
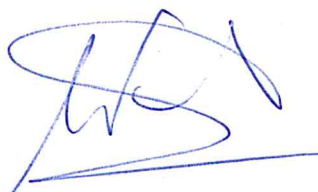



0	CHANGE CONTROL .....	2
1	OBJECTIVE AND SCOPE .....	2
2	REFERENCES.....	2
3	DEFINITIONS .....	2
4	ABBREVIATIONS.....	3
5	PROCEDURE .....	3
5.1	ENVIRONMENTAL NEAR MISSES .....	3
5.2	ENVIRONMENTAL INCIDENTS & EMERGENCY SITUATIONS .....	4
5.3	RECORD, ANALYSIS AND REPORT .....	6
5.4	CHECK AND REVIEW .....	8
6	RESPONSIBILITIES .....	10
7	TEMPLATES .....	11

Prepared	Revised	Approved
 EDPR EU EMS Manager	 EDPR EU EMS Management Representative	 EDPR EU EMS Management Representative
Name: ANGELA TOLEDO	Name: MANUEL FERNANDEZ	Name: MANUEL FERNANDEZ
Date: 1-9-15	Date: 02/09/2015	Date: 02/09/2015

## 0 CHANGE CONTROL

Edition	Date	Description of the modification
00		Initial edition
01	September 2015	Update to describe in detail the concepts of environmental near miss, incident and emergency, to include the requirement of elaborating post-drills reports and explain the importance of analysis of causes. Removal of template TMP-EU/EMS-GEN-00012

## 1 OBJECTIVE AND SCOPE

The purpose of this procedure is to define the process to identify, respond, record, analyze and report environmental near misses, incidents and emergency situations; as well as to take the necessary actions to prevent and/or mitigate them.

This procedure shall apply to the facilities and activities included in the EMS scope set out in the file Facilities in the EMS scope.

## 2 REFERENCES

- ISO 14001:2004 standard
- MAN-EU/EMS-MAN-00001 *"EMS Manual"*
- EXPR-EU/EMS-GEN-00004 *"Competence, training and awareness"*
- EXPR-EU/EMS-GEN-00007 *"Operational control, monitoring and measurement"*
- EXPR-EU/EMS-GEN-00009 *"Non-conformities, subjects to monitor and areas of improvement"*
- EXPR-EU/ASMG-GEN-00001 - EDPR Europe Crisis Management Plan
- EXPR-ESP/ASMG-PTC-00004 - EDPR Spain - Environmental Crises Communication Protocol - Compliance with Directive 2004/35/CE on environmental liability.
- EXPR-EU/EMS-GEN 00013 *"Management of equipment with fluorinated greenhouse gases and ozone depleting substance"*

## 3 DEFINITIONS

- **Emergency:** a sudden serious event or situation which needs immediate action to deal with it.
- **Incident:** an unpleasant event that happens unexpectedly.
- **Near miss:** an unplanned event that did not result in injury, illness or damage, but had the potential to do so.

## 4 ABBREVIATIONS

- **EDPR EU:** EDP Renewables Europe.
- **EMS:** Environmental Management System.
- **EMS Manager:** EMS Manager in each country.
- **HR Manager:** Human Resources Manager in each country.
- **H&S:** Health & Safety department.
- **SIS:** Sustainability Information System.

## 5 PROCEDURE

It is the responsibility of each organization to be prepared and respond to incidents and emergency situations in an appropriate manner to its particular needs.

The aim of this procedure is the management of near misses, incidents and emergency situations from the environmental point of view.

It is focused on the main risks arising from EDPR activity that could lead to an environmental incident or emergency situation:

- Fires.
- Spillages of dangerous substances into water bodies or soils.

The operational issues not related with the environment to take into account when an incident or emergency occurs (first aid, evacuation, fire extinction...), are not considered in this document, since those guidelines are already included in other company procedures.

