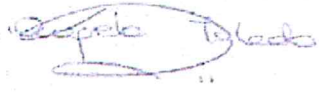




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Date: 1-9-15	Date: 02/09/2015	Date: 02/09/2015

0 CHANGE CONTROL

Edition	Date	Description of the modification
00		Initial edition
01	September 2015	Update to include the reference to the corporate reporting tool SIS

1 OBJECTIVE AND SCOPE

The aim of this procedure is to define the process followed by EDPR EU to establish the operational control, monitoring and measurement of its environmental aspects.

This procedure shall apply to all 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 00008 *"Near-miss and Emergency preparedness and response"*
- EXPR-EU/EMS-GEN 00013 *"Management of equipment with fluorinated greenhouse gases and ozone depleting substances"*
- EXPR-GLB/TSO&M-SPV-00023 *"O&M Procedures for PV"*
- EXPR-GLB/TSO&M-SPV-00024 *"O&M Procedures for PV Waste management and module recycling"*
- EXPR-GLB/TSO&M-SPV-00025 *"O&M Procedures for PV Water management for module cleaning"*
- SIS - User Guide

3 DEFINITIONS

- **Clean point:** waste storage area.
- **Storage:** independent storage, not a constituent element of the facility where materials and components are stored.

4 ABBREVIATIONS

- **EMS:** Environmental Management System.
- **EDPR EU:** EDP Renewables Europe.
- **EMS Manager:** EMS Manager in each country.

- **O&M:** Operation and Maintenance.
- **PV plant:** Photovoltaic plant.
- **SIS:** Sustainability Information System.

5 PROCEDURE

EDPR EU has established some good environmental practices. These guidelines are mandatory and shall be monitored by the Facility managers, by the O&M Manager for EMS (if this role has been defined in the country) or by the EMS Manager.

As evidence, the template TMP-EU/EMS-GEN-00007 *“Environmental monitoring and measurement program”* shall be completed and sent to the EMS Manager, at least, once every twelve months. If any disagreement is identified, a non-conformity shall be recorded.

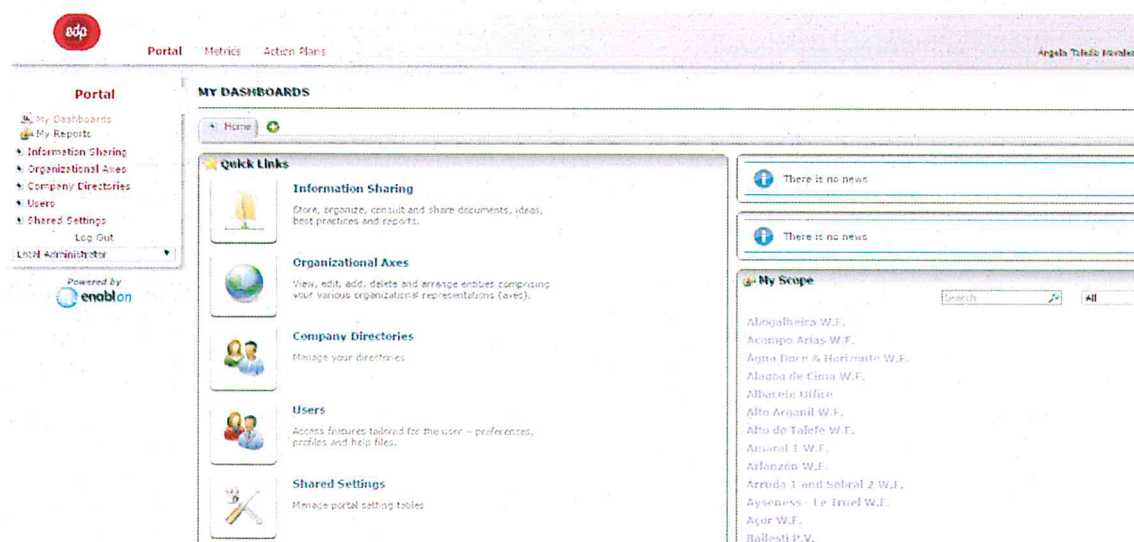
In all cases, the applicable legal and voluntary requirements shall be fulfilled and identified and evaluated as specified in the EXPR-EU/EMS-GEN-00002 *“Identification and assessment of compliance obligations”*.

For each environmental aspect, a methodology for monitoring and measurement has been established including where data shall be recorded.

5.1 SIS

SIS is the EDP reporting tool for collecting information about the company’s environmental performance.

The Environmental departments of the EDPR EU business units are responsible for SIS reporting (compliance with deadlines, data validation, etc).



Environmental data is reported quarterly by all the companies of the EDP Group according to the following calendar (it may vary because of EDP requirements):

**OPERATIONAL CONTROL, MONITORING
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SIS campaign	Reporting period	Report accumulated data
3M (1 st quarter)	April 1 st -15 th	From January 1 st to March 31 st
6M (2 nd quarter)	July 1 st -15 th	From January 1 st to June 30 th
9M (3 rd quarter)	October 1 st -15 th	From January 1 st to September 30 th
12M (4 th quarter)	January 1 st -15 th	From January 1 st to December 31 st

The data to be reported shall be the accumulated figure for the current year. For example, after the second quarter of the year the 6M SIS campaign is launched and the data from January 1st to June 30th shall be reported.

5.2 CONSUMPTIONS

5.2.1 Water consumption

Good environmental practices

To improve the organisation's environmental performance regarding water consumption, an efficient use of the resource shall be pursued, for that purpose:

- Toilet facilities shall be monitored to avoid losses due to seepage, leakages, etc.
- Members of staff shall be trained to avoid excessive water usage and to promote a rational use of the resource (posters, stickers).

