

# Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.04.0

## Purpose

To establish the criteria for the appropriate management of incidents, improvement actions and lessons learned in all Units and Operating Centres, that enable significant information to be obtained so that the whole organization can gain a more in-depth knowledge of the incidents, learn how to control them and be able to act in order to prevent the repetition of their consequences, thus protecting people, facilities, environment and Company reputation.

All Repsol employees, regardless of the type of contract that determines their working relationship, the position they occupy, and the place where they work (including interns and people who have been temporarily transferred to Repsol to provide professional services [secondees]) are obligated, when they witness or suffer an incident, to communicate it. Subsequently, the Business Units will open the investigation process, identify of root causes and propose improvement actions following the criteria established by the Sustainability Division in this norm.

In addition, the contract holders must ensure that Repsol's suppliers and contractors, as well as all of the Companies in which Repsol has direct or indirect management control, know this norm and promote practices consistent with it in their relations with Repsol.

The Safety and Environmental Audit Area within the Audit Division would be able to access all the information provided through the incident management process, improvement actions and lessons learned according to its functions and responsibilities as S&E auditing unit.

## Scope of application

The management of emergencies, the management of activities for the monitoring and rehabilitation of injured parties, insurance activities related to incidents and the management of the economic-labour aspects related to the same are excluded from this procedure.

Security incident management is also excluded from this standard.

Joint Operating Agreement (JOAs) of E&P where Repsol is not consortium operator are excluded from the scope of this procedure.

If any point specified in the process could not be complied with, the organizational unit must provide documented justification for non-compliance, and inform their direct superiors, Sustainability Division and the S&E Managing areas for analysis.

## Framework regulations

- "Health, Safety Environmental" policy (code 00-00075PO).
- "Safety and Environment Risk Management" norm (code 00-000353NO).

---

## Safety and Environment Incident Management

---

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

---

### Table of contents

<b>1. Definitions</b> .....	<b>3</b>
<b>2. Occurrence of an incident</b> .....	<b>5</b>
<b>3. Incident communication, registering and notification</b> .....	<b>5</b>
3.1. Incident classification .....	7
3.1.1. Reporting Boundaries .....	7
3.1.2. Consequence evaluation .....	7
<b>4. Investigation</b> .....	<b>7</b>
4.1. High Profile Incidents (HPIs) .....	8
<b>5. Improvement actions</b> .....	<b>9</b>
<b>6. Lessons learned</b> .....	<b>9</b>
<b>7. Appendices</b> .....	<b>10</b>
Appendix I: Reporting Boundaries .....	11
Appendix II: Consequences Classification Matrix.....	14
Appendix III: Root causes classification .....	15
Appendix IV: High Profile Incident (HPI) Final investigation report .....	17
<b>Approval</b> .....	<b>18</b>

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

### 1. Definitions

INCIDENT AND TYPES	
<b>INCIDENT</b>	An unplanned or uncontrolled outcome of a Company activity or operation with <u>actual and/or potential consequences</u> to personnel, environment, assets, business or reputation of the Company.
<b>NEAR MISS</b>	<u>Any incident</u> with <u>potential</u> (not actual) <u>consequences</u> to personnel, assets, environment, Business or the reputation of the Company.
<b>HIGH PROFILE INCIDENT (HPI)</b>	An Incident with <b>serious or higher</b> <u>actual consequences</u> , and/or <u>potential consequences</u> , and/or <u>process safety incidents</u> classified as <b>TIER 1</b> .  The TIER levels categorization of these kind of incidents will be done following the “API Recommended Practice 754 (Second Edition – April 2016): Process Safety Performance Indicators for the Refining and Petrochemical” standard.

INVOLVED ACTORS	
<b>EMPLOYEE</b>	Any individual on the Company payroll whose work hours and injuries are routinely tracked by the Company. Individuals not on the Company payroll, but providing services under direct company supervision are also included. Persons employed under short-service contracts are included as Company employees provided they are paid directly by the Company.
<b>CONTRACTOR<sup>1</sup></b>	Any individual not on the Company payroll who carries out tasks or work or provides services to the Company by reason of the corresponding agreement or service contract.  In terms of incident management accidentability, subcontracted parties and self-employed staff are considered contractors.  Distribution Agencies, Official Services are excluded from this definition, as are ship consignment agents and ship suppliers.
<b>THIRD PARTY</b>	Any individual other than an <u>employee</u> or <u>contractor</u> of the Company (e.g., interns).