### 5.1 ENVIRONMENTAL NEAR MISSES

An environmental near miss is an unplanned event that did not result in damage to the environment, but had the potential to do it. For instance, an incipient stage fire expected to be extinguished without consequences to the environment, or an oil spill not expected to reach bare soil.

Detecting near misses early and addressing them properly improves EDPR environmental performance because incidents and emergency situations can be avoided.

Facility managers and contractors shall pay attention to these kinds of situations in order to recognize near misses.

Once a near miss is identified it shall be recorded according to section 5.3 *Record, Analysis and Report*.



## 5.2 ENVIRONMENTAL INCIDENTS & EMERGENCY SITUATIONS

An environmental incident is an unpleasant event that happens unexpectedly causing a minor impact on the environment. For example, an incipient stage fire or a fire expected to affect just non-protected isolated vegetation close to the facility, or an oil spill expected to reach bare soil but not affecting fauna and/or flora.

An environmental emergency is a sudden event with serious consequences for the environment which requires immediate action to deal with it. We would be facing an environmental emergency for example in case of fires or oil spills expected to reach or affecting an area with protected species.

Knowing how to respond to these situations from the environmental point of view is decisive in order to avoid and/or minimize the consequent impacts on the environment.

In the same way, keeping an updated database with the environmental incidents and emergency situations occurred in the facilities, is a powerful tool for the organization because it enables to analyze what is happening, which are the causes and establish preventive/corrective measures to avoid its recurrence.

Therefore, in case that any environmental incident or emergency situation occurs, and once it is under control, it shall be recorded according to section 5.3 *Record, Analysis and Report*.

### 5.2.1 ENVIRONMENTAL GUIDELINES FOR RESPONSE

EDPR EU Health & Safety department establishes the measures to ensure the health and safety of the employees and other people working on the facilities.

This section specifies the steps to follow, from an environmental point of view, once the incident or emergency situation has been overcome and controlled.

Several guidelines have been set out in order to explain in detail the steps to follow depending on the type of environmental issue that could take place because of an incident or emergency situation in the facilities.

#### In case of fire:

Once the fire has been extinguished following the steps set out by H&S, the waste generated shall be removed, both hazardous and non-hazardous, and managed properly.

The contractors shall inform the facility manager immediately about these kinds of situations. The facility manager shall report the event to his/her hierarchical supervisor.

#### In case of flood:

In case of flood or severe meteorological conditions (which could lead to flood) all personnel shall attempt to locate the source of the problem and mitigate it, when possible.

Everything that could be affected by the flood shall be removed, if possible, starting with the shutdown and removal of electronic equipment.

Once the situation has been controlled, waste generated shall be removed, both hazardous and non-hazardous, and managed properly.

If any spill, for example waste stored at the clean point, happens during the flood, the guidelines described at "In case of spill" section shall be followed.

The contractors shall inform the facility manager immediately about these kinds of situations. The facility manager shall report the event to his/her hierarchical supervisor.

In case of explosion:

If anyone notices an explosion, stay calm, away from the site and try to assess the severity of the situation following H&S guidelines.

If a fire is caused because of the explosion, guidelines given by "In case of fire" shall be followed.

If a spill is caused because of the explosion, guidelines given by "In case of spill" shall be followed.

After the confirmation of the non-existence of additional risks, waste generated shall be removed, both hazardous and non-hazardous, and managed properly.

The contractors shall inform the facility manager immediately about these kinds of situations. The facility manager shall report the event to his/her hierarchical supervisor.

In case of oil spill or spill of a hazardous substance:

In case of spill, try to avoid the spreading by containing it using absorbent materials.

Once the spill has been contained, try to identify the source of the problem and to take the necessary steps to stop or control it.

Remove any potential sources of heat or ignition to reduce the risk of fire.

Once stopped or controlled, the spilled substance shall be collected using a pump or any absorbent material, disposing properly any waste produced in containers labeled according to the applicable legal requirements and handling it as a waste.