Monitoring & Measurement

Several situations shall be considered at EDPR EU facilities:

- No water available: no water consumption.
- Water withdrawal from well:
 - If the well/pump has a meter, the consumed amount shall be read quarterly. It's important to take the reading within the first three working days of the quarter because quarterly energy production data is used to calculate the performance indicator.
 - If the well/pump hasn't got a meter, water consumption shall be estimated quarterly according to an average consumption per person.
- Water provided by an external supplier (private entity delivering to the site):
 - If the water tank has a meter, the consumed amount shall be read quarterly. It's important to take the reading within the first three working days of the quarter because quarterly energy production data is used to calculate the performance indicator.

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- If the water tank hasn't got a meter:
 - Water consumption can be measured by comparing the different amount of water in the deposit at the beginning of the quarter and at the end of the quarter (or the beginning of next quarter). It's important to record the data within the first three working days of the quarter because quarterly energy production data is used to calculate the performance indicator.
 - Water consumption can be estimated quarterly according to an average consumption per person.
- Rainwater supply: the installation of rainwater collection systems in the substations enables the reduction of water consumption coming from other less sustainable sources (well, external suppliers, etc) evolving to a self-consumption model. Rainwater is collected and channeled to the water tank.
- Water withdrawal from public grid: water consumption data is collected from the invoices.

In all cases, the amount of water consumed (accumulated for the current year) shall be recorded in SIS quarterly. Data will be recorded in m³.

A comment shall be included if data have been estimated.

Campaign	Water accumulated - 9M 2015 [2015, Quarter 3]	Submission limit date: 15/10/15
Questionnaire	IA - 14 - Water consumption and use	3%
Status	Draft	

IA - 14 - Water consumption and use	Unit	Prev. Value	Value
IA-14.05.S : IA-14.05.S : Water withdrawal from artesian well	m ³	5,64	
IA-14.05.1.S : A-14.05.1.S : Water withdrawal from well	m ³		
IA-14.07.S : IA-14.07.S : Water withdrawal from public grid	m ³	0	
IA-14.08.S : IA-14.08.S : Amount of water coming from other private entities	m ³	0	
IA-14.06.C : IA-14.06.C : Amount of water used	m ³	5,64	0
IA-14.12.S : IA-14.12.S : Consumption of water for human use	m ³	5,64	
IA-14.23.C : IA-14.23.C : Main water uses	m ³	5,64	0
IA-14.18.S : IA-14.18.S : Water consumption for other uses not covered in [...]	m ³	0	
IA-14.26.S : IA-14.26.S : Storm water	m ³	0	
IA-14.15.S : IA-14.15.S : Water recirculated, reused and recycled in the [...]	m ³	0	
IA-14.27.C : IA-14.27.C : Water recirculated, reused and recycled in all [...]	m ³	0	0
IA-14.20.C : IA-14.20.C : Water Balance	m ³	0	0

Comments

Saving will start a new Audit Trail

Back Edit More ...



5.2.2 Electricity consumption

Good environmental practices

To improve the organisation's environmental performance in energy consumption, an efficient use of the resource shall be pursued, for that purpose:

- All computer equipment shall be set to switch to low consumption mode after being idle for 5 minutes.
- When feasible, the best location shall be sought to take full advantage of natural sunlight.
- The temperature of the air-conditioning equipment shall be regulated, seeking the best energy efficiency.
- All staff shall be trained to avoid overuse and promote rational use of the resource.
- Lights shall be switched off when not in use (rooms, toilets, offices, etc) as it helps to reduce energy consumption. In the case of fluorescent tubes, increased consumption of energy is produced when switched on. Hence, in this case, the best environmental practice is not to turn them off in rooms where it is necessary to turn them back on in less than 30 minutes.
- Air conditioning equipment and heating shall be switched off when it is not necessary and use in moderation when necessary. The ideal temperature is 20-22°C throughout the day. The abuse of air conditioning/heat pumps causes high energy consumption. Radiator and heating and cooling systems, if any, shall be monitored.
- The cleaning of lighting systems shall be reviewed so as not to reduce their intensity.

Monitoring & Measurement

The information about electricity consumption at facilities/storage centres is collected from the invoices and reported in SIS quarterly in MWh.

Item	Unit	Prev. Value	Value
IA-26.9.S : IA-26.9.S : Backfeed Power	MWh	53,20	
IA-26.150.S : IA-26.150.S : Gas consumption in wind farms	m³		
IA-26.151.S : IA-26.151.S : Electricity consumption in wind farms	MWh		

5.2.3 Fuel consumption

Good environmental practices

To improve the organisation's environmental performance in this aspect, an efficient use of the resource shall be pursued:

VEHICLES

Guidelines for efficient driving will be followed by employees using vehicles:

- Proper maintenance of vehicles.
- Use the highest gear possible at low revolutions.
- Maintain speed as uniform as possible.
- Avoid braking and accelerating unnecessarily.
- In traffic jams if the stop is expected to exceed 60 seconds, turn off the engine.

To maintain a sense of comfort in the car, it is recommended an internal temperature of 23-24 °C. Use air conditioning only when the average temperature exceeds this value.

Before a trip, plan the route: it saves fuel, prevents wasted time in traffic jams and reduce noise and emissions of pollutants.

AUXILIARY GENERATORS

Preventive measures shall be available to mitigate potential environmental impacts in case of emergency.

Monitoring & Measurement

VEHICLES

Quarterly, the information regarding vehicles fleet of each business unit shall be recorded in SIS (consolidated data for the country):

- Number of each type of vehicle (diesel, petrol, hybrid, alcohol, natural gas, biodiesel).
- Fuel consumption in liters of each type of vehicle.
- Distance travelled in km with each type of vehicle.