CONSEQUENCE CLASSIFICATION	
<b>ACTUAL CONSEQUENCE</b>	The outcome(s) of an <u>incident</u> . The consequences are evaluated based on the Consequence Classification Matrix established in the Safety and Environment Risk Management norm 00-000353NO.
<b>POTENTIAL CONSEQUENCE</b>	The highest potential outcome(s) of an <u>incident</u> that could occur under the same circumstances or that at least one additional <u>safeguard</u> had failed. The consequences are evaluated based on the Consequence Classification Matrix established in the Safety and Environment Risk Management norm 00-000353NO.

<sup>1</sup> For E&P and TGP (Trading, Gas & Power) (see contractor activity definition in “IOGP Safety data reporting user guide – 2015 data”)

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

INVESTIGATION PROCESS/IMPROVEMENT ACTIONS/LESSONS LEARNED	
<b>IMPROVEMENT ACTION</b>	Action to prevent the reoccurrence of an <u>incident</u> , or to correct or optimize any S&E management aspect.
<b>ROOT CAUSE</b>	Fundamental, underlying reason why an incident occurred that identifies a failure(s) that if corrected would have prevented the occurrence of the same or similar problem.
<b>BARRIER/ SAFEGUARD<sup>2</sup></b>	A measure put in place (mechanism, system or action) to prevent the release of a hazard or to provide protection or mitigate the consequences once a hazard is released. Barriers may be physical (design, active and passive protection systems, etc.) or non-physical (procedures, training, operational control, etc.).
<b>S&amp;E ANALYSIS</b>	In general, any study or evaluation from which improvement opportunities in safety and environment are identified.  For example: nonconformities, inspections, supervision, observations, audits, risk studies, emergency simulations, innovation and improvement initiatives, external events, reports of external organizations, lessons learned, etc.
<b>LESSON LEARNED</b>	Knowledge gained through the reflection on an experience or process that may have relevant consequences for safety or the environment, and that is shared for the purposes of continuous improvement and learning. Requires register, inclusion in the management systems and implementation of the actions.

PERSONAL SAFETY	
<b>FATALITY</b>	The death of a person.
<b>PERMANENT DISABILITY</b>	Those effects that involve decreases and alterations in physical integrity of working people, can be disabling or not.
<b>LOST WORK DAY CASE (LWDC)</b>	Any injury other than a <u>fatality</u> that results in a person being unfit for work on any calendar day after the injury.
<b>RESTRICTED WORK</b>	Any injury other than a <u>fatality</u> or <u>lost work day case</u> that results in a person being unfit for full performance of the regular job or in the regular schedule. Work performed may be the assignment to a temporary job, part-time work at a regular job, continuation of full-time in the regular job but not performing all of the usual duties of the job, or training.
<b>MEDICAL TREATMENT</b>	Any injury other than a <u>fatality</u> , <u>lost work day case</u> or <u>restricted work</u> that requires medical supervision or treatment more than once and which forces the injured party to be absent from his place of work, for no longer than the day (or shift) on which the Incident took place and allows him to return to his normal working conditions thereafter. <sup>3</sup>

<sup>2</sup> See Prevention and mitigation of fires, explosions and toxic releases (00-00458NO)

<sup>3</sup> See IOGP SAFETY DATA REPORTING USER'S GUIDE (2015 Data) and OSHA A Brief Guide To Recordkeeping Requirements For Occupational Injuries And Illnesses

Medical Treatment does not include:

- The conduct of diagnostic procedures, such as x-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (e.g. eye drops to dilate pupils).
- Visits to a physician or other licensed health care professional solely for observation for counselling.

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

<b>FIRST AID</b>	An minor injury which does not require any restriction or reassignment to another job and/or duties. As such, it is limited to a one-time treatment. <sup>4</sup>
------------------	---

INDUSTRIAL SAFETY	
<b>PROCESS SAFETY INCIDENT<sup>5</sup></b>	<p>An unplanned or uncontrolled release of any material including non-toxic and non-flammable materials (e.g., steam, hot water, nitrogen, compressed CO<sub>2</sub>, or compressed air) from a process, or an undesired event or condition, that under slightly different circumstances, could have resulted in a release of material.</p> <p>The TIER levels categorization of these kind of incidents will be done following the “API Recommended Practice 754 (Second Edition – April 2016): Process Safety Performance Indicators for the Refining and Petrochemical” standard.</p>

INCIDENT MANAGEMENT TOOL	
<b>INCIDENT MANAGEMENT TOOL</b>	Company Tool where incidents and its subsequent actions are managed.

