal at the start of the investigation (see 4.1).
- In addition to the team members appointed by the BP entity leader, the investigation team leader shall engage additional expertise as needed. Example: a health expert shall be considered for a fatality investigation. Another example: where fitness for task (including fatigue), chemical exposure, substance misuse or psychological health (e.g., stress) may be a contributing factor to the incident.
- The incident investigation team shall utilize BP's RCA techniques in performing the incident investigation and shall consider human factors issues where applicable.
- The incident investigation team shall create a draft report and review it with the BP entity leader and, if appropriate, with BP legal before issue.
- After considering the comments on the draft report from both legal counsel and the BP entity leader, the incident investigation team shall complete a final report utilizing the preferred template provided (see the Proforma in Annex 3).
- The incident investigation team shall collate all investigation materials, including process safety materials, and secure them according to the local procedure.
- The incident investigation team shall work jointly with the BP entity leader to create an appropriate 'lessons learned' communication.
- The incident investigation team's report shall be addressed to the BP entity leader with accountability for the area or operation where the incident occurred. (Note that the report is to be labeled 'BP Confidential' and handled accordingly. The investigation team leader shall consult with the security professional team member when determining the distribution list for the inclusion in reports of investigations into security incidents. See 6.1.



## Annex 2 Severity Matrixes

The master reference document for severity levels is GDP 3.1-0001 Assessment, Prioritization and Management of Risk and should be used in case of dispute. The table is replicated here for ease of use for the end user.

### 2.1 HSSE Impact Levels

Severity Level	Health, Safety & Security	Environment	Investigation Required
<b>A-D</b>	<ul style="list-style-type: none"> <li>3 or more fatalities.</li> <li>Identified onset of life-threatening health effects to 3 or more individuals.</li> <li>30 or more injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours.</li> </ul>	<ul style="list-style-type: none"> <li>Event with widespread or extensive damage to any environment, including sensitive and non-sensitive environments, and remains in "unsatisfactory" state for a period of &gt; 5 years.</li> <li>Event with widespread or extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of around 1 year.</li> <li>Event with localized, widespread or extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of around 1 year.</li> <li>Event with widespread or extensive damage to a non-sensitive environment and can only be restored to a satisfactory/agreed state in a period of more than 1 year and up to 5 years.</li> <li>Event with widespread or extensive damage to a sensitive environment and can only be restored to a satisfactory/agreed state in a period of more than 1 year and up to 5 years.</li> <li>Event with widespread damage to a sensitive or non-sensitive environment and can be stored to an equivalent capability in a period of months.</li> <li>Event with extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> </ul>	<p>Level A-E incidents shall be investigated using BP's RCA investigation process (CLC). A BP RCA investigation is defined in <u>3.1</u>.</p> <p><b>Investigation Team Make-up:</b></p> <p><b>Fatalities</b> All investigations of any fatalities shall be externally led (both investigation manager and MRCS external to the BP entity affected).</p> <p><b>Non-fatalities</b> All other level A-E investigations shall have an MRCS on the team.</p> <p><b>HiPos</b> See HiPo section below.</p> <p><b>Special Cases</b> Also note special cases listed in <u>1.2</u> and <u>3.1</u>.</p>



Severity Level	Health, Safety & Security	Environment	Investigation Required
<b>E</b>	<ul style="list-style-type: none"> <li>• 1 to 2 fatalities, acute or chronic, actual or alleged.</li> <li>• 10 or more injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours.</li> </ul>	<ul style="list-style-type: none"> <li>• Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of 1 year.</li> <li>• Event with extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>• Event with localized damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>• Event with extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	
<b>F</b>	<ul style="list-style-type: none"> <li>• Permanent partial disabilities.</li> <li>• Several non-permanent injuries or health impacts.</li> <li>• Days Away From Work Case (DAFWC)</li> </ul>	<ul style="list-style-type: none"> <li>• Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>• Event with immediate area damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>• Event with extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> <li>• Event with localized damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>Level F incidents shall be investigated using BP's RCA Investigation process (CLC).</p> <p><b>DAFWC</b></p> <p>Note: The requirement for a BP RCA incident investigation may be waived by a BP entity leader if the case is classified as DAFWC solely due to conservative medical care.</p> <p><b>Investigation Team Make-up:</b></p> <p>The use of MRCS is recommended. At a minimum, a trained 'basic' root cause specialist shall be on the team.</p>



Severity Level	Health, Safety & Security	Environment	Investigation Required
<b>G</b>	Single or multiple recordable injury or health effects from a common source/event.	<ul style="list-style-type: none"> <li>Event with immediate area damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> <li>Event with immediate area damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>It is recommended that events of this severity should be investigated utilizing BP's RCA investigation process.</p> <p><b>Investigation Team Make-up:</b></p> <p>Depending on the severity of the event, the BP entity leader may elect to utilize a MRCS. It is recommended that at least one member of the team be trained to at least the 'basic' root cause specialist level.</p>
<b>H</b>	<ul style="list-style-type: none"> <li>First aid.</li> <li>Single or multiple over-exposures causing noticeable irritation but no actual health effects.</li> </ul>	<ul style="list-style-type: none"> <li>Event with immediate area damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>Events of this severity shall be investigated at a level deemed appropriate by the BP entity leader.</p> <p><b>Investigation Team Make-up:</b></p> <p>If BP's RCA is used, at least one member of the team must be trained to at least the 'basic' level.</p>





Severity Level	Health, Safety & Security	Environment	Investigation Required
HiPo	<a href="#">BP Group HSE Reporting Definitions</a>	N/A	<p><b>Safety-related HiPo</b></p> <p>If an incident (whatever its actual impact) is classified as a HiPo because of its potential health and safety consequences (a safety-related HiPo), a BP RCA investigation is required.</p> <p><b>Investigation Team Make-up:</b></p> <p>This level of investigation shall be led by, or have a member of the team, that has been trained as a MRCS or 'basic' RCA, depending on the complexity of the investigation. The investigation may be internally led.</p> <p><b>Other Non-safety-related HiPo</b></p> <p>If a HiPo is not a safety-related HiPo, the actual severity will determine the required level of investigation.</p>



## 2.2 Business Impact Levels

*When categorising business impact severity to meet the requirements of this practice, only equipment / property damage (replacement cost) as a result of a HSSE incident or unsafe / unhealthy condition shall be considered.*

Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
A-D	<ul style="list-style-type: none"> <li>&gt;\$10m equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Public or investor outrage in markets where there is presence or aspirations.</li> <li>Prolonged adverse national or international media attention.</li> <li>Loss of license to operate an asset or threat of global loss of license to operate.</li> <li>Intervention from government.</li> <li>Severe enforcement action against a material asset in a non-major market, or against other assets in a major market.</li> <li>Widespread adverse social impact.</li> <li>Damage to relationships with key stakeholders of benefit to the SPU, segment or group.</li> <li>Localized or limited 'interest-group' outrage in a major market.</li> </ul>	<p>Level A-E business impact incidents resulting from an HSSE incident or unsafe unhealthy condition shall be investigated using BP's RCA Investigation process.</p> <p>A BP RCA investigation is defined in <a href="#">3.1</a>.</p> <p><b>Investigation Team Make-up:</b> Level A-E investigations shall have at a minimum a trained basic root cause specialist on the team.</p> <p><b>Special Cases</b> Also note special cases listed in <a href="#">1.2</a> and <a href="#">3.1</a>.</p>
E	<ul style="list-style-type: none"> <li>\$1m-\$10m property &amp; equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Other adverse enforcement action by regulators.</li> <li>Limited 'interest-group' outrage in non major market.</li> <li>Short term adverse national or international media coverage.</li> <li>Damage to relationships with key stakeholders of benefit to the PU.</li> </ul>	



Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
<b>F</b>	<ul style="list-style-type: none"> <li>\$100k-\$1m property and equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory compliance issue which does not lead to regulatory or other higher severity level consequence.</li> <li>Prolonged adverse local media coverage.</li> <li>Local adverse social impact.</li> </ul>	<p>Level F business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated using BP's RCA Investigation process.</p> <p><b>Investigation Team Make-up:</b> The use of MRCS is recommended. At a minimum, a 'basic' trained person must be on the team.</p>
<b>G</b>	<ul style="list-style-type: none"> <li>\$25k-\$100k property &amp; equipment damage.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term adverse local media coverage.</li> <li>Some disruption to local operations (e.g., loss of single road access less than 24 hours).</li> </ul>	<p>Level G business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated using BP's RCA Investigation process.</p> <p><b>Investigation Team Make-up:</b> Depending on the severity of the event, the BP entity leader may elect to utilize a MRCS. It is recommended that at least one member of the team be trained to at least the 'basic' root cause specialist level.</p>
<b>H</b>	<ul style="list-style-type: none"> <li>&lt;\$25k property &amp; equipment damage.</li> </ul>	<ul style="list-style-type: none"> <li>Isolated and short term complaints from neighbours (e.g. complaints about specific noise episode).</li> </ul>	<p>Level H business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated at a level deemed appropriate by the BP entity leader.</p> <p><b>Investigation Team Make-up:</b> If RCA is used, at least one member of the team must be trained to at least the 'basic' level.</p>



Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
HiPo	See <a href="#">Annex 5</a> for the definition.	N/A	<p><b>Safety-related HiPo</b></p> <p>If an incident (whatever its actual impact) is classified as a HiPo because of its potential health and safety consequences (a safety-related HiPo), a BP RCA investigation is required.</p> <p><b>Investigation Team Make-up:</b></p> <p>This level of investigation shall be led by an MRCS or a person trained in 'basic' RCA (or have one as a member of the team), depending on the complexity of the investigation. The investigation may be internally led.</p> <p><b>Other Non-safety-related HiPo</b></p> <p>If a HiPo is not a safety-related HiPo, the actual severity will determine the required level of investigation.</p>

### Annex 3 Proforma for Incident Investigation Report

### Annex 4 Investigation Lessons Learned Summary

### Annex 5 Standard Usage Definitions

The terms associated with this specific document are defined in this section. Some terms may already be defined in the [Group OMS Glossary](#) or the [BP Group HSE Reporting Definitions](#) document. The definitions for those terms contain a link to the appropriate document.

Term	Definition
<b><i>Antecedent-Behaviour-Consequence Analysis (ABC Analysis)</i></b>	Analysis technique that helps the user to understand why people behave as they do, which provides a better quality cause analysis when using the <a href="#">RD 4.4-0001</a> . This technique is used for intentional behaviours. Utilization of BP's RCA process requires basic root cause specialist training or MRCS training.



Term	Definition
<b>Basic Root Cause Specialist</b>	Individual with the skills obtained upon completion of a 12 hour training program (maintained by S&O group safety) that provides basic level competency for RCA training in BP's RCA process including human factors. Individuals previously trained in the eight hour BP RCA Basic class are also considered trained. All new basic root cause specialists require the new 12 hour program.
<b>BP Entity</b>	An organizational unit within BP which may be a Performance Unit, Business Unit (BU), Strategic Performance Unit (SPU), segment or some logical sub-group of one of these, which shall be defined by the segment, function or region. Each BP entity operating on OMS, will have a consistent Local Operating Management System (LOMS) documented in an LOMS Handbook.
<b>BP RCA Investigation</b>	An Incident Investigation undertaken by an incident investigation team using BP's RCA process (CLC) for gathering evidence; undertaking interviews; utilising human factor tools; determining root cause through identification of critical factors, possible immediate and system causes and subsequent use of the 5-Why technique to identify underlying systemic causes; developing proposed corrective actions; and submitting an incident investigation report. Utilization of BP's RCA process requires basic root cause specialist or MRCS training.
<b>Comprehensive List of Causes (CLC)</b>	The BP cause identification tool used in RCA. Utilization of BP's <u>RD 4.4-0001</u> process requires basic root cause specialist, MRCS, or investigation manager training.
<b>Contractor</b>	<u>Group OMS Glossary</u>
<b>Corrective Actions</b>	Actions intended to prevent, or reduce the probability of, the identified systemic root cause(s) of the incident investigated.
<b>Critical Factors</b>	Events or conditions, which if eliminated, would have prevented the incident's occurrence or significantly reduced its severity.
<b>Employees</b>	<u>Group OMS Glossary</u>
<b>Exception</b>	A one-time departure from the requirements of this practice in response to a specific incident. An exception is approved for a specific incident under <u>3.1</u> of this practice. An exception enables a BP entity, if necessary, to apply an incident-specific approach which is different from what this practice would otherwise require. However, if a BP entity intends to systematically depart from this practice (for all incidents or for a particular type of incident), this would require an approved deviation, not an exception.
<b>Group Reportable</b>	An incident or unsafe / unhealthy condition which is defined in the finance list as reportable to the BP group. This includes major incidents and High Potential incidents (HiPos). A list to which this mandatory reporting applies is reviewed and, if necessary, updated at least annually and can be found at: <u>BP Group HSE Reporting Definitions</u>
<b>High Potential Incident (HiPo)</b>	<u>BP Group HSE Reporting Definitions</u>



<b>Term</b>	<b>Definition</b>
<b>High Value Learnings</b>	<a href="#">Group OMS Glossary</a>
<b>Human Error Analysis (HEA)</b>	Analysis technique that helps the user to understand why people behave as they do, which provides a better quality cause analysis when using the <a href="#">RD 4.4-0001</a> . This technique is used for unintentional behaviours. Utilization of BP's RCA process requires basic root cause specialist or MRCS training.
<b>Human Factors Analysis Tools (HFAT)</b>	This includes the ABC and HEA techniques.
<b>Implement</b>	<a href="#">Group OMS Glossary</a>
<b>Incident</b>	<a href="#">BP Group HSE Reporting Definitions</a> As used in this practice, "incident" includes any HiPo. (New definition based on existing segment and external sources and to cover the requirements in the <a href="#">Code of Conduct</a> .)
<b>Incident Investigation</b>	Methodical examination of an incident; incident investigation activities are directed toward identifying the facts and circumstances related to the event, determining the causes, and developing proposed corrective actions to control the risks.
<b>Incident Investigation Report</b>	The written record of the incident investigation team's findings, consisting of facts, the critical factors that led to the incident and proposed recommendations for corrective actions. For a BP RCA investigation, <a href="#">6</a> sets out requirements applicable to the incident investigation report.
<b>Incident Investigation Team</b>	A group of individuals gathered for the sole purpose of conducting an investigation into an incident.
<b>Investigation Team Leader/Investigation Manager</b>	The individual assigned to take the lead role in managing the incident investigation team. For a fatality, the investigation team leader requires specialized training as an investigation manager. This is a one and one-half day class on managing fatality investigations, taught by the group's safety advisor.
<b>Leader</b>	The person accountable for an operation or activity and those to whom authority has been delegated for specific operational activities.
<b>Major Incident</b>	<a href="#">BP Group HSE Reporting Definitions</a>
<b>Master Root Cause Specialist (MRCS)</b>	Individual with the skills obtained upon completion of a three day, invitation-only course for individuals who demonstrate skillful application of the investigation skills covered in the basic 12 hour training course. The master-level investigator is the local centre of expertise that can train, coach, and mentor investigation team leads trained at a lower competency level. The safety advisor - incident investigation is the only qualified trainer of MRCSs.
<b>Operating</b>	<a href="#">Group OMS Glossary</a>



Term	Definition
<b>Report Recipient</b>	The BP entity leader with accountability for the area or operation where the incident occurred. The BP entity leader is responsible for all recommendations that are within his sphere of delegated authority, and to refer upwards for consideration any recommendations that are not.
<b>Risk</b>	<a href="#">Group OMS Glossary</a>
<b>Root Cause</b>	The most basic cause(s) that can be reasonably identified, which management has control to fix, and for which effective corrective actions for preventing recurrence can be generated.
<b>Root Cause Analysis (RCA)</b>	A formal process designed to determine the systemic root causes in an incident or accident, and develop effective solutions to those systemic root causes to eliminate (or reduce the probability of) a recurrence.
<b>Safety and Production Critical</b>	<a href="#">Group OMS Glossary</a>
<b>Safety-related HiPo</b>	An incident classified as a High Potential (HiPo) incident due to its potential health and safety impacts.
<b>Security Incident</b>	An incident within the scope of this practice that affects the security of BP's workforce, premises or assets or of a BP operation or project, such as an incident that includes or may include any of the following, as defined for the purposes of the reporting of security incidents in <a href="#">Tr@ction</a> : assault / threat; burglary, civil unrest, criminal property damage, drug / alcohol abuse / possession, robbery, security of information breach, terrorist / guerrilla activity, or theft. Note that an incident that involves or may involve fraud is excluded from this list because fraud is outside the scope of this practice (fraud is not reported into <a href="#">Tr@ction</a> ).
<b>Work Environment</b>	The establishment and other locations (including marine vessels and vehicles) where one or more BP employees and or BP contractors are working or are present as a condition of their employment/contract. The work environment includes not only physical locations, but also the equipment or materials used by the employee or contractor during the course of his or her work.  Definitions for specifically included and excluded locations can be found at: <a href="#">BP Group HSE Reporting Definitions</a>
<b>Workforce</b>	<a href="#">Group OMS Glossary</a>