In the case of a spill in the transformers, they have their own deposits and oil/water separators that operate by gravity. Oil contained in the deposit shall be removed as soon as possible, and if there is an oil/water separator outlet, it shall be closed. A specialized service shall clean the transformer's tank and oil/water separator. All resulting waste (hazardous and non-hazardous) shall be properly managed.



If the spill reaches the rainwater network, even partially, it shall be immediately collected to prevent the spread downstream. In case of a significant spill, a company specializing in rainwater network cleanings shall be hired. All resulting waste shall be properly managed.

If the soil is contaminated, it shall be removed and managed according to legal requirements.

If the spill leaves traces of oil, etc in the facility (turbine tower, etc) it shall be cleaned as soon as possible in order to prevent them to be washed to the ground by rainfall.

The contractors shall inform the facility manager immediately if any spill occurs. The facility manager shall report the event to his/her hierarchical supervisor.

#### Leakage of gases (SF<sub>6</sub>)

If a leakage of SF<sub>6</sub> is detected, follow the manufacturer's instructions and, if possible, stop the gas leakage.

An authorized company shall be hired to review the equipment and take the necessary measures.

The general procedure EXPR-EU/EMS-GEN 00013 "*Management of equipment with fluorinated greenhouse gases and ozone depleting substances*" explains how to proceed regarding reparations, leakage control, etc.

Contractors shall inform the facility manager immediately about these kinds of situations. The facility manager shall report the event to his/her hierarchical supervisor.

## **5.3 RECORD, ANALYSIS AND REPORT**

### **5.3.1 RECORDING**

Once the near-miss, the incident or the emergency situation have been controlled, it shall be recorded in the template TMP-EU/EMS-GEN-00011 "*Environmental Near-miss, Incident & Emergency report*", where date, person(s) involved in the detection and response, location, description (including approximate volume of spill or SF<sub>6</sub> leakage), causes, environmental damages and immediate measures taken, shall be completed.

This *Environmental Near-miss, Incident & Emergency report* shall be submitted immediately to the EMS Manager in order to analyze it jointly with other departments that may be involved.

### **5.3.2 ANALYSIS**

When detecting an environmental near miss, incident or emergency situation, it is important to make a detailed analysis of causes.

The importance of determining the root cause lies in being able to establish an action plan meant to eliminate the cause, so that never again take place either in the detected facility or in any other.

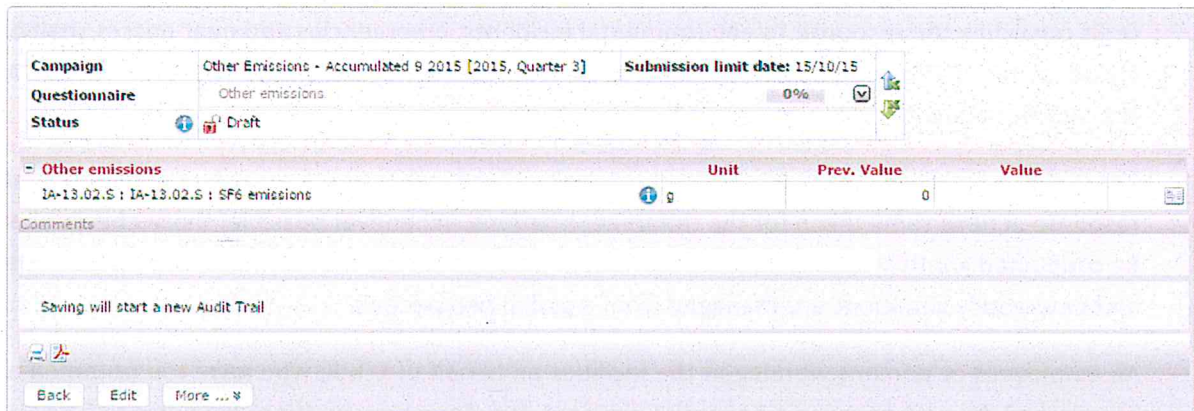
There are several methods for determining the root cause, one of the simplest is the methodology of the 5 *Whys*. The use of this method or any other is not mandatory, but advisable. For more information about this methodology, check the general procedure EXPR-EU/EMS-GEN-00009 *“Non-conformities, subjects to monitor and areas of improvement”* (section 5.2.3. *Analysis*).