## 2. Occurrence of an incident

Anyone who witnesses or suffers an incident must first, as far as practicable, try to gain control of any unsafe condition which could spread or worsen the damage, trying not to endanger themselves, other people, actives or environment.

After the occurrence of an incident the Incident Management process is activated. This process implies the following stages:

- Communication and Registering
- Investigation
- Improvement Actions
- Lessons Learned

The Business Unit director must guarantee the existence of the appropriate roles and resources to complete the incident management process successfully.

## 3. Incident communication, registering and notification

- **Who communicates**

Any Repsol employee who witnesses or is involved in an incident must communicate it.

<sup>4</sup> See IOGP SAFETY DATA REPORTING USER'S GUIDE (2015 Data) and OSHA A Brief Guide To Recordkeeping Requirements For Occupational Injuries And Illnesses

<sup>5</sup> ANSI/API Recommended practice 754

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

In the case of a contractor incident, the manager responsible for the contract will be the person who communicates the details of the incident, they may choose to delegate this responsibility to the manager supervising the contractor. In any case the Business may define a different communication protocol provided that meets the intent of this norm.

In the case of a third party incident, the incident is communicated to the closest employee. In the case of people visiting the company facilities, the incident must be communicated by the person who authorized or accompanied the visit.

- **How and when to communicate**

Communication of incidents will be facilitated through the incident management tool or through a format established by the Business Unit, meeting the following deadlines:

- Incidents classified as HPI (see Appendix II) are communicated and registered in the tool in the first 24 hours after the incident.
- All other incidents are communicated and registered in the tool within the first 7 calendar days after the incident.

Each Business Unit will define the mechanisms that guarantee the proper communication of every incident and will identify inside its organization the people who can be assigned as "Person in Charge". The Person in Charge will be responsible for validating the information reported by the communicators and for registering the information into the incident management tool if they had not access to it.

- **What to communicate**

The communication must contain the following minimum information:

- WHEN: Date of occurrence
- WHERE: Location
- WHAT: Incident description, actual and potential consequences description, involved equipment/system/vehicles
- WHO: Involved companies, involved persons

Additionally, immediate action(s) can be reported.

- **Internal incident notification**

In case of a High Profile Incidents (see Appendix II), an internal communication must be done by the "Person in Charge" ensuring basic information about the incident is communicated to:

- Head of Area
- Head of the work centre
- Manager of the Business Unit, , Manager of the Sustainability Division and Manager of Safety and Environment of the Business

The Business Units may determine additional positions to be notified.

In any case, each Business Unit must define the most appropriate media to disclose the information related to incidents.

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

- External incident notification**

Regarding external notification, for any kind of incident, the Business Units will ensure compliance with the external communication requirements established by the law applicable in each case, best practices of the Industry or contractual agreements.

### 3.1. Incident classification

#### 3.1.1. Reporting Boundaries

The “Person in Charge” will be responsible for determining whether an incident has occurred in circumstances under Company Control, using the diagram and criteria of the Appendix I. Based on that, incidents will be reported either as Company Control or as non-Company Control Incidents.

If an incident is classified as a non-Company Control Incident, and a fatality has occurred, the Business Unit must keep the documentation used to make the decision on classification, and the information of the events which triggered the fatality, and upload this information into the incident management tool.

#### 3.1.2. Consequence evaluation

The “Person in Charge” will classify all incidents following the criteria established in the consequence classification matrix included in Appendix II being the results trivial, minor, moderate, serious, very serious, disastrous and catastrophic.

In the case of process safety incidents, due to their own characteristics, the “Person in Charge”, will review API 754 specifications, to determine the TIER level classification.

In the case of process safety incidents the classification is also established by the matrix included in Appendix II (regarding real and potential consequences).

## 4. Investigation

- What to investigate**

The Business Units will investigate, as a minimum, all High Profile Incidents (HPI) under Company Control.

All remaining incidents shall be investigated according to the Business Unit considerations, giving priority and more resources to those with the highest consequences.

For non-Company Control incident investigation must be carried out if the Business Unit considers it necessary.

A joint analysis of the incidents in a period must be performed by each Unit in order to identify the recurrent incidents and suggest improvement actions.

The Business Units must comply with any recommendations from the investigations with Administrations and/or stakeholders (organizations in the sector, insurance, etc.).

- Who investigates**

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

To carry out the investigation, the “Person in Charge” will assign an “Investigation leader” who will be responsible for the review and validation of the whole investigation process, ensuring the compliance to this norm.

Before the investigation begins, the investigation leader will select the members of the Investigation Team and provide them with basic training about investigation methodology.