#### Annex 6 Acronyms and Symbols

Term	Definition
<b>ABC Analysis</b>	Antecedent-Behaviour-Consequence (ABC) Analysis. This is a component of BP's RCA process.
<b>BU</b>	Business Unit
<b>CLC</b>	Comprehensive List of Causes



<b>Term</b>	<b>Definition</b>
<b>DAFWC</b>	Days Away From Work Cases <a href="#">BP Group HSE Reporting Definitions</a>
<b>GC&amp;E</b>	Group Compliance & Ethics
<b>GDP</b>	Group Defined Practice
<b>HEA</b>	Human Error Analysis
<b>HFAT</b>	Human Factors Analysis Tools
<b>HiPo</b>	High Potential Incident
<b>HOD</b>	Head of Discipline
<b>HR</b>	Human Resources
<b>HSSE</b>	Health, Safety, Security & Environment
<b>LOMS</b>	Local Operating Management System
<b>MIA</b>	Major Incident Announcement
<b>MRCS</b>	Master Root Cause Specialist
<b>OMS</b>	Operating Management System
<b>RCA</b>	Root Cause Analysis
<b>RCFA</b>	Root Cause Failure Analysis
<b>S&amp;O</b>	Safety & Operations
<b>TOR</b>	Terms of Reference

## Annex 7 References

### 7.1 Referenced - Group Documents

- [GDP 0.0-0001 Implementation of Group Defined Practices](#)
- [GDP 3.1-0001 Assessment, Prioritization and Management of Risk](#)
- [GDP 4.4-0001 Reporting HSSE and Operational Incidents](#)
- [RD 4.4-0001 Group Comprehensive List of Causes \(CLC\)](#)
- [Group OMS Glossary](#)

### 7.2 Referenced - Other

- [BP Global Document Management Policy](#)
- [BP Global HSSE Information System](#)
- [BP Global Information Handling Standard](#)
- [BP Group HSE Reporting Definitions](#)
- [BP Records Management website](#)
- [Code of Conduct](#)
- [Group HSSE Reporting](#)
- [Group Major Incident Reporting website](#)
- [Open Talk](#)
- [Tr@ction](#)



**Annex 8 How This Practice Supports Delivery of OMS**

For those BP entities operating under OMS, this practice:

- Should be read in conjunction with OMS Part 2 - Elements of Operating Including Group Essentials, OMS Part 3 - OMS Performance Improvement Cycle and OMS Part 4 - Governance and Implementation to understand how it fits with the OMS Framework and other requirements.
- Supports delivery of the following Group Essentials:

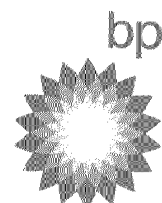
Sub Element	Group Essentials
2.2 People and competence	2.2.3, 2.2.5
2.4 Organisational Learning	2.4.2, 2.4.3
4.4 Incident Management	4.4.2

- Links with the OMS Performance Improvement Cycle for prioritizing and obtaining resources to deliver continuous risk reduction.

**Revision Log**

Revision Date	Content Owner Name/Title	Approver Name/Title	Revision Details
14 October 2009	Steve Flynn, Group HOD - HSSE, S&O	Mark Bly, Group Head of Safety & Operations	Initial issue and this document supersedes the implementation draft listed below.
30 January 2008	Steve Flynn, Group HOD - HSSE, S&O	John Mogford, Group Head of Safety and Operations.	Published as an implementation draft with the title Group GDP for Reporting HSSE and Operational Incidents.

Group Defined Practice



GDP 4.4-0002

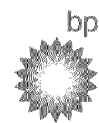
Incident Investigation

14 October 2009  
Operating Practice  
S&O Health, Safety & Environment (HSE)



<b>Issue Date</b>	14 October 2009
<b>Revision Date</b>	14 October 2009
<b>Next Review Date</b>	14 October 2012
<b>Content Owner</b>	Steve Flynn, Group Head of Discipline – HSSE
<b>Approver for Issue to BP</b>	Mark Bly, Group Head of Safety & Operations

Copyright © 2009 BP International Ltd. All rights reserved.  
This document and any data or information generated from its use, are classified, as a minimum, BP Internal. Distribution is intended for BP authorized recipients only. The information contained in this document is subject to the terms and conditions of the agreement or contract under which this document was supplied to the recipient's organization. None of the information contained in this document shall be disclosed outside the recipient's own organization, unless the terms of such agreement or contract expressly allow, or unless disclosure is required by law.



## Table of Contents

	Foreword .....	4
1	Introduction.....	4
2	Scope .....	5
3	General Requirements and Recommendations .....	5
4	Appointing and Mobilizing the Incident Investigation Team .....	7
5	Conducting the Investigation.....	8
6	Reporting the Findings .....	10
7	Acting on the Findings.....	11
	Annex 1 Sample Terms of Reference (TOR) for Local Site Investigation Team .....	13
	Annex 2 Severity Matrixes .....	14
	Annex 3 Proforma for Incident Investigation Report.....	20
	Annex 4 Investigation Lessons Learned Summary .....	20
	Annex 5 Standard Usage Definitions .....	20
	Annex 6 Acronyms and Symbols.....	23
	Annex 7 References.....	24
	Annex 8 How This Practice Supports Delivery of OMS.....	25
	Revision Log.....	25



## Foreword

This practice was issued as an implementation draft in January 2008. The style and format has been simplified and many common requirements have been moved to [GDP 0.0-0001 Implementation of Group Defined Practices](#) to provide focus on the technical content.

## 1 Introduction

BP openly investigates HSSE related incidents with the primary intention of reducing risk across operations. The BP Root Cause Analysis (RCA) process supports this practice and reduces risks when properly applied. The reduction of risk can be achieved by adherence to this practice in identifying those systemic failures within the management systems and applying appropriate corrective actions.

Systemic root causes are best identified, addressed and corrected through Root Cause Analysis (RCA) methodology. BP's RCA methodology utilizes the [RD 4.4-0001 Comprehensive List of Causes \(CLC\)](#). Utilization of BP's RCA process requires basic root cause specialist training or Master Root Cause Specialist (MRCS) training.

This practice:

- Establishes a consistent approach for investigating incidents.
- Assists in improving the quality of investigations.
- Supplements and aids a methodical examination of an incident that did, or could have, resulted in physical harm to people or damage to property or the environment.
- Focuses on identifying the facts and circumstances related to the incident, determining the causes and developing remedial actions to control the risks.
- Provides the requirements and recommendations for establishing incident investigation teams, conducting the incident investigation and reporting the findings of the incident investigation.
- Facilitates the sharing of investigation findings to prevent or reduce the risk of future incidents.

### 1.1 Applicability

This practice applies group-wide, and is not limited to entities operating on Operating Management System (OMS). Its applicability is further set out (for example in relation to joint ventures, contractors and acquisitions) in [GDP 0.0-0001](#).

### 1.2 Conformance, Deviation and Legal Compliance

[GDP 0.0-0001](#) sets out:

- The date(s) by which actions are required for transition to conformance to this practice.
- The processes for endorsement of extensions and deviations from the requirements of this practice.

In the event of a conflict between this practice and applicable legal and regulatory requirements, the applicable legal and regulatory requirements shall be followed. If this practice creates a higher obligation, it shall be followed as long as full compliance with applicable legal and regulatory requirements is also achieved.