OPERATIONAL CONTROL, MONITORING AND MEASUREMENT




Campaign

Fleet - Accumulated 9M 2015 [2015, Quarter 3]


Submission limit date: 15/10/15



































Questionnaire

IA - 10 - Fleet

0%   

Status

 Draft

IA - 10 - Fleet	Unit	Prev. Value	Value
IA-10.1.3.S : IA-10.1.3.S : N° of Diesel vehicles		5	
IA-10.1.4.S : IA-10.1.4.S : N° of LPG vehicles			
IA-10.1.5.S : IA-10.1.5.S : N° of Electric vehicles)			
IA-10.1.6.S : IA-10.1.6.S : N° of Alcohol vehicles			
IA-10.1.7.S : IA-10.1.7.S : N° of Natural Gas vehicles			
IA-10.1.8.S : IA-10.1.8.S : N° of biodiesel vehicles			
IA-10.2.1.S : IA-10.2.1.S : Consumption of gasoline	 L		
IA-10.2.2.S : IA-10.2.2.S : Consumption of Hybrid's gasoline	 L		
IA-10.2.3.S : IA-10.2.3.S : Consumption of diesel	 L	6.690,3251	
IA-10.2.4.S : IA-10.2.4.S : Consumption of LPG	 L		
IA-10.2.5.S : IA-10.2.5.S : Consumption of electricity	 kWh		
IA-10.2.6.S : IA-10.2.6.S : Consumption of alcohol	 L		
IA-10.2.7.S : IA-10.2.7.S : Consumption of natural gas	 Nm3		
IA-10.2.8.S : IA-10.2.8.S : Consumption of biodiesel in EDP fleet	 L		
IA-10.3.1.S : IA-10.3.1.S : Gasoline vehicles distance traveled	 km		
IA-10.3.2.S : IA-10.3.2.S : Hybrids vehicles distance traveled	 km		
IA-10.3.3.S : IA-10.3.3.S : Diesel vehicles distance traveled	 km	98.511	

AUXILIARY GENERATORS

In case of having an auxiliary generator, fuel consumption shall be measured. If the generator hasn't got a meter, a record of each tank refill shall be kept. The number of operating hours shall be recorded too.

Data shall be recorded in liters in the template TMP-EU/EMS-GEN-00008 "Environmental Monitoring & Measurement - Generators" and it shall be sent with a semi-annual frequency to the EMS Manager.

The person in charge of recording the data shall ensure that the generator operating hours don't exceed 5% of the facility operation hours. If that value is exceeded it shall be notified to the EMS Manager.

5.2.4 Paper consumption

Good environmental practices

To improve the organisation's environmental performance in paper consumption, an efficient use of the resource shall be pursued, for that purpose:

- Buying recycled paper, bleached without chlorine or that satisfies other environmental requirements, shall be encouraged. Below some eco-labelling symbols are shown (European Union, Forest Stewardship Council, the Blue Angel and Nordic Swan, respectively).

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- All documents shall be reviewed prior to printing.
- The printer shall be set to print on both sides. If the printer does not support that configuration, first, one side with the even pages and then the other with the odd pages shall be printed. If possible, a tray should be set out for used paper, and internal documents shall be printed on the unused side.
- Reuse paper printed on one side encouraging the use of draft notebooks with reused sheets.
- Members of staff shall be trained to avoid excessive paper usage and to promote rational use of this resource (posters, stickers, etc.).

5.2.5 Toner and ink cartridge consumption

Good environmental practices

To improve the organisation's environmental performance in toner and ink cartridge consumption, an efficient use of the resource shall be pursued by ensuring that all employees:

- Activate the toner save option when printing or photocopying.
- Whenever possible, print in black.
- Shake the toner/ink cartridge when it's running out.

5.2.6 Chemical products

It is advisable to have an inventory of chemicals stored and used in the facilities.

Material Safety Data Sheets (MSDS) of all the chemical products used in the facilities shall be available in the place where chemicals are stored and readily accessible.

5.3 ATMOSPHERIC EMISSIONS

5.3.1 Emissions and noise from vehicles

Good environmental practices

Efficient driving is a way of driving the vehicle that aims to achieve low fuel consumption and reduced environmental pollution (emissions and noise).

EDPR EU employees using vehicles shall follow the efficient driving guidelines to ensure rational fuel consumption and therefore more eco-friendly driving (check guidelines in the Fuel consumption section).

In case of car rental, when feasible, choose companies with environmental certification.

5.3.2 Fluorinated greenhouse gases and ozone depleting substances

Fluorinated Greenhouse Gases (FGHG) are those gases that can absorb and emit infrared radiation. Some of them are naturally present in the atmosphere, such as water vapour, carbon dioxide and ozone. This process is the fundamental basis of the greenhouse effect.

Global warming, a recent warming of the Earth's surface and lower atmosphere, is believed to be the result of a strengthening of the greenhouse effect mostly due to human-produced increases in atmospheric FGHG.

According to the Intergovernmental Panel on Climate Change, SF₆ is the most powerful FGHG evaluated, with a global warming potential of 22,800 times that of CO₂ when compared over a 100-year period.

SF₆ is used in the electrical industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear, and other electrical equipment, often replacing oil filled circuit breakers (OCBs) that can contain harmful PCBs. SF₆ gas under pressure is used as an insulator in gas insulated switchgear (GIS) because it has a much higher dielectric strength than air or dry nitrogen.