The Head of the Business Unit must ensure the independence of the investigation team at all times.

Additionally, the Investigation leader will inform the Operating Centre or Business Unit Manager about relevant issues of the investigation and will consult Legal Services when there are any legal questions or uncertainties, especially in cases where the incident is also investigated by a competent authority.

### • How to investigate

The investigation process involves the following stages:

#### Information and evidence gathering

The Investigation team must gather and document the evidence about the incident and its consequences, as soon as possible, uploading the documents into the incident management tool.

The evidence will come from the observation of the incident site and its immediate surroundings as well as documentation review, research, investigation and interviews with people involved in the incident as injured people, witnesses, etc. and other people not directly related with the incident whom can provide additional information.

The Investigation team must ensure the preservation of evidence until the complete closure of the internal investigation process, or if applicable, until the procedure opened by the relevant authorities is closed.

#### Event/barriers and root cause analysis

The Investigation team will determine the sequence of events that occurred and, if possible, the barriers that functioned and those that failed as well as missing barriers which caused the incident.

Additionally, they will analyse and report into the tool:

- Root causes of the incident according to the root causes classification in Appendix III.
- Breaches of the basics safety rules.

#### Final investigation report

The Investigation team will prepare a Final investigation report which must contain at least the information specified in Appendix IV for a HPI. For investigations not related to an HPI, a summary might be prepared. The “Person in Charge” will be responsible for uploading the Final investigation report and other related information as attached documents into the Incident management tool.

### 4.1. High Profile Incidents (HPIs)

For the incidents that have been initially identified as HPI, the Investigation team will be made up of:

- One person who is not directly involved in the incident (necessary)
- One S&E Manager

Additionally, Business, subject experts and witnesses (included contractor staff) may be consulted throughout the investigation process although they are not part of the investigation team.

---

## Safety and Environment Incident Management

---

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

The deadline to complete the investigation for HPIs will be 45 calendar days from event date of the incident. During this time, the Investigation team members must have the investigation as principal task and be ready as required.

The investigation will be performed using any of the tools approved by the Sustainability Division.

The Investigation leader will validate the Final report and will ensure that it is distributed, as a minimum, to the list defined in the Section 3 (Internal incident notification) of this norm. The Final report must be distributed to the Management or Business Committee which will have the responsibility of reviewing it.

### 5. Improvement actions

The improvement actions can be derived from a variety of different means (incidents and S&E analysis, etc.). Improvement actions must be:

- Specific, measurable, attainable, relevant and time bound.
- Classified according to its criticality depending on their contribution to avoid damage, up to three levels: high, medium and low. Those improvement actions that may avoid a HPI incident will be highly critical.

The following should be considered during the definition process and implementation of the improvement actions:

- In the case of actions developed from incident investigations, the investigation team will ensure the proposed actions address the root cause(s) identified during the investigation process.
- The “Person in Charge” of the incident or of the S&E analysis will validate the action(s) and register them in the Company incident management tool and assign a person responsible for each action (at least those which are derived from incidents will be registered in the Company incident management tool).
- The person responsible for the improvement actions must ensure the implementation of their actions and update the Company incident management tool when actions are completed.
- The “Person in Charge” of the incident or of the S&E analysis will follow up on the implementation of the improvement actions, validating their effectiveness if appropriate.

### 6. Lessons learned

Each Business must establish a Lessons Learn process using a standard and systematic method that facilitates organizational learning and ensures sustained improvement in S&E performance.

The lessons may be developed from incidents (internal and/or external) and/or S&E analysis.

The process shall consider:

- Elaboration, evaluation and approval of proposals of lessons learned. At least, lessons from all of HPI must be issued where a knowledge gained that did not exist previously has been identified.
- Communication and spreading of the lesson learned.
- Registration of the lessons in a Business Tool that enables the spreading of learnings across the whole Company.
- Following and monitoring of the actions derived from each lesson learned.