### 1.3 Administration

[GDP 0.0-0001](#) sets out the processes and accountabilities for ownership, approval, document control, review, amendment and interpretation of this practice. The identity of the approver, content owner and document administrator are shown in the [Group OMS Library](#).



## 2 Scope

This practice sets out BP's required approach for an incident investigation. This practice applies to all incidents that require reporting under the [GDP 4.4-0001 Reporting HSSE and Operational Incidents](#).

This practice is intended for use by BP leaders, including:

- Leaders in both segment and group functions.
- Supervisors to whom incidents are reported and who then take initial actions.
- Health, Safety, Security and Environment (HSSE) teams.
- Those individuals who support the incident investigation process.

This practice does not apply to:

- [OpenTalk](#) or any other investigation of allegations or concerns by Group Compliance & Ethics (GC&E) or an independent monitor. However, depending on the outcome, such investigations could lead to an incident investigation.
- Any incident that may involve murder, suicide or death by natural causes. However, if it is established that none of these were involved, then this practice applies.
- Any incident that involves suspected illegal behaviour (or a suspected [Code of Conduct](#) violation) that would not typically be associated with an HSSE or operational incident.
- Any disciplinary inquiry or proceedings.

## 3 General Requirements and Recommendations

### 3.1 Requirements

- BP entities shall investigate any incident that requires reporting under the [GDP 4.4-0001](#) in accordance with the requirements of this practice. A list of the reporting and recording categories to which this applies is available at [Group HSSE Reporting](#).
- The level and type of investigation required for an incident is outlined in [Annex 2.1](#) and [Annex 2.2](#). If an incident has different types of HSSE and business impacts the most stringent investigation requirements apply. For instance, an incident with classification level A for environment and level H for health, safety and security is investigated using level A requirements in [Annex 2.1](#).
- BP RCA investigations shall utilize the [RD 4.4-0001 Comprehensive List of Causes \(CLC\)](#). Utilization of BP's RCA process requires basic root cause specialist training or Master Root Cause Specialist (MRCS) training.

*A BP RCA investigation is one undertaken by a team using BP's CLC process for:*

  - > *Gathering evidence and undertaking interviews.*
  - > *Utilising human factor analysis tools (as applicable). (See [5.2 D](#))*
  - > *Determining the root causes through the identification of critical factors.*
  - > *Determining possible immediate and system causes and subsequent use of the 5-Why technique to identify underlying systemic causes.*
  - > *Developing proposed corrective actions.*
  - > *Submitting an incident investigation report.*
- The BP entity leader accountable for the area or operation where the incident occurs shall request the segment or function head of HSSE for approval of any exceptions from the requirements of [3.1B](#) above. The BP entity leader may request an exception for an incident that appears to be a special case for the following reasons:



- > The location of the incident.
- > The nature of BP's relationship to the incident (e.g., the involvement of other parties).
- > The nature of other investigations taking place or the possibility of a joint investigation with a governmental authority or other parties.
- > The potential for litigation or regulatory action.

When an exception is requested, the relevant head of HSSE shall determine whether to conduct an investigation, and if so, when and how to do so. If an exception is approved, the decision of the segment or function head of HSSE as to whether, when and how to investigate the incident shall replace the requirements of this practice for that specific incident. The relevant head of HSSE shall inform the group safety adviser-incident investigation of any exceptions for incidents at level A-E.

If a BP entity wishes to systematically depart from the requirements of this practice, the appropriate route for obtaining approval to do so is the deviation provision in 1.2.

### 3.2 Supporting Recommendations

- A. BP entities should seek to identify causes which BP is able to influence and / or which provide an opportunity for learning. The incident investigation should not examine causes that BP is unable to influence.

*If a critical factor in an incident is a natural or external event such as a hurricane or a pandemic, this practice does not require BP entities to examine the causes of the hurricane or pandemic. However, if BP assets or procedures were designed to withstand a hurricane or other natural event, but failed to do so, this practice requires the BP entity to identify the causes of that failure. A review of the effectiveness of crisis response procedures in responding to such incidents is also appropriate. However, such a review would be considered outside the scope of this practice and would not be expected to utilize BP RCA techniques.*

*If a critical factor is the conduct of a member of the public, BP would not seek to identify the causes of that conduct. An example is if a vehicle veered off a road and crashed into a BP asset, then BP would not seek to identify the cause of the behavior of the driver of that vehicle. However, BP would seek to identify the causes of other critical factors within BP's control, such as the absence of barriers between the road and the BP asset.*

- B. When the BP entity leader requests an exception for levels A-E, the segment head of HSSE (or functional equivalent) should consult BP legal and / or other relevant functions (e.g., security). The relevant head of HSSE should also consult the group safety adviser-incident investigation on any proposal not to undertake a BP RCA investigation where this practice would otherwise require such an investigation.

*The GDP 4.4-0001 requires the local management promptly advise BP legal of any incident classified at actual severity level A-E. This also includes any other incident if litigation or regulatory action is possible. This requirement enables BP legal to advise on the BP entity's response to the incident, including investigation and any need to seek an exception from 3.1 of this practice.*

- C. Conduct of the investigation of an incident may be affected by the rights of the insurers of an asset or risk affected by an incident or other parties. Insurance policies may have limitations or exclusions from coverage. The BP entity should check the insurance policy as soon as possible. They should also confirm whether any notifications are required to third parties, and seek advice from an insurance adviser and from BP legal on protecting BP's position during the investigation.



## **4 Appointing and Mobilizing the Incident Investigation Team**

### **4.1 Requirements**

The BP entity shall meet the following requirements for any investigation to which this practice applies:

- A. For any fatality investigation, there shall be both an investigation team leader and a MRCS. Both of these individuals shall be external to the BP entity affected, and selected by the segment head of HSSE (or functional equivalent). The investigation team leader shall be trained as an investigation manager by the group safety advisor - incident investigation. The MRCS for fatalities shall have been trained as MRCS by the group safety advisor - incident investigation.
- B. For a non-fatality incident requiring a BP RCA investigation, the BP entity leader with accountability for the area or operation where the incident occurred (or their delegate) selects the investigation team and leader.
- C. People directly or indirectly involved in an incident A-E shall not be selected as members of the incident investigation team.
- D. The investigation team leader for a level A-E HSSE incident (except a fatality as described in 4.1A) shall be trained as an MRCS or have an MRCS on the team.
- E. Investigation teams for level A-E business impact or level F HSSE incidents shall have at least one member trained to at least a basic RCA level.
- F. An incident investigation team assigned to investigate a level A-F security incident shall include a security professional nominated or approved by the group head of Security.
- G. Level A-E marine incident investigations required by this practice shall be brought to the attention of BP group marine authority.
- H. Investigation teams for level G incidents shall have at least one member trained to at least a basic RCA level if BP's RCA investigation process is utilized.
- I. For level H incidents that are not safety-related HiPos, the level of investigation shall be determined within the BP entity. However, if RCA is used, BP's RCA process shall be used, and only people formally trained in CLC shall use this technique. Utilization of BP's RCA process requires basic root cause or MRCS training.
- J. For any investigation team, the BP entity leader with accountability for the area or operation where the incident occurred or his or her delegate (who may be the investigation team leader) shall appoint investigation team members with necessary expertise.
- K. BP entity leaders shall verify that trained persons (e.g., basic RCA and MRCS) are available to perform BP's RCA investigations.
- L. Incident investigation team members shall be given the resources to complete the incident investigation.
- M. The incident investigation team shall consult with BP legal at the initiation of all investigations of level A-E incidents, and any other incident where the possibility of regulatory action or litigation is identified.
- N. For level A-E incidents and for HiPos, the BP entity leader with accountability for the area or operation where the incident occurred shall agree to the Terms of Reference (TOR) for the investigation with the investigation team leader. The BP entity leader shall issue the TOR to guide the incident investigation activities. (See [Annex 1](#) for a sample.)
- O. Once the TOR is agreed on for an investigation, the BP entity shall not determine the content or conclusions of the investigation. The incident investigation team will make this determination.