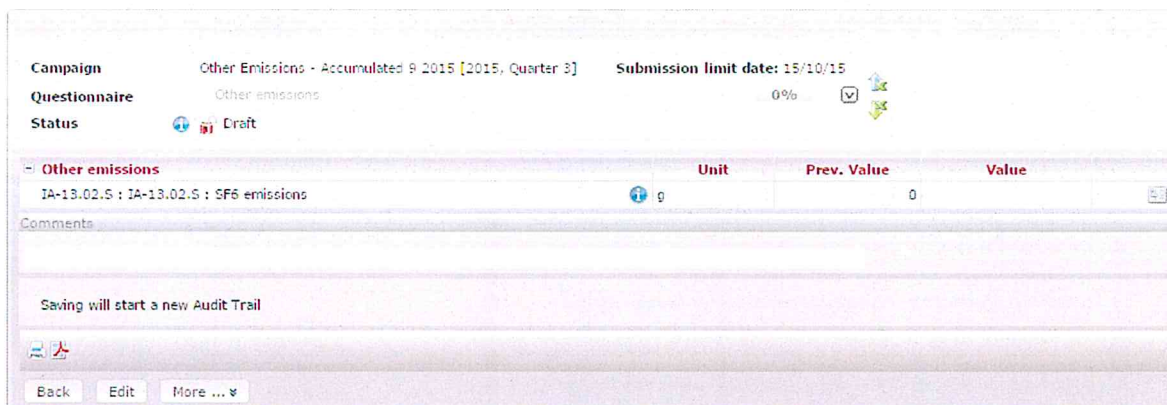
Although in the facilities included in the scope of the EMS this is not a significant environmental aspect, it has been identified as a potential aspect because of the risk of leakage.

The general procedure EXPR-EU/EMS-GEN 00013 *"Management of equipment with fluorinated greenhouse gases and ozone depleting substances"* show how to manage equipment containing FGHG and ODS ensuring its effective control.

Only qualified technicians are authorised to perform safely the refilling, recycling and destruction of these substances, including maintenance of the equipment and detection of any leakage.

If any decrease in the level of SF₆ is detected, authorized technicians shall review and refill the equipment. It shall be recorded (including SF₆ amount refilled) in the template TMP-EU/EMS-GEN-00011 *"Environmental emergency/Near-miss report"* in accordance with the general procedure EXPR-EU/EMS-GEN 00008 *"Near-miss and Emergency preparedness and response"*.

The amount of SF₆ released into the atmosphere (g) shall be also reported in SIS quarterly.



Chlorofluorocarbons (CFCs) and other halogenated Ozone Depleting Substances (ODS) are mainly responsible for man-made chemical ozone depletion.

These substances are contained in refrigeration/air conditioning equipment, and shall be managed in order to avoid their emission.

Only qualified technicians are authorised to perform safely the refilling, recycling and destruction of these substances, including maintenance of the equipment, and detection of any leakage.

5.4 WASTE

The aim of this section is to describe some general considerations regarding waste management, both hazardous and non-hazardous.

Specific requirements arising from the applicable legislation in each business unit may be included in specific procedures or waste management guides. EMS Managers are responsible for verifying that these technical instructions are consistent with legislation and with the principles of pollution prevention.

The amount of non-hazardous and hazardous waste generated at facilities/storages shall be reported quarterly in SIS. Data will be recorded in tonnes.

Also, waste shall be reported in SIS by treatment regarding the following categories:

Hazardous waste/non-hazardous waste:

- Sent to disposal:
 - o Waste disposed;
 - o Waste sent to destinations other than landfill.
- Sent to recovery:
 - o Waste recycled;
 - o Waste with recovery other than recycling.

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Campaign

Waste - Accumulated 9M 2015 (2015, Quarter 3)


Submission limit date: 15/10/15





























Questionnaire

IA - 15 - Waste (EWR)

17% 

Status

 Draft

IA - 15 - Waste (EWR)		Unit	Prev. Value	Value
IA-130205.S : IA-130205.S : Mineral-based non-chlorinated engine, gear and [...]	 kg			
IA-130206.S : IA-130206.S : Synthetic engine, gear and lubricating oils (LER 13 [...]	 kg			
IA-130208.S : IA-130208.S : Other engine, gear and lubricating oils (LER 13 02 [...]	 kg		292	
IA-130899.S : Wastes not otherwise specified (LER 13 08 99*) - HW	 kg		0	
IA-130307.S : IA-130307.S : Mineral-based non-chlorinated insulating and heat [...]	 kg			
IA-130507.S : IA-130507.S : Oily water from oil/water separators (LER 13 05 [...]	 kg		0	
IA-130000.C : IA-130000.C : Total oil wastes	 t [metric]		0,292	0 
IA-140603.S : IA-140603.S : Other solvents and solvent mixtures (LER 14 06 03*) [...]	 kg			
IA-140602.S : IA-140602.S : Other halogenated solvents and solvent mixtures [...]	 kg			
IA-150101.S : IA-150101.S : Paper and cardboard packaging (LER 15 01 01)	 kg		0	
IA-150102.S : IA-150102.S : Plastic packaging (LER 15 01 02)	 kg		0	
IA-150103.S : IA-150103.S : Wooden packaging (LER 15 01 03)	 kg		0	
IA-150110.S : IA-150110.S : Packaging containing residues of or contaminated by [...]	 kg		123	
IA-150111.S : IA-150111.S : Metallic packaging containing a dangerous solid [...]	 kg		3	

Back

Annex I and II of the *Directive 2008/98/EC on waste*, set out the codes of the different waste treatments:

- D code: Disposal operations.
- R code: Recovery operations.

This information shall be provided by the waste manager of each waste.