---

## Safety and Environment Incident Management

---

Scope: Global

Code: 00-00343NO

Owner: Sustainability Division

Revision: 4.0

---

## 7. Appendices

Appendix I: Reporting Boundaries

Appendix II: Consequences Classification Matrix

Appendix III: Root causes classification

Appendix IV: High Profile Incident (HPI) Final investigation report

## Safety and Environment Incident Management

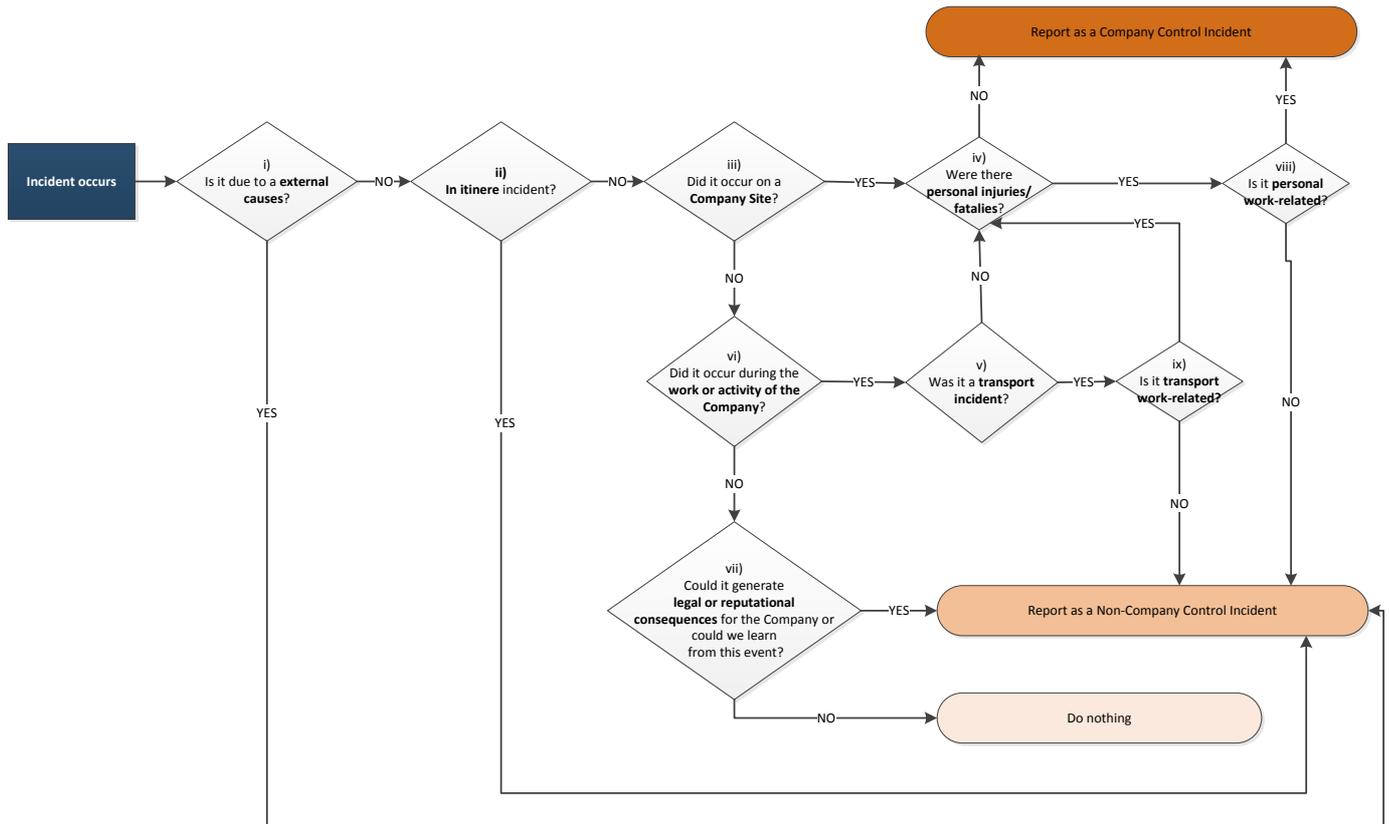
Scope: Global

Code: 00-00343NO

Owner: Sustainability Division

Revision: 4.0

### Appendix I: Reporting Boundaries



The following criteria need to be considered:

QUESTION	CRITERIA
<b>i. External causes</b>	Sabotage acts, terrorist attacks, unexpected natural phenomenon (hurricanes, earthquakes, etc), fire caused by third parties, etc.
<b>ii. In itinere incident</b>	An incident that occurs within the usual time-frame and the usual itinerary of the commute between the person's place of residence and their place of work. Includes travel times due to shifts and overtime, special or emergency working hours, as well as the travels to a lunch place (outside office) during a working hours break.
<b>iii. Company site</b>	Any asset/area where Repsol has operational control.
<b>iv. Personal injury/fatality</b>	Includes first aid, medical treatment, restricted work, lost work day case, permanent disability and fatalities. See Section 1. Definitions.