#### 4.2 Supporting Recommendations

- A. Practitioners of BP's RCA process should serve on a rotational basis within the BP entity after training to develop and maintain the skilful application of BP's RCA investigative techniques.
- B. Local site procedures should identify the expected make-up of the incident investigation team. Generally, teams should be multi-level and cross-functional in membership, and draw on relevant subject matter experts.
- C. BP legal should be consulted on the arrangements for appointing any person from outside BP (e.g., someone with a relevant area of expertise) to participate in the investigation, whether as a team member or as a provider of expert opinion.
- D. The incident investigation team should not be responsible for managing any post-incident activities other than the incident investigation itself.
- E. Level A-E investigations should be initiated within 48 hours. Initiation is defined as the start of the process to appoint an investigation team leader and establish an investigation team.
- F. The BP entity leader and the investigation team leader should agree on a proposed timeline for completion of the investigation. This agreed timeline should be included in the TOR. In order to ensure quality investigations, the time to complete investigations may vary based upon factors such as the complexity of the incident, access to witnesses, engineering evaluations and legal considerations. Generally, however, an RCA incident investigation and report should be completed within 30 days of the incident.
- G. If the investigation needs to be extended beyond the agreement in the TOR, the investigation team leader should document the reasons for extending the investigation. For level E and above, actual or potential incidents, key stakeholders should be made aware of such delays (e.g., the affected BP entity leader and segment head of HSSE).
- H. The investigation team leader (or MRCS or basic root cause specialist) should brief the incident investigation team members who have not been trained on incident investigation tools and techniques before the incident investigation starts.

*The Basic RCA may be taught by a third party contractor, if approved by the safety advisor - incident investigation. However, Human Factors Analysis Tools used by BP cannot be taught by third party contractors. At the date of issue of this practice, certain contractual limitations apply as to who can provide training on the use of the Human Factors Analysis Tools.*

*It is not the purpose of the incident investigation under this practice to support or facilitate any BP disciplinary inquiry. However, in some circumstances (and subject to guidance from BP legal and / or Human Resources [HR]), it may be appropriate or necessary for an incident report and other documents produced by an incident investigation team to be seen by participants in such an inquiry or any proceedings that may result from those inquiries.*

### 5 Conducting the Investigation

Following any incident, the [GDP 4.4-0001](#) requires the classification and reporting of the incident. This section outlines the requirements for the investigation of incidents based on the initial assigned classification.

#### 5.1 Requirements

The BP entity shall meet the following requirements for any investigation for which this practice applies:



- A. Annex 2.1 and Annex 2.2 shall be used to select the type of investigation. This selection is subject to the exceptions process described in 3.1.
- B. The incident investigation team shall conduct the sole BP RCA investigation, pursuing any reasonable line of inquiry to establish evidence addressing what happened, how it happened and why it happened.
- C. Incident investigation documents shall be managed in accordance with the applicable requirements of the BP Global Information Handling Standard.
- D. Where the incident occurs at a location owned or operated by BP, the BP entity leader shall confirm that the incident scene is properly preserved, including relevant process unit data (unless it is unsafe to do so) and shall notify the investigation team when they may access the scene for investigation. Wherever the location of the incident, the investigation team shall not investigate in circumstances where it may be unsafe to do so. It shall be the responsibility of the investigation team leader (with help from the BP entity leader as requested) to ensure the safety of the investigation team members during the investigation.
- E. The incident scene (including machinery and access to plant, equipment and materials) shall be released for resumption of work only at the direction of the incident investigation team. This shall be done (with advice from BP legal as needed and) at the direction or with the concurrence of any involved regulatory or law enforcement bodies.
- F. The incident investigation team shall maintain the confidentiality of the investigation materials and information, control the flow of information regarding the incident investigation and release the information only when they find it prudent or necessary to do so, or where release is required by law.

## 5.2 Supporting Recommendations

- A. The incident investigation team should consult with the BP entity leader and the security professional in the case of a security incident if there is any doubt as to the correct classification of a document, under the BP Global Information Handling Standard.
- B. The investigation team leader should periodically update the BP entity leader with accountability for the area or operation where the incident occurs, as necessary to maintain site operations and fulfill other responsibilities. In some jurisdictions, such as the US, UK and Australia, a legal privilege may cover certain documents produced by the incident investigation team. Legal privilege may mean, in some circumstances, that the documents require special handling as well as being confidential to BP. Legal advice is necessary from the very start of the investigation process regarding this possibility.
- C. Additional cause mapping techniques, such as Root Cause Failure Analysis (RCFA), can be used to augment evidence gathering prior to the use of the RCA CLC technique. RCFA may be appropriate during incident investigations where engineering causes need to be identified.
- D. Human Factors Analysis Tools (HFAT) Antecedent-Behaviour-Consequence (ABC) Analysis and Human Error Analysis (HEA) should be used to augment the RCA.  
*Done properly, these tools are utilized to better understand why people behave as they do. This understanding provides a quality root cause analysis when using the CLC technique.*
- E. BP's checklist for investigating fatigue-related incidents should, when appropriate, be used to augment the investigation. It will enable investigators to carry out an in-depth analysis and determine (for any incident) whether fatigue may have been an underlying (system) cause.



## 6 Reporting the Findings

### 6.1 Requirements

The BP entity shall meet the following requirements for any investigation for which this practice applies:

- A. An incident investigation report utilizing BP's format (see [Annex 3](#)) shall be made of the incident investigation team's findings and conclusions whenever BP's RCA process is utilized. The investigation team leader shall consult with the security professional team member when determining the distribution list for any report of a security related incident.
- B. The incident investigation report shall include proposed corrective actions for consideration by the BP entity (See [7.1](#)). The BP entity shall document exceptional circumstances where proposed corrective actions are not necessary or not possible.
- C. For any level A-E or HiPo BP RCA investigation, the BP entity shall record in the designated [BP Global HSSE Information System](#) the critical factors, CLC immediate and system causes categories (from [RD 4.4-0001](#), and the corrective actions accepted (with or without modifications) by the BP entity (See [7.1](#)). This also includes assigning the responsible party and target dates. This requirement applies except for information classified as 'BP Confidential' or higher under the [BP Global Information Handling Standard](#). (See also [5.2 A.](#))
- D. If BP's RCA process is not utilised (as allowed by [Annex 2.1](#) and [Annex 2.2](#) or under the [3.1](#) exceptions process), the findings and any recommendations resulting from the process shall still be documented.
- E. The incident investigation report shall be retained for 10 years, or for any longer period of time that is required by applicable law or by the [BP Global Document Management Policy](#). Documents and materials gathered or produced by the investigation team shall be transferred to the BP entity at the end of the investigation and retained in accordance with BP entity procedures until BP legal confirms that their retention is no longer necessary.

*The records management part of BP's intranet is located at <http://recordsinfo.bpweb.bp.com>. The policy, retention and regional Programs tabs on the records management page can be used to find BP's policies and requirements, and the programs and document retention schedules applicable to specific locations, such as North America.*

### 6.2 Supporting Recommendations

- A. The incident investigation report should reflect the findings of the incident investigation team and should represent a consensus among incident investigation team members.
- B. The report should not include paperwork generated as part of the investigation methodology (i.e., Human Factors Analysis Tools paperwork). The report should not include other 'insights' that are not directly related to the identified critical factors, immediate causes, system causes or systemic root causes. Timelines should be included, but only listing those items directly related to the incident.
- C. Each BP entity should establish expectations for the nature and extent of information required in incident investigation reports based on each level of incident severity.
- D. The proposed corrective actions should be specific, measurable, actionable and practical, and be able to be completed in a reasonable timeframe.
- E. The proposed corrective actions should be reviewed with the BP entity prior to the issuance of the report to identify any factual errors or omissions, determine applicability,



authorization for implementation and to check that implementation by the BP entity would be consistent with applicable legal and regulatory requirements.

*Maintaining legal and regulatory compliance is a line management accountability, and is not the responsibility of the investigation team.*

- F. BP entities should have a process for reviewing RCA incident investigation report quality prior to final issuing of the report and provide feedback to the investigation team leader for consideration.
- G. During the investigation, the investigation team may identify matters that are of concern to the team, but that are not causally relevant to the incident being investigated. Such matters should not be included in the investigation report, but should be communicated separately to the BP entity leader.