Following there is an example with the treatment code in bold:

Q05//R13/S36/C41-51//H5//A173 (2)//B0019

SIS indicators as well as the treatment codes to be considered to calculate each of these total amounts are shown below:

SIS code	Indicator description	Hazardous Waste/ Non Hazardous Waste	Code R/D
IA-15.12.4.S	Total hazardous waste recycled	HW	R3, R4, R5
IA-15.12.1.S	Total hazardous waste sent to others destinations exception landfill disposal	HW	D2-D15
IA-15.12.2.S	Total hazardous waste disposed	HW	D1
IA-15.12.3.S	Total hazardous waste with other recovered, except recycled	HW	R1 - R2, R6 - R13
IA-15.20.1.S	Total non hazardous waste recycled	NHW	R3, R4, R5
IA-15.20.4.S	Total non hazardous waste sent to other recovered, except recycled	NHW	R1 - R2, R6 - R13
IA-15.20.2.S	Total non hazardous waste sent to landfill disposal	NHW	D1
IA-15.20.5.S	Total non hazardous waste sent to other disposal operations, except landfill	NHW	D2-D15

5.4.1 Non - Hazardous Waste

All recoverable waste will be segregated and managed for that purpose. Therefore, there will be different bins for waste segregation. If selective collection for recovery is not possible in the area where the facility is located, an authorised waste handler shall be hired.

In general, it is necessary to segregate paper and cardboard, plastic and metal packaging, scrap, sludge collected from watertight tanks and any other waste that might be recovered. The rest shall be collected in the bins of "non-recoverable waste" to be sent to landfill.

When the collection is done by an external waste handler, its authorisation for the management of this type of waste shall be kept. In addition, the documentation generated in each disposal shall be kept for at least the time specified in the applicable legislation.

If the collection is made by the public services, there will not be any evidence of collection, so the amount of waste shall be estimated.

5.4.2 Hazardous Waste

The hazardous wastes generated by EDPR EU are not directly linked to the generation process, but to the facilities' operation & maintenance process.

More than 90% of the hazardous waste produced by the facilities are oil and oil-related wastes such as oil filters or oil containers. The consumption of this oil is based on certain pre-defined replacement time frequencies (between 2 and 5 years, based on the component, oil type and manufacturer). Annual fluctuations in hazardous waste generated are heavily dependent on this pluri-annual oil replacement programs.

The Environmental departments of the business units are responsible for ensuring that the compliance obligations regarding hazardous waste management are met.

5.4.2.1 General rules for packaging, labelling, storage and treatment

- **Packaging:**

- It's advisable that barrels or other containers of hazardous waste have an adequate lid or closure contraption and are maintained in good conditions, without structural defects (cracks, etc) so as to avoid any leakage or loss of contents.
- They shall be built with suitable materials able to withstand any dangerous content and not susceptible to produce any dangerous compounds.
- The containers and their closure contraptions shall be robust and resistant in order to withstand safely to any handling required.
- The exterior of the packaging shall provide acceptable protection with no evidence of rust.
- Oil mixtures with water or other non-oily waste shall be avoided.

- The packaging and storage of hazardous wastes shall be done so as to prevent heat generation, explosion, ignition or generation of toxic substances, and hazardous waste shall not be mixed with other wastes that may increase the hazard.
- **Labelling:**
 - All waste containers temporarily stored until their delivery to the final external waste handler shall be labelled in a clear, legible and indelible way.
 - The labels must be firmly fixed on the container, removing or covering any signs or labels that could be misleading or confusing.
 - Labels will include at least the information required by the legislation in force at the time.
- **Storage:**
 - It would be advisable to have the waste storage area (Clean Point) covered by a roof.
 - At the Clean Point, various different barrels or containers shall be stored, in which different kinds of waste shall be deposited according to their compatibility, so as to avoid heat generation, production of toxic substances or any effect that may increase hazard or hinder their subsequent management. These barrels or containers shall be permanently identified.
 - The floor shall be paved and impermeable and spills shall be collected using absorbent material. This condition can also be achieved by the use of appropriate containment basins, where all non-solid hazardous waste shall be placed.
 - As a security measure, the substations must have firefighting equipment to extinct possible fire.
 - The hazardous waste shall be stored for a maximum period not exceeding that determined by the legislation in force.
- **Treatment:**
 - EDPR promotes the recovery of waste through recycling and other means rather than its disposal.

5.5 WASTEWATER EFFLUENTS

Several situations shall be considered at EDPR EU facilities:

- No water available: no wastewater generation.
- Wastewater collected in a watertight tank:

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This is the most common situation at EDPR EU facilities, the sewage is channeled to a watertight tank and then taken to the treatment plan.

To ensure the tightness of the tank, a test shall be performed at least every 10 years, for example by filling it up with water and measuring the water level three times a day at least during two days to make sure that there are not changes. If any problem is detected in the tank, the appropriate measures shall be taken to fix it. Evidences of these actions shall be kept.

In these facilities where wastewater is taken to the treatment plant, the patterns of control are the same as those determined for the aspect of "water consumption".

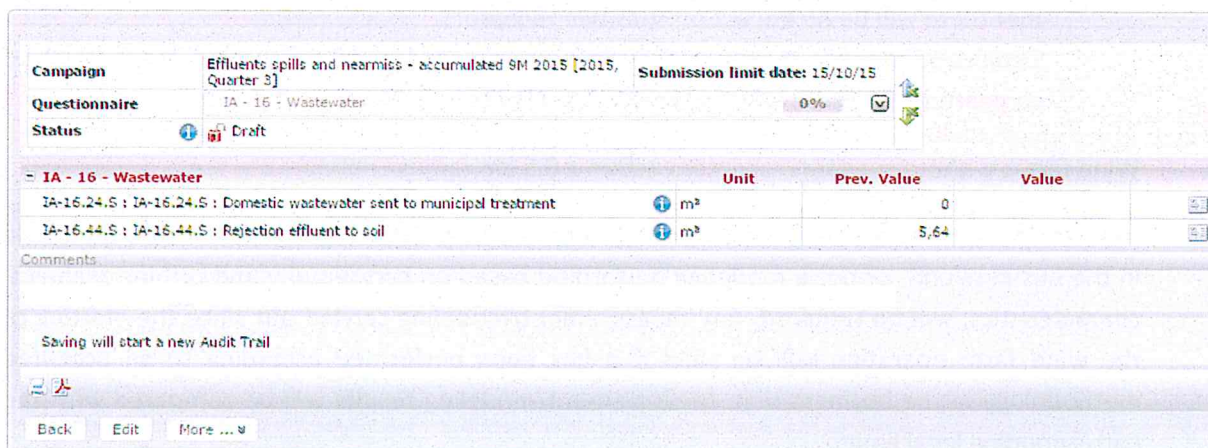
- Wastewater effluent discharged into the soil:

Some facilities at EDPR are equipped with a septic tank to treat the wastewater on site and then discharge it into the ground.