When detecting an environmental near miss, incident or emergency situation, it is not always necessary to record a NC. The NC shall be only recorded if after the analysis of causes of the near miss/incident/emergency situation it is confirmed that it has occurred because of a legal breach, a deviation from internal requirements or repetitive failures in operational control (for example, not performing the scheduled maintenance).

### 5.3.3 REPORTING

According to the general procedure EXPR-EU/EMS-GEN-00007 *“Operational control, monitoring and measurement”*, if any decrease in the level of SF<sub>6</sub> is detected, authorized technicians shall review and refill the equipment.

The SF<sub>6</sub> amount refilled shall be recorded in the template TMP-EU/EMS-GEN-00011 *“Environmental Near-miss, Incident & Emergency report”* and reported quarterly in SIS.



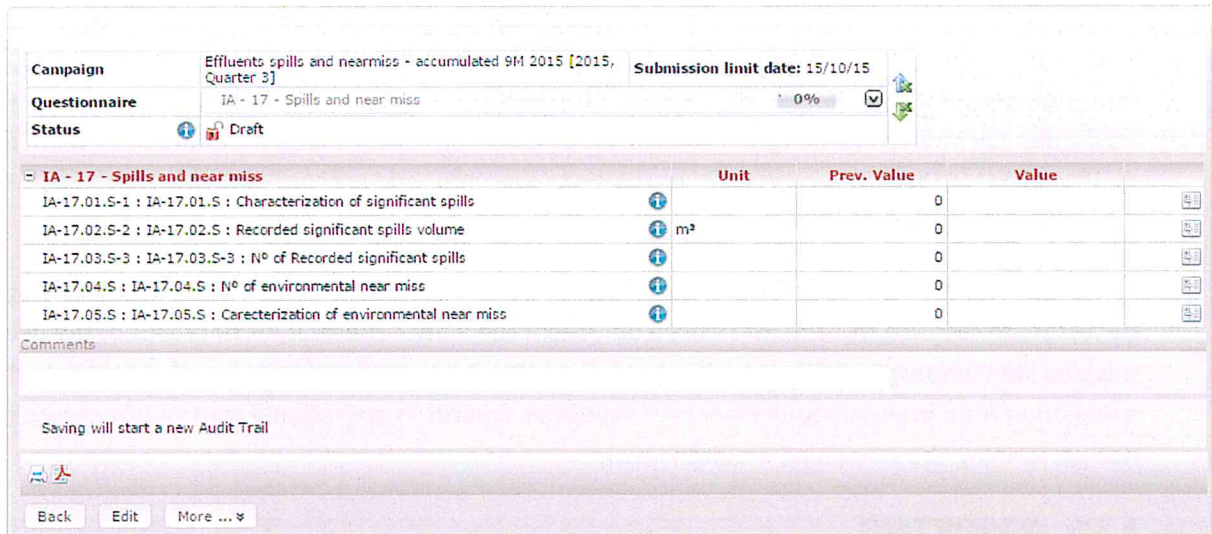
Regarding spills, it shall be included in the field *“Description”* of the template TMP-EU/EMS-GEN-00011 *“Environmental Near-miss, Incident & Emergency report”*, the approximate volume of the spill.

Only significant spills shall be reported in SIS, which are those with a volume greater than 0.16 m<sup>3</sup> and reaching bare soil or water bodies.

As regards to environmental near miss situations, based on the information recorded in the template TMP-EU/EMS-GEN-00011 *“Environmental Near-miss, Incident & Emergency report”*,



the number of environmental near misses and its characteristics shall be reported in SIS quarterly.