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

<b>v. Transport incident</b>	Any incident where one or more vehicles are involved. Includes road, maritime/fluvial, rail and air vehicles.
<b>vi. Work or activity of the Company</b>	A work or activity related to the Company when it is a service or transportation developed by or for Repsol. Transportation services to and from work hired by the company are included.
<b>vii. Legal or reputational consequences</b>	Actual and/or potential consequences that could impact on the image or have legal implications of the Company.
<b>Work relatedness</b>	<p><b>viii. NON WORK-RELATED INJURIES</b></p> <p>In the case of personal injuries, it will <b>NOT</b> be considered a work related incident when <b>one or more of the following circumstances</b> have occurred:</p> <ul style="list-style-type: none"> <li>- Injuries that, due to either their nature or due to the place where the tasks are performed, should be considered as completely unforeseeable by any correctly performed risk analysis carried out on the affected worker's activities, and resulting from: injuries caused by animals (stings, bites, etc) and by contact with plants. Example: a snake bite to someone working in an administration office, where the presence of snakes could not have been foreseen.</li> <li>- Injuries declared as such by the workers involved and in which, after the investigation, there is evidence or grounds to indicate that the incident did not take place within the work environment. Example: An injury resulting from an ambiguous incident, in which there are no witnesses and the worker declares the incident after the end of the shift in which it took place, thereby failing to comply with the Repsol communication procedure.</li> <li>- Injuries to third parties. Example: Where a third party is hit by a vehicle driven by a contractor.</li> <li>- Activities unrelated to the work performed in which, although they have been promoted by Repsol, the workers participation is voluntary. Example: Injuries resulting from sports activities at an E&amp;P camp.</li> <li>- Injuries caused during lunch or rest periods in areas not managed by Repsol, or in rest periods in onshore and offshore platforms. Example: An incident at lunch time in a public restaurant or an incident occurred during rest time in an onshore or offshore installation (campsites, platforms).</li> <li>- On purpose injuries.</li> <li>- Cases of common pathologies that do not originate from a verifiable event carried out for the purpose of work, and for which, after the investigation, it is concluded that said pathologies are not related to the tasks assigned to the worker or job. Example: A musculoskeletal complaint that does not originate from an incident with the potential to have caused it and that, in addition, is sustained by a worker to which only administrative tasks have been assigned.</li> <li>- Injuries resulting from anti-social behavior such as aggressions and fights between people (cases in which such behavior is aimed at security guards are included in the work- related category). Example: Injuries resulting from a fight within Repsol's instalations, as for example a refinery, for reasons beyond the company's control. (Security staff are excluded if the fight takes place to defend property or for non-personal circumstances).</li> <li>- Contractor injuries that have occurred at the contractor's own offices or workshops,</li> </ul> <p><b>ix. TRANSPORT INCIDENT WORK RELATEDNESS</b></p>

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

	<p>In case of transport incidents, it will be considered as a work related incident when <b>one or more of the following circumstances are accomplished</b>:</p> <ul style="list-style-type: none"> <li>- Road tankers, boats, etc. distribution vehicles used for company´s products transportation including loading and discharging operations.</li> <li>- Contractor vehicles that supply services or materials inside a Repsol operative area.</li> <li>- Buses, helicopters, etc. which offer regular services between work centers.</li> <li>- Vehicles used by commercial sellers, technical assistance and technical inspection service dispensers that can be owned, under leasing or renting contracts.</li> <li>- Vehicles used for general services or supply works.</li> <li>- Vehicles used for the internal transportation inside Repsol´s facilities or between exploration wells.</li> </ul> <p><b>AND</b> the vehicle driver is one of the following:</p> <ul style="list-style-type: none"> <li>- An employee</li> <li>- A contractor with a direct legal agreement with Repsol or specifically subcontracted for the road transport.</li> </ul> <p>The following cases will be <b>excluded</b>:</p> <ul style="list-style-type: none"> <li>- Traffic incidents where after its investigation it is concluded that the cause isn't commutable to the vehicle driver (Company staff or contractors) and the vehicle its own. Example: when the incident occurs due to the infraction of a third party or defects of the way.</li> </ul>
--	--