The Environmental departments shall ensure that compliance obligations are met, especially those regarding the discharge permit, if applicable.

The proper maintenance of the septic tank shall be also ensured in order to discharge wastewater that meets quality parameters.

The volume of domestic wastewater sent to municipal treatment (as stated above it will be equivalent to water consumption in these locations) and rejected effluent to soil shall be quarterly reported in SIS in m³.



Unit	Prev. Value	Value
m ³	0	
m ³	5,64	

A comment shall be included if data have been estimated.

5.6 NOISE

Regarding noise monitoring and measurement two different situations will be considered:

- Wind farms with sensitive receptors within a 0,5 km radius
- Wind farms without sensitive receptors within a 0,5 km radius

The overall concept of noise sensitive receptors includes residential uses, schools, churches and medical facilities. Nevertheless, in each country the concept scope should be established based on the applicable legislation.

Wind farms with sensitive receptors within a 0,5 km radius

At least, one noise assessment performed according to the legal requirements applicable in the business unit will be required. Any measurement carried out since the starting of the wind farm operation will be valid if it has been performed according to an accepted methodology in the business unit. Measurement results will be compared with the corresponding legal limits.

Noise measurements in these wind farms will be repeated as often as deemed appropriate, but periodicity never can exceed 10 years.

In addition, a noise measurement will be carried out if any of the following situations occur:

- Any written noise complaint.
- Significant changes in the facility: a new noise assessment will be undertaken or a noise modeling will be performed or a report will be prepared with the arguments to support that there will be no impact on sensitive receptors.
- Significant changes in the applicable noise limits: last measurement results will be compared with these new applicable legal limits.

Wind farms without sensitive receptors within a 0,5 km radius

At least one noise assessment will be undertaken according to the legal requirements applicable in the business unit, or noise modeling performed based on cartography and turbine technical characteristics, will be required. Any measurement/modeling carried out since the starting of the wind farm operation will be valid if it has been performed according to an accepted methodology in the business unit. Measurement/modeling results will be compared with the corresponding legal limits.

Noise assessments/modeling at these wind farms will be repeated if any of the following situations occur:

- Any written noise complaint.
- Significant changes in the facility: a new noise assessment/modeling will be performed or a report will be prepared with the arguments to support that there will be no impact on sensitive receptors.

- Significant changes in the applicable noise limits: last assessment /modeling results will be compared with these new applicable legal limits.

The number of facilities where noise measurements were carried out and the measures that have been applied to minimize noise shall be reported in SIS during 12M campaign.

This questionnaire has not been submitted for approval yet. Click [here](#) to get more information.

Campaign	Noise 9M 2014 [2015]	Submission limit date: 15/10/15
Questionnaire	IA - 22 - Noise	0% <input type="checkbox"/>
Status	Draft	

	Prev. Value	Value
IA-22.01.S : IA-22.01.S : No. of facilities where noise measurements were made		
IA-22.02.S : IA-22.02.S : Measures to minimize noise		

Comments

Saving will start a new Audit Trail

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5.7 BIRDS AND BATS FATALITIES

Birds and bats fatalities shall be always monitored and measured in the following circumstances:

- Facilities where birds/bats fatality monitoring is mandatory (by law, permit requirement, etc),
- Facilities where birds/bats fatality monitoring is carried out as a result of an internal decision of the company,
- Facilities inside or within a 5 km radius of any protected bird/bats area (at least international, European and national protected birds/bats areas).

In these cases it shall be prepared a plan of visits to the facility which enables to collect information about the fatalities of birds/bats.

At least, the following data shall be collected in a database in case of the detection of a dead bird/bat:

- Date
- Facility name
- Location of the dead bird/bat in the facility (nearest point: turbine nº, etc)
- Scientific name of the species
- Nº of dead individuals (of the same species in the same date and facility)
- Protection status according to the Red List of the IUCN

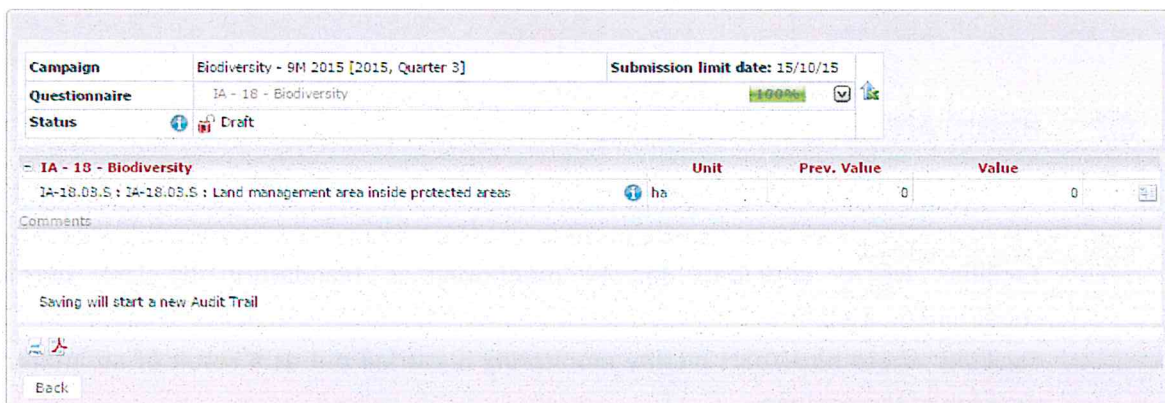
The IUCN (International Union for Conservation of Nature) is an internationally recognized body in the field of nature conservation and sustainable use of natural resources. The IUCN Red List will be used as a reference for the protection status of species. In addition, national catalogues/lists may be also used, if appropriate.