## **7 Acting on the Findings**

### **7.1 Requirements**

The BP entity shall meet the following requirements for any investigation for which this practice applies:

- A. All investigation findings and proposed corrective actions shall be reviewed with the BP entity leader with accountability for the area or operation where the incident occurred. For levels G and H incidents that are not safety HiPos, the review may be with the BP entity leader's delegate.
- B. The BP entity shall determine which of the proposed corrective actions shall be accepted, which shall be accepted with modification and which shall be rejected. Any changes to proposed corrective actions shall be documented, along with the reasons for those changes, and retained within the business. It is the responsibility of the BP entity to review any proposed corrective actions having implications beyond the authority of the BP entity and inform and follow through as required on any of these items.
- C. For those actions accepted (with or without modification) by the BP entity, the BP entity shall establish a schedule and assign personnel to complete those actions.
- D. The BP entity shall obtain progress reports from assigned personnel and verify the completion of the tasks required to meet the proposed corrective action.
- E. If any proposed corrective action in the report is beyond the authority of the BP entity to accept or implement, the BP entity shall copy the report to the person(s) who would be able to accept or implement that action. For the proposed corrective action, requirements A to D in this section apply to that person(s) instead of to the BP entity. Whenever requested by the BP entity, that person shall update the BP entity on the steps taken and progress made in respect to requirements A to D for that proposed corrective action.

*This requirement modifies requirements A to D to verify that proposed corrective actions are acted on by people with authority to take action, without assuming that it will be within the authority of the BP entity who appointed the investigation team to do so. For example, some corrective actions may involve modifying Strategic Performance Unit (SPU) procedures, or significant unplanned expenditure, which may be a level of authority "above" that of the BP entity).*

- F. The BP entity shall complete an investigation summary report after the investigation is completed for any Major Incident Announcement (MIA) or HiPo investigation using the template in [Annex 4](#), and circulate to the applicable MIA and HiPo distribution list. Group S&O shall post the summary report to the [Group Major Incident Reporting website](#).



## 7.2 Supporting Recommendations

- A. BP entity leaders should put procedures in place that describe the process for communicating report findings across the BP entity.
- B. BP entities should use corrective actions to improve the local management system.
- C. For level A-E, externally led incidents, the BP entity should provide documented feedback to the relevant segment or function head of HSSE or designated alternate and to the investigation team leader to help them to identify areas for improvement for future investigations. Similar feedback should be considered for other incidents.

*The BP entity should regard the feedback process as a leadership opportunity through which they can assist incident investigation team members in developing their incident investigation skills. This feedback could include, but not be limited to, items such as:*

- > *Communication with BP entity.*
- > *Team effectiveness.*
- > *Quality of reports and recommendations.*
- > *Better collection of evidence.*
- > *Any other items that would improve future investigation.*

**Annex 1 Sample Terms of Reference (TOR) for Local Site Investigation Team**

*This sample TOR assumes the full application of the practice requirements; in special cases / exceptions, substantial departure from the sample TOR could be required.*

**Terms of Reference - Local Site Investigation Teams**

- Establish a timeline for the completion of the investigation and issuance of the investigation report (and the lessons learned summary, if applicable).
- The incident investigation team shall limit their investigation to the incident, and the conditions and circumstances leading to the incident. They shall avoid doing a general safety audit.
- The incident investigation team shall pursue any reasonable line of inquiry to establish evidence addressing what happened, how it happened and why it happened.
- The investigation team leader shall provide periodic updates to the BP entity leader on the progress and findings of the incident investigation. Other than any disclosure authorised by the BP entity leader or required by law, or as is necessary for the purposes of the investigation, all investigation team members shall maintain strict confidentiality regarding the progress and content of their investigation.
- The investigation team leader shall identify the team members with the assistance of the BP entity leader and BP Legal and utilize the appropriate legal counsel during the investigation. (Note that for some investigations, the investigation team leader is required to consult BP Legal at the start of the investigation (see 4.1).
- In addition to the team members appointed by the BP entity leader, the investigation team leader shall engage additional expertise as needed. Example: a health expert shall be considered for a fatality investigation. Another example: where fitness for task (including fatigue), chemical exposure, substance misuse or psychological health (e.g., stress) may be a contributing factor to the incident.
- The incident investigation team shall utilize BP's RCA techniques in performing the incident investigation and shall consider human factors issues where applicable.
- The incident investigation team shall create a draft report and review it with the BP entity leader and, if appropriate, with BP legal before issue.
- After considering the comments on the draft report from both legal counsel and the BP entity leader, the incident investigation team shall complete a final report utilizing the preferred template provided (see the Proforma in Annex 3).
- The incident investigation team shall collate all investigation materials, including process safety materials, and secure them according to the local procedure.
- The incident investigation team shall work jointly with the BP entity leader to create an appropriate 'lessons learned' communication.
- The incident investigation team's report shall be addressed to the BP entity leader with accountability for the area or operation where the incident occurred. (Note that the report is to be labeled 'BP Confidential' and handled accordingly. The investigation team leader shall consult with the security professional team member when determining the distribution list for the inclusion in reports of investigations into security incidents. See 6.1.



## Annex 2 Severity Matrixes

The master reference document for severity levels is *GDP 3.1-0001 Assessment, Prioritization and Management of Risk* and should be used in case of dispute. The table is replicated here for ease of use for the end user.

### 2.1 HSSE Impact Levels

Severity Level	Health, Safety & Security	Environment	Investigation Required
A-D	<ul style="list-style-type: none"> <li>3 or more fatalities.</li> <li>Identified onset of life-threatening health effects to 3 or more individuals.</li> <li>30 or more injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours.</li> </ul>	<ul style="list-style-type: none"> <li>Event with widespread or extensive damage to any environment, including sensitive and non-sensitive environments, and remains in "unsatisfactory" state for a period of &gt; 5 years.</li> <li>Event with widespread or extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of around 1 year.</li> <li>Event with localized, widespread or extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of around 1 year.</li> <li>Event with widespread or extensive damage to a non-sensitive environment and can only be restored to a satisfactory/agreed state in a period of more than 1 year and up to 5 years.</li> <li>Event with widespread or extensive damage to a sensitive environment and can only be restored to a satisfactory/agreed state in a period of more than 1 year and up to 5 years.</li> <li>Event with widespread damage to a sensitive or non-sensitive environment and can be stored to an equivalent capability in a period of months.</li> <li>Event with extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> </ul>	<p>Level A-E incidents shall be investigated using BP's RCA investigation process (CLC). A BP RCA investigation is defined in <a href="#">3.1</a>.</p> <p><b>Investigation Team Make-up:</b></p> <p><b>Fatalities</b> All investigations of any fatalities shall be externally led (both investigation manager and MRCS external to the BP entity affected).</p> <p><b>Non-fatalities</b> All other level A-E investigations shall have an MRCS on the team.</p> <p><b>HiPos</b> See HiPo section below.</p> <p><b>Special Cases</b> Also note special cases listed in <a href="#">1.2</a> and <a href="#">3.1</a>.</p>



Severity Level	Health, Safety & Security	Environment	Investigation Required
<b>E</b>	<ul style="list-style-type: none"> <li>1 to 2 fatalities, acute or chronic, actual or alleged.</li> <li>10 or more injuries or health effects, either permanent or requiring hospital treatment for more than 24 hours.</li> </ul>	<ul style="list-style-type: none"> <li>Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of 1 year.</li> <li>Event with extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with localized damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with extensive damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	
<b>F</b>	<ul style="list-style-type: none"> <li>Permanent partial disabilities.</li> <li>Several non-permanent injuries or health impacts.</li> <li>Days Away From Work Case (DAFWC)</li> </ul>	<ul style="list-style-type: none"> <li>Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with immediate area damage to a sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with extensive damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> <li>Event with localized damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>Level F incidents shall be investigated using BP's RCA Investigation process (CLC).</p> <p><b>DAFWC</b></p> <p>Note: The requirement for a BP RCA incident investigation may be waived by a BP entity leader if the case is classified as DAFWC solely due to conservative medical care.</p> <p><b>Investigation Team Make-up:</b></p> <p>The use of MRCS is recommended. At a minimum, a trained 'basic' root cause specialist shall be on the team.</p>