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

### Appendix II: Consequences Classification Matrix

Consequences Matrix 00-00353NO Norm – Risk Management					INCIDENTS CLASSIFICATION	API classification to process safety events
	Personal injury	Property damage and Business loss Environmental remediation costs	Environment (at least one of the conditions) <sup>6</sup>	Spreading level; Reputation <sup>7</sup>		
<b>TRIVIAL</b>	First aid	≤ 5 k €	No damage/ Release that doesn't reach the environment	No spreading	TRIVIAL INCIDENTS	TIER 3
<b>MINOR</b>	Medical treatment or restricted work	5 k - 100 k €	Minimum damage /Environmental management is not required	Internal spreading		
<b>MODERATE</b>	Lost work day case	100 k – 1 M €	Relevant damage/ Possible sanction/Exceeds "reference values"/ Minor or limited environmental management	Green crisis level	MODERATE INCIDENTS	TIER 2
<b>SERIOUS</b>	Permanent disability	1 M € - 10 M €	Serious damage/ Exceeds in large areas "reference values"/ Possible significant impact to third parties/ Short or medium-term environmental management	Yellow crisis level		
<b>VERY SERIOUS</b>	1 Fatality	10 M € - 100 M €	Very serious damage/ Relevant spill/ Compensation measures / Long-term environmental management (up to 5 years)	Red crisis level and/or national level media spreading	HPI (High Profile Incidents)	TIER 1
<b>DISASTROUS</b>	2-10 fatalities	100 M€ - 1000M€	Catastrophic damage/Environmental resources and services loss/ Almost permanent damages/ Long-term compensation, remediation and recovery (more than 5 years)	Red crisis level and/or transitional international affectation		
<b>CATASTROPHIC</b>	More than 10 fatalities	> 1000 M €	Catastrophic damage/ Environmental resources and services extensive loss /Permanent damages	Red crisis level and/or permanent international affectation		

<sup>6</sup> \* If necessary and in a consistent way environmental consequences could be adjusted by the Business for different activities.

\* The "reference values" for environmental consequences are defined by the Business or by country regulations (the most restrictive). If there are no reference values, local regulations as USA, Spain... can be used.

<sup>7</sup> \*The different types of crisis are described in the Crisis Communication Manual

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

### Appendix III: Root causes classification

ROOT CAUSE NUMBER	ROOT CAUSE TYPE	DESCRIPTION
RC1	<b>Hardware: materials, equipment and tools</b>	Failures due to inadequate quality of materials or construction, non-availability of hardware and failures due to aging (position in the life-cycle). It does not include: <ul style="list-style-type: none"> <li>• error-generating mechanisms due to poorly designed equipment</li> <li>• hardware failures caused by inadequate maintenance Management</li> </ul> Examples: <ul style="list-style-type: none"> <li>- Inadequate or in poorly maintained equipment and tools</li> </ul>
RC2	<b>Design</b>	Deficiencies in layout or design of facilities, plant, equipment or tools that lead to the misuse or sub-standard acts, increasing the chance of particular types of errors and violations. Examples: <ul style="list-style-type: none"> <li>- Inadequate design (including failures in ergonomics)</li> <li>- Interface with the operator</li> <li>- Nonexistent, non-applicable or inadequate standard</li> </ul>
RC3	<b>Maintenance management</b>	Failures in the systems for ensuring technical integrity of facilities, plant, equipment and tools. Examples: <ul style="list-style-type: none"> <li>- Lack of maintenance plans</li> <li>- Failures to comply with maintenance plans</li> </ul>
RC4	<b>Procedures and control of operations</b>	Unclear, unavailable, incorrect or otherwise unusable standardized task information that has been established to achieve a desired result. Examples: <ul style="list-style-type: none"> <li>- No procedure</li> <li>- Inadequate procedure</li> <li>- Incomplete or confusing procedure</li> </ul>
RC5	<b>Work place conditions leading to human errors</b>	Factors such as physical working conditions (hot, cold, noisy), etc. acting on the individual or in the workplace that promote unsafe acts- errors or violations. Examples: <ul style="list-style-type: none"> <li>- External conditions (natural disaster, sabotage, animals, cold/heat beyond usual conditions)</li> <li>- Occasional stress and fatigue</li> </ul>
RC6	<b>Housekeeping</b>	Tolerance of deficiencies in conditions of tidiness and cleanliness of facilities and work spaces or inadequate resources for cleaning and waste removal.
RC7	<b>Incompatible goals</b>	Failure to manage conflict; between organizational goals, such as safety and production; between formal rules such as company written procedures and the rules generated informally by a work group; between the demands of individuals' tasks and their personal preoccupations or distractions.
RC8	<b>Communication</b>	Failure in transmitting information necessary for the safe and effective functioning of the organization to the appropriate recipients in a clear, unambiguous or intelligible form. Examples: <ul style="list-style-type: none"> <li>- Lack of communication</li> <li>- Inefficient communication (including improvement actions, lessons learned)</li> </ul>
RC9	<b>Organization</b>	Deficiencies in either the structure of a company or the way it conducts its business that allow responsibilities to become ill-defined and warning signs to be overlooked. It includes