5.8 ENVIRONMENTAL MONITORING PLAN

The Environmental department of each business unit shall decide if an environmental monitoring plan is required in the different facilities depending on its compliance obligations, the conclusions reached by previous studies, the environmental performance and the technical and economic possibilities.

The following information shall be reported in SIS.

- Environmental studies in place (during 12M campaign).
- Land management area inside protected areas (ensure to keep updated quarterly)



Campaign	Biodiversity - 9M 2015 [2015, Quarter 3]	Submission limit date: 15/10/15
Questionnaire	IA - 18 - Biodiversity	100%
Status	Draft	
IA - 18 - Biodiversity		
IA-18.03.S : IA-18.03.S : Land management area inside protected areas	ha	0
Prev. Value		0
Value		0

Comments

Saving will start a new Audit Trail

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5.9 CONTRACTORS & SERVICE PROVIDERS CONTROL

The person(s) in charge of each contractor/service provider working at the facility shall inform them about the environmental requirements of the EDPR EU EMS through the template TMP-EU/EMS-GEN-00010 "Environmental requirements for contractors". The evidence of this communication through the return of this template signed and stamped, shall be kept. If the contract signed with the contractor/service provider already includes these requirements, the template TMP-EU/EMS-GEN-00010 would be dispensable.

At least, every twelve months, the person(s) in charge of the supervision of the outsourced work, shall monitor if the contractors/service providers fulfil these requirements as well as their environmental performance. The template TMP-EU/EMS-GEN-00009 "Environmental monitoring of contractors" shall be completed.

This template establishes the monitoring to be conducted to each of the contractors/service providers, with the general requirements to verify, in addition to the specific issues that could have been established. By filling in this template, the person in charge of the supervision of the

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outsourced work shall verify the environmental condition of the facility after a visit (possible presence of discarded waste or spillages, vegetation condition or other environmental requirements as agreed with the contractor).

The records resulted from this monitoring shall be sent to the EMS Manager.

5.10 ENVIRONMENTAL RESPONSIBILITIES IN AREAS WHERE FACILITIES ARE LOCATED

EDPR EU does not usually own the land where facilities are installed; therefore the following statement seeks to clarify any doubts that may arise regarding the responsibility of EDPR EU in the areas where its facilities are located.

**STATEMENT OF THE ENVIRONMENTAL RESPONSIBILITIES OF EDPR EU
ON LAND WHERE FACILITIES ARE LOCATED**

WHEREAS:

- A) EDPR EU facilities are usually located on land which is not owned by EDPR EU. The right to install facilities results from a lease, with periods equal to or slightly greater than the operational lifetime of the project, which is approximately 20 years.
- B) EDPR EU uses standard form contracts in which the rent is established based on the area leased and the type of usage. The rent is paid as compensation to the landowner and to ensure the prohibition of development or construction activities on this land that may affect the normal operation of the wind farm.
- C) The contracts allow the owner to continue, for example, to cultivate the land or to allow the grazing of cattle.
- D) The accesses within the facility are usually built on existing public accesses. Thus EDPR EU is required to maintain the existing rights of access and cannot prevent anyone from using them.

GIVEN THE ABOVE

EDPR EU has no authority to control any bad environmental practices of people outside their business, and therefore cannot be held responsible for any consequence of such practices. However, EDPR EU states its commitment to try to influence visitors and owners about the need to adopt good environmental practices, and to denounce bad practices that have significant negative effects on the environment.



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6 RESPONSIBILITIES

Task	Business Units			EDPR EU Sustainability department
	Environmental department	O&M department	Asset management department	
Perform the monitoring and measurement of the environmental aspects	Monitor and measure	Monitor and measure	Support the environmental department	Support the environmental department
Report the environmental information	Report and validate	Support the environmental department	Support the environmental department	Support the environmental department
Implement and check best environmental practices	Implement and check	Implement and check	Support the environmental department	Support the environmental department
Ensure that contractors/service providers know EDPR environmental requirements	Ensure that EDPR environmental requirements are properly communicated and understood	Support the environmental department	Support the environmental department	Support the environmental department
Perform the environmental monitoring to contractors/service providers	Monitor	Monitor	Support the environmental department	Support the environmental department

7 TEMPLATES

- TMP-EU/EMS-GEN-00007 *"Environmental Monitoring and Measurement Program"*
- TMP-EU/EMS-GEN-00008 *"Environmental Monitoring and Measurement –Generators"*
- TMP-EU/EMS-GEN-00009 *"Environmental monitoring of contractors"*
- TMP-EU/EMS-GEN-00010 *"Environmental requirements for contractors"*