Severity Level	Health, Safety & Security	Environment	Investigation Required
<b>G</b>	Single or multiple recordable injury or health effects from a common source/event.	<ul style="list-style-type: none"> <li>Event with immediate area damage to a non-sensitive environment and can be restored to an equivalent capability in a period of months.</li> <li>Event with localized damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> <li>Event with immediate area damage to a sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>It is recommended that events of this severity should be investigated utilizing BP's RCA investigation process.</p> <p><b>Investigation Team Make-up:</b> Depending on the severity of the event, the BP entity leader may elect to utilize a MRCS. It is recommended that at least one member of the team be trained to at least the 'basic' root cause specialist level.</p>
<b>H</b>	<ul style="list-style-type: none"> <li>First aid.</li> <li>Single or multiple over-exposures causing noticeable irritation but no actual health effects.</li> </ul>	<ul style="list-style-type: none"> <li>Event with immediate area damage to a non-sensitive environment and can be restored to an equivalent capability in a period of days or weeks.</li> </ul>	<p>Events of this severity shall be investigated at a level deemed appropriate by the BP entity leader.</p> <p><b>Investigation Team Make-up:</b> If BP's RCA is used, at least one member of the team must be trained to at least the 'basic' level.</p>



Severity Level	Health, Safety & Security	Environment	Investigation Required
HiPo	<a href="#">BP Group HSE Reporting Definitions</a>	N/A	<p><b>Safety-related HiPo</b></p> <p>If an incident (whatever its actual impact) is classified as a HiPo because of its potential health and safety consequences (a safety-related HiPo), a BP RCA investigation is required.</p> <p><b>Investigation Team Make-up:</b></p> <p>This level of investigation shall be led by, or have a member of the team, that has been trained as a MRCS or 'basic' RCA, depending on the complexity of the investigation. The investigation may be internally led.</p> <p><b>Other Non-safety-related HiPo</b></p> <p>If a HiPo is not a safety-related HiPo, the actual severity will determine the required level of investigation.</p>



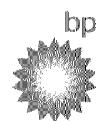
## 2.2 Business Impact Levels

*When categorising business impact severity to meet the requirements of this practice, only equipment / property damage (replacement cost) as a result of a HSSE incident or unsafe / unhealthy condition shall be considered.*

Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
A-D	<ul style="list-style-type: none"> <li>&gt;\$10m equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Public or investor outrage in markets where there is presence or aspirations.</li> <li>Prolonged adverse national or international media attention.</li> <li>Loss of license to operate an asset or threat of global loss of license to operate.</li> <li>Intervention from government.</li> <li>Severe enforcement action against a material asset in a non-major market, or against other assets in a major market.</li> <li>Widespread adverse social impact.</li> <li>Damage to relationships with key stakeholders of benefit to the SPU, segment or group.</li> <li>Localized or limited 'interest-group' outrage in a major market.</li> </ul>	<p>Level A-E business impact incidents resulting from an HSSE incident or unsafe unhealthy condition shall be investigated using BP's RCA Investigation process.</p> <p>A BP RCA investigation is defined in <a href="#">3.1</a>.</p> <p><b>Investigation Team Make-up:</b> Level A-E investigations shall have at a minimum a trained basic root cause specialist on the team.</p> <p><b>Special Cases</b> Also note special cases listed in <a href="#">1.2</a> and <a href="#">3.1</a>.</p>
E	<ul style="list-style-type: none"> <li>\$1m-\$10m property &amp; equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Other adverse enforcement action by regulators.</li> <li>Limited 'interest-group' outrage in non major market.</li> <li>Short term adverse national or international media coverage.</li> <li>Damage to relationships with key stakeholders of benefit to the PU.</li> </ul>	



Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
<b>F</b>	<ul style="list-style-type: none"> <li>\$100k-\$1m property and equipment damage</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory compliance issue which does not lead to regulatory or other higher severity level consequence.</li> <li>Prolonged adverse local media coverage.</li> <li>Local adverse social impact.</li> </ul>	<p>Level F business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated using BP's RCA Investigation process.</p> <p><b>Investigation Team Make-up:</b> The use of MRCS is recommended. At a minimum, a 'basic' trained person must be on the team.</p>
<b>G</b>	<ul style="list-style-type: none"> <li>\$25k-\$100k property &amp; equipment damage.</li> </ul>	<ul style="list-style-type: none"> <li>Short-term adverse local media coverage.</li> <li>Some disruption to local operations (e.g., loss of single road access less than 24 hours).</li> </ul>	<p>Level G business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated using BP's RCA Investigation process.</p> <p><b>Investigation Team Make-up:</b> Depending on the severity of the event, the BP entity leader may elect to utilize a MRCS. It is recommended that at least one member of the team be trained to at least the 'basic' root cause specialist level.</p>
<b>H</b>	<ul style="list-style-type: none"> <li>&lt;\$25k property &amp; equipment damage.</li> </ul>	<ul style="list-style-type: none"> <li>Isolated and short term complaints from neighbours (e.g. complaints about specific noise episode).</li> </ul>	<p>Level H business impact incidents resulting from an HSSE incident or unsafe unhealthy condition should be investigated at a level deemed appropriate by the BP entity leader.</p> <p><b>Investigation Team Make-up:</b> If RCA is used, at least one member of the team must be trained to at least the 'basic' level.</p>



Severity Level	Financial Impact - Equipment Damage	Non-Financial Impact - Privilege to Operate	Investigation Required
HiPo	See <a href="#">Annex 5</a> for the definition.	N/A	<p><b>Safety-related HiPo</b></p> <p>If an incident (whatever its actual impact) is classified as a HiPo because of its potential health and safety consequences (a safety-related HiPo), a BP RCA investigation is required.</p> <p><b>Investigation Team Make-up:</b></p> <p>This level of investigation shall be led by an MRCS or a person trained in 'basic' RCA (or have one as a member of the team), depending on the complexity of the investigation. The investigation may be internally led.</p> <p><b>Other Non-safety-related HiPo</b></p> <p>If a HiPo is not a safety-related HiPo, the actual severity will determine the required level of investigation.</p>

### Annex 3 Proforma for Incident Investigation Report

### Annex 4 Investigation Lessons Learned Summary

### Annex 5 Standard Usage Definitions

The terms associated with this specific document are defined in this section. Some terms may already be defined in the [Group OMS Glossary](#) or the [BP Group HSE Reporting Definitions](#) document. The definitions for those terms contain a link to the appropriate document.

Term	Definition
<b>Antecedent-Behaviour-Consequence Analysis (ABC Analysis)</b>	Analysis technique that helps the user to understand why people behave as they do, which provides a better quality cause analysis when using the <a href="#">RD 4.4-0001</a> . This technique is used for intentional behaviours. Utilization of BP's RCA process requires basic root cause specialist training or MRCS training.



Term	Definition
<b>Basic Root Cause Specialist</b>	Individual with the skills obtained upon completion of a 12 hour training program (maintained by S&O group safety) that provides basic level competency for RCA training in BP's RCA process including human factors. Individuals previously trained in the eight hour BP RCA Basic class are also considered trained. All new basic root cause specialists require the new 12 hour program.
<b>BP Entity</b>	An organizational unit within BP which may be a Performance Unit, Business Unit (BU), Strategic Performance Unit (SPU), segment or some logical sub-group of one of these, which shall be defined by the segment, function or region. Each BP entity operating on OMS, will have a consistent Local Operating Management System (LOMS) documented in an LOMS Handbook.
<b>BP RCA Investigation</b>	An Incident Investigation undertaken by an incident investigation team using BP's RCA process (CLC) for gathering evidence; undertaking interviews; utilising human factor tools; determining root cause through identification of critical factors, possible immediate and system causes and subsequent use of the 5-Why technique to identify underlying systemic causes; developing proposed corrective actions; and submitting an incident investigation report. Utilization of BP's RCA process requires basic root cause specialist or MRCS training.
<b>Comprehensive List of Causes (CLC)</b>	The BP cause identification tool used in RCA. Utilization of BP's <u>RD 4.4-0001</u> process requires basic root cause specialist, MRCS, or investigation manager training.
<b>Contractor</b>	<u>Group OMS Glossary</u>
<b>Corrective Actions</b>	Actions intended to prevent, or reduce the probability of, the identified systemic root cause(s) of the incident investigated.
<b>Critical Factors</b>	Events or conditions, which if eliminated, would have prevented the incident's occurrence or significantly reduced its severity.
<b>Employees</b>	<u>Group OMS Glossary</u>
<b>Exception</b>	A one-time departure from the requirements of this practice in response to a specific incident. An exception is approved for a specific incident under <u>3.1</u> of this practice. An exception enables a BP entity, if necessary, to apply an incident-specific approach which is different from what this practice would otherwise require. However, if a BP entity intends to systematically depart from this practice (for all incidents or for a particular type of incident), this would require an approved deviation, not an exception.
<b>Group Reportable</b>	An incident or unsafe / unhealthy condition which is defined in the finance list as reportable to the BP group. This includes major incidents and High Potential incidents (HiPos). A list to which this mandatory reporting applies is reviewed and, if necessary, updated at least annually and can be found at: <u>BP Group HSE Reporting Definitions</u>
<b>High Potential Incident (HiPo)</b>	<u>BP Group HSE Reporting Definitions</u>