Unit	Prev. Value	Value
IA-17.01.S-1 : IA-17.01.S : Characterization of significant spills	0	
IA-17.02.S-2 : IA-17.02.S : Recorded significant spills volume	0	
IA-17.03.S-3 : IA-17.03.S-3 : N° of Recorded significant spills	0	
IA-17.04.S : IA-17.04.S : N° of environmental near miss	0	
IA-17.05.S : IA-17.05.S : Characterization of environmental near miss	0	

## 5.4 CHECK AND REVIEW

As stated in the general procedure EXPR-EU/EMS-GEN-00004 “Competence, training and awareness”, every year the EMS Manager, in coordination with the involved departments, identify and propose the environmental training needs for the following year for all employees involved in the EMS.

Drills regarding the response to environmental incidents, emergencies and near misses shall be included among these training needs, in order to verify if employees and contractors working at the facilities know the steps to follow in these situations.

These drills shall cover theoretical aspects as well as practical patterns regarding mitigation and response actions to be taken for the different situations. Whenever possible, these checks shall be conducted jointly with the H&S department in order to ensure that the near misses, incidents and emergency situations are managed from a global perspective.

All employees or persons working at the facilities on behalf of EDPR, who have the potential to be exposed, be part or cause a near miss, incident or emergency situation, shall attend a drill at least every three years. It is advisable that new hires attend the drill during the first six months working at the facility.

As with all the trainings, the EMS Manager, in collaboration with the HR Manager, shall ensure that attendance registrations are completed properly and signed by all attendees. In the same way, whenever possible, quality evaluations shall be done in order to verify if the training has been satisfactory. These records shall be kept by the HR Manager.



After completing the drills planned for a particular year, the EMS manager shall prepare a report describing briefly the drills conducted in the business unit (date, location, attendees, aspects covered), analyzing the results and extracting conclusions. It is important to perform this analysis every year to ensure that the patterns of response to environmental near misses, incidents and emergencies are reviewed periodically and that, if necessary, appropriate actions are taken.

The EDPR EU EMS Manager decides if this procedure shall be reviewed and updated as a result of the conclusions of the reports mentioned above, and after the analysis of the environmental near misses, incidents and emergency situations occurred throughout the year.



## 6 RESPONSIBILITIES

Task	Business Units			EDPR EU Sustainability department	EDPR EU H&S department
	Environmental department	O&M department	Asset management department		
Know the main emergency situations that could take place at EDPR EU facilities	Know and ensure awareness	Know and communicate to contractors	Know	Know and ensure awareness	Know and ensure awareness
Respond to environmental incidents/emergencies following guidelines for response	Define and communicate guidelines for response	Know and implement	Support the environmental department	Define and communicate guidelines for response	Support the environmental department
Record and report	Record and report	Record and report	Support the environmental department	Support the environmental department	n/a
Analyze and take the necessary actions to avoid recurrence	Analyze and act	Analyze and act	Support the environmental department	Support the environmental department	Support the environmental department
Plan drills together with H&S and ensure implementation	Plan and ensure implementation	Attend to planned drills	Support the environmental department	Support the environmental department	Work together with the environmental departments in the planning and implementation
Prepare post-drills report	Prepare report	Support the environmental department	Support the environmental department	Analyze business units' conclusions	Support the environmental department
Review the procedure	Support the EDPR EU Sustainability department	n/a	n/a	Review	Support the EDPR EU Sustainability department



## 7 TEMPLATES

- TMP-EU/EMS-GEN-00011 *Environmental Near-miss, Incident & Emergency report.*



v.01

Page 12 of 12

ENVIRONMENTAL NEAR-MISS, INCIDENT &amp; EMERGENCY REPORT

LOCATION	

[illegible]

\* Note: In the case of spills, please indicate in the "Description" column the approximate volume of spillage (in litres). In the case of SF<sub>6</sub> leakage, please indicate the approximate amount (in grams) of released gas.

*This document is owned by EDP Renewables. Any printed copies of this document may be outdated.  
The updated version can be found on the corporate tool "Internal Documentation"*