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LOCATION _____				
ENVIRONMENTAL ASPECT	CONTROL	SPECIFICATIONS	TYPE OF INSPECTION	RESULT (IN AGREEMENT/DISAGREEMENT)
WASTE AND CONSUMPTION	Control	<ul style="list-style-type: none">✓ Operational control, monitoring and measurement procedure is available to staff	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
HAZARDOUS WASTE	Internal waste control	<ul style="list-style-type: none">✓ Collection and storage of waste in the area designated for this purpose and equipped for this purpose (Clean point).✓ The waste is stored in a suitable container which is adequately labelled for this purpose.✓ Containers are correctly labelled✓ Storage time does not exceed time established by law.✓ Waste amounts are recorded.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
	Waste control records	<ul style="list-style-type: none">✓ Waste management companies authorizations are available and correct.✓ Waste carriers are requested for legal documentation attesting that they are authorised to do the work.✓ Documentation of each waste disposal is available and correct	DOCUMENT	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
	Segregation	<ul style="list-style-type: none">✓ Suitable containers for segregation are available and correctly identified.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
NON - HAZARDOUS WASTE				



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LOCATION _____				
ENVIRONMENTAL ASPECT	CONTROL	SPECIFICATIONS	TYPE OF INSPECTION	RESULT (IN AGREEMENT/DISAGREEMENT)
EMISSIONS	Metal scrap	✓ A suitable container or collection area is available for the segregation of the recoverable fraction. ✓ Metal scrap is recovered as first option, going to landfill when there is no other option available.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Control of the speed of vehicles in the facilities with signs and/or indications to contractors.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
	Operational control	✓ Equipment and vehicles which are not being used for more than 15 minutes are shut down.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ In case of spill, it is collected and polluted soil is managed as hazardous waste.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
SPILLS	Spills	✓ Containers/barrels are placed on protected land/dike and if any spill is produced during the handling, it's immediately cleaned.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
	Containers/barrel	✓ Watertight tank is properly maintained and tightness tests are performed with the established frequency.	DOCUMENTARY EVIDENCES	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
WASTEWATER EFFLUENTS	Tightness Controls	✓ Water consumption data is taken on time	RECORDS	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
WATER CONSUMPTION	Control			



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LOCATION _____				
ENVIRONMENTAL ASPECT	CONTROL	SPECIFICATIONS	TYPE OF INSPECTION	RESULT (IN AGREEMENT/DISAGREEMENT)
ELECTRICITY CONSUMPTION	Control	✓ The proper functioning of toilet facilities, avoiding losses by dripping, spilling, etc. is monitored.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Avoid leaving an open tap, avoid using the toilet as a paper bin, and notify any leaks as soon as possible, etc.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ All computer equipment is set to switch to low consumption mode after being idle for 5 minutes.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Locations take full advantage of natural sunlight.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ The temperature of the air-conditioning equipment is regulated trying to achieve the best energy efficiency.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Avoid overuse and promote rational usage of the resource	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Switch off the lights and air conditioning equipment when not needed	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Cleanliness of the lighting systems	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____



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LOCATION _____				
ENVIRONMENTAL ASPECT	CONTROL	SPECIFICATIONS	TYPE OF INSPECTION	RESULT (IN AGREEMENT/DISAGREEMENT)
PAPER CONSUMPTION	Control	✓ Recycled paper, bleached without chlorine or that meets other environmental requirements	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Documents are reviewed before printing	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Print double sided (automatic or manual) and/or two pages per sheet.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
		✓ Reuse printed paper on one side as draft paper	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
FUEL CONSUMPTION	Control	✓ Avoid stops with a stationary vehicle and a running engine, avoid driving with the windows down, plan routes to avoid inefficient trips and avoid fast and unnecessary accelerations.	VISUAL	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____
CONTRACTORS	Control	✓ Periodic environmental monitoring	RECORDS	<input type="checkbox"/> A <input type="checkbox"/> D NC N°: _____



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ENVIRONMENTAL MONITORING AND MEASUREMENT - AUXILIARY GENERATORS

LOCATION	
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Monitored by	
--------------	--

YEAR	MONTH	FUEL CONSUMPTION (l)	OPERATING HOURS (h)
	January		
	February		
	March		
	April		
	May		
	June		
	July		
	August		
	September		
	October		
	November		
	December		

TOTAL	
-------	--

Note: If the number of the generator operating hours per year exceeds 438 h (5% of wind farm operation hours), please notify it to the EMS Manager in order to evaluate this environmental aspect.



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ENVIRONMENTAL MONITORING - CONTRACTORS/SERVICE PROVIDERS

LOCATION: _____				
PERIODIC ENVIRONMENTAL CONTROL OF:				
ENVIRONMENTAL REQUIREMENT	EVIDENCE	COMPLIANCE		OBSERVATIONS
		Compliant	Non-compliant	
Hazardous waste management		Compliant	Non-compliant	
Non-hazardous waste management		Compliant	Non-compliant	
No waste found		Compliant	Non-compliant	
No spills found		Compliant	Non-compliant	
Collaboration with EDPR in environmental matters		Compliant	Non-compliant	
Other:		Compliant	Non-compliant	
Other:		Compliant	Non-compliant	

Performed by:

Date and Signature

TMP-EU/EMS-GEN-00010 ENVIRONMENTAL REQUIREMENTS FOR CONTRACTORS

The contractor/service provider _____, as part of the contract established with EDPR in the facility(ies) _____, knows the environmental requirements that EDPR EU has established according to its implemented environmental management system, by committing to:

- Distribute these requirements among all staff/contractor so that they can be known by every worker who carries out activities under the contract.
- Fulfill all environmental compliance obligations that are applicable in the performance of their activities during their service to EDPR.
- Fulfill all environmental requirements established and reported on by EDPR.
- Not discarding waste at any of EDPR EU facilities nor on roads or areas near them.
- Not producing spills on the ground or waterways.
- Make EDPR EU aware of any environmental incident that may be detected.
- Provide any document that demonstrates compliance with the above points and that may be requested by EDPR at any time. At least, all the documents certifying the proper management of waste will be provided.

Received by: _____

Date and signature: _____