Term	Definition
<b>High Value Learnings</b>	<a href="#">Group OMS Glossary</a>
<b>Human Error Analysis (HEA)</b>	Analysis technique that helps the user to understand why people behave as they do, which provides a better quality cause analysis when using the <a href="#">RD 4.4-0001</a> . This technique is used for unintentional behaviours. Utilization of BP's RCA process requires basic root cause specialist or MRCS training.
<b>Human Factors Analysis Tools (HFAT)</b>	This includes the ABC and HEA techniques.
<b>Implement</b>	<a href="#">Group OMS Glossary</a>
<b>Incident</b>	<a href="#">BP Group HSE Reporting Definitions</a> As used in this practice, "incident" includes any HiPo. (New definition based on existing segment and external sources and to cover the requirements in the <a href="#">Code of Conduct</a> .)
<b>Incident Investigation</b>	Methodical examination of an incident; incident investigation activities are directed toward identifying the facts and circumstances related to the event, determining the causes, and developing proposed corrective actions to control the risks.
<b>Incident Investigation Report</b>	The written record of the incident investigation team's findings, consisting of facts, the critical factors that led to the incident and proposed recommendations for corrective actions. For a BP RCA investigation, <a href="#">6</a> sets out requirements applicable to the incident investigation report.
<b>Incident Investigation Team</b>	A group of individuals gathered for the sole purpose of conducting an investigation into an incident.
<b>Investigation Team Leader/ Investigation Manager</b>	The individual assigned to take the lead role in managing the incident investigation team. For a fatality, the investigation team leader requires specialized training as an investigation manager. This is a one and one-half day class on managing fatality investigations, taught by the group's safety advisor.
<b>Leader</b>	The person accountable for an operation or activity and those to whom authority has been delegated for specific operational activities.
<b>Major Incident</b>	<a href="#">BP Group HSE Reporting Definitions</a>
<b>Master Root Cause Specialist (MRCS)</b>	Individual with the skills obtained upon completion of a three day, invitation-only course for individuals who demonstrate skillful application of the investigation skills covered in the basic 12 hour training course. The master-level investigator is the local centre of expertise that can train, coach, and mentor investigation team leads trained at a lower competency level. The safety advisor - incident investigation is the only qualified trainer of MRCSs.
<b>Operating</b>	<a href="#">Group OMS Glossary</a>



Term	Definition
<b>Report Recipient</b>	The BP entity leader with accountability for the area or operation where the incident occurred. The BP entity leader is responsible for all recommendations that are within his sphere of delegated authority, and to refer upwards for consideration any recommendations that are not.
<b>Risk</b>	<a href="#">Group OMS Glossary</a>
<b>Root Cause</b>	The most basic cause(s) that can be reasonably identified, which management has control to fix, and for which effective corrective actions for preventing recurrence can be generated.
<b>Root Cause Analysis (RCA)</b>	A formal process designed to determine the systemic root causes in an incident or accident, and develop effective solutions to those systemic root causes to eliminate (or reduce the probability of) a recurrence.
<b>Safety and Production Critical</b>	<a href="#">Group OMS Glossary</a>
<b>Safety-related HiPo</b>	An incident classified as a High Potential (HiPo) incident due to its potential health and safety impacts.
<b>Security Incident</b>	An incident within the scope of this practice that affects the security of BP's workforce, premises or assets or of a BP operation or project, such as an incident that includes or may include any of the following, as defined for the purposes of the reporting of security incidents in <a href="#">Tr@ction</a> : assault / threat; burglary, civil unrest, criminal property damage, drug / alcohol abuse / possession, robbery, security of information breach, terrorist / guerrilla activity, or theft. Note that an incident that involves or may involve fraud is excluded from this list because fraud is outside the scope of this practice (fraud is not reported into <a href="#">Tr@ction</a> ).
<b>Work Environment</b>	The establishment and other locations (including marine vessels and vehicles) where one or more BP employees and or BP contractors are working or are present as a condition of their employment/contract. The work environment includes not only physical locations, but also the equipment or materials used by the employee or contractor during the course of his or her work.  Definitions for specifically included and excluded locations can be found at: <a href="#">BP Group HSE Reporting Definitions</a>
<b>Workforce</b>	<a href="#">Group OMS Glossary</a>

#### Annex 6 Acronyms and Symbols

Term	Definition
<b>ABC Analysis</b>	Antecedent-Behaviour-Consequence (ABC) Analysis. This is a component of BP's RCA process.
<b>BU</b>	Business Unit
<b>CLC</b>	Comprehensive List of Causes





Term	Definition
<b>DAFWC</b>	Days Away From Work Cases <a href="#">BP Group HSE Reporting Definitions</a>
<b>GC&amp;E</b>	Group Compliance & Ethics
<b>GDP</b>	Group Defined Practice
<b>HEA</b>	Human Error Analysis
<b>HFAT</b>	Human Factors Analysis Tools
<b>HiPo</b>	High Potential Incident
<b>HOD</b>	Head of Discipline
<b>HR</b>	Human Resources
<b>HSSE</b>	Health, Safety, Security & Environment
<b>LOMS</b>	Local Operating Management System
<b>MIA</b>	Major Incident Announcement
<b>MRCS</b>	Master Root Cause Specialist
<b>OMS</b>	Operating Management System
<b>RCA</b>	Root Cause Analysis
<b>RCFA</b>	Root Cause Failure Analysis
<b>S&amp;O</b>	Safety & Operations
<b>TOR</b>	Terms of Reference

## Annex 7 References

### 7.1 Referenced - Group Documents

- [GDP 0.0-0001 Implementation of Group Defined Practices](#)
- [GDP 3.1-0001 Assessment, Prioritization and Management of Risk](#)
- [GDP 4.4-0001 Reporting HSSE and Operational Incidents](#)
- [RD 4.4-0001 Group Comprehensive List of Causes \(CLC\)](#)
- [Group OMS Glossary](#)

### 7.2 Referenced - Other

- [BP Global Document Management Policy](#)
- [BP Global HSSE Information System](#)
- [BP Global Information Handling Standard](#)
- [BP Group HSE Reporting Definitions](#)
- [BP Records Management website](#)
- [Code of Conduct](#)
- [Group HSSE Reporting](#)
- [Group Major Incident Reporting website](#)
- [Open Talk](#)
- [Tr@ction](#)

**Annex 8 How This Practice Supports Delivery of OMS**

For those BP entities operating under OMS, this practice:

- Should be read in conjunction with OMS Part 2 - Elements of Operating Including Group Essentials, OMS Part 3 - OMS Performance Improvement Cycle and OMS Part 4 - Governance and Implementation to understand how it fits with the OMS Framework and other requirements.
- Supports delivery of the following Group Essentials:

Sub Element	Group Essentials
2.2 People and competence	2.2.3, 2.2.5
2.4 Organisational Learning	2.4.2, 2.4.3
4.4 Incident Management	4.4.2

- Links with the OMS Performance Improvement Cycle for prioritizing and obtaining resources to deliver continuous risk reduction.

**Revision Log**

Revision Date	Content Owner Name/Title	Approver Name/Title	Revision Details
14 October 2009	Steve Flynn, Group HOD - HSSE, S&O	Mark Bly, Group Head of Safety & Operations	Initial issue and this document supersedes the implementation draft listed below.
30 January 2008	Steve Flynn, Group HOD - HSSE, S&O	John Mogford, Group Head of Safety and Operations.	Published as an implementation draft with the title Group GDP for Reporting HSSE and Operational Incidents.