## Safety and Environment Incident Management

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

		<p>risk and change management.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>- Problems of culture and leadership</li> <li>- Unclear responsibilities</li> <li>- Processes not implemented</li> <li>- Lack of resources</li> <li>- Identifying dangers and risks analysis process</li> <li>- Stress and fatigue of workers</li> </ul>
<b>RC10</b>	<b>Training</b>	<p>Deficiencies in the system for providing the necessary awareness, knowledge or skill to an individual or individuals in the organization. In this context, training includes on the job coaching by mentors and supervisors as well as formal courses.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>- Lack of knowledge</li> <li>- Lack of ability</li> <li>- Lack of risk perception</li> </ul>
<b>RC11</b>	<b>Missing or failed safeguards/barriers</b>	<p>Failures in the systems, facilities and equipment for control or containment of source of harm or for the mitigation of the consequences of either human or component failures.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>- Insufficient/defective personal protection</li> <li>- Unused personal protection or incorrect use</li> <li>- Protections of tools/machines</li> <li>- Not defined safety-related systems or not according to design</li> <li>- Incorrect alarm</li> </ul>

---

## Safety and Environment Incident Management

---

Scope: Global	Code: 00-00343NO
Owner: Sustainability Division	Revision: 4.0

---

### Appendix IV: High Profile Incident (HPI) Final investigation report

The purpose of the investigation report is to clearly and concisely convey the results of the investigation (less than 50 pages). The content should help the reader understand WHAT HAPPENED (the incident description and chronology), WHY IT HAPPENED (the causal factors), and WHAT can be done TO PREVENT a recurrence (the Judgments of Need). Investigation results are reported without attributing individual fault or proposing punitive measures. The investigation report constitutes an accurate and objective record of the incident and provides complete and accurate details and explicit statements.

#### INTRODUCTION

- Executive Summary
- Terms of Reference (ID, Date, Time, Country, Site, Investigation , Scope, Description of how the investigation has been done and Methodology, Investigation Team members)

#### INCIDENT INFORMATION

- Background and facility description
- Incident description
- Sequence of events
- Sketch/illustration of the incident
- Photos and Drawings
- Actual and Potential Consequence Classification
- Emergency Response and Immediate Actions taken

#### INVESTIGATION

- Traceable List of evidence, personnel interviewed, advisors and consultants
- Root Causes, Root Cause classification and corrective actions, barriers that function, that failed and missing barriers
- Root cause tree or barrier analysis diagram
- Conclusions: recommended Preventive Actions, Safety Alerts and Lessons Learned
- Supporting information

#### OTHERS

- Other areas of improvement
- Specific studies or analysis: non-compliance (with regulatory requirements, procedures, Basic rules), change analysis, technical studies, etc.
- Glossary, acronyms, abbreviations
- Investigation Report Signature page for the Investigation Team Lead, Unit Manager, Business Unit Manager and Business Manager or Committee to sign, acknowledging their review of the Report, acceptance and dissemination.

The above content establishes the **minimum requirement** and does not replace or supersede any requirements placed by regulatory authorities. For presentation purposes, a word and PowerPoint template shall be used.

---

## Safety and Environment Incident Management

---

Scope: Global

Code: 00-00343NO

Owner: Sustainability Division

Revision: 4.0

### Approval

### Validity

This procedure shall become valid in stages according to the “Temporary provisions” section.

### Revoked regulations

- “Incident Management” procedure (00-0034PR), rev. 3.1.
- “Management of Improvement Actions and Lessons Learned” procedure (00-00473PR), rev. 1.0.
- “Processing reinsurance recommendations” procedure (00-00507PR), rev. 0.0.
- Talisman High Profile Incident (HPI) Reporting, Investigation, and Analysis Mandatory Practice
- Talisman Reporting Boundaries Mandatory Practice
- Talisman HSE Performance Indicator Reporting Mandatory Practice

### Temporary provisions

This norm shall become valid in each business according to the entry date into production of the new Company tool for the safety and environmental incidents management. The following restrictions apply:

- For Legacy Talisman will come into effect on 31/07/2017 as a deadline
- For the rest of E&P will come into effect on 01/10/2017 as a deadline
- For the rest of the Company will come into effect on 01/01/2018 as a deadline

#### Revision 4.0 approved by:

Approval:

20/06/2017

**Corporate Executive Committee**