



PREFEITURA DE ITANHAÉM

ESTÂNCIA BALNEÁRIA | ESTADO DE SÃO PAULO

ANNEX 6 - ENVIRONMENTAL GUIDELINES



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1 INTRODUCTION

This ANNEX aims at presenting the minimum environmental guidelines to be considered when providing the SERVICES and to serve as a base document for the preparation of the CONCESSION Material Treatment and Disposal Program (PTDM), an integral part of the OPERATION AND MAINTENANCE PLAN, as set out in ANNEX 5 (TECHNICAL TENDER SPECIFICATIONS).

During the CONCESSION TERM, the CONCESSIONAIRE shall promote the adequacy of its procedures and technical instructions for the performance of the SERVICES whenever the environmental legislation changes, bearing the respective expenses arising from it.

The CONCESSIONAIRE shall act in order to preserve the environment in all activities carried out regarding the SERVICES under the CONTRACT and its ANNEXES, and shall adapt to the socio-environmental requirements of the International Finance Corporation - IFC, specifically the provisions of the Performance Standards on Social and Environmental Sustainability¹ applicable, which are:

- Performance Standard 1: Assessment and Management of Socio-environmental Risks and Impacts: Performance Standard 1 refers to the identification of socio-environmental impacts and risks and opportunities of the Projects; the importance of effective community engagement through the dissemination of information related to the Project and contacting local communities on matters that directly affect them, and the client's management of the socio-environmental performance resulting from the project.

¹Source: Performance Standards on Social and Environmental Sustainability. International Finance Corporation (IFC), World Bank Group, January 2012.



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- Performance Standard 2: Employment and Working Conditions: Performance Standard 2 provides for the pursuit of economic growth, through job creation and income generation, the terms of which must be accompanied by the protection of basic labor rights, ensuring the conditions and employment, including occupational health and safety issues, as well as labor and child labor protection.
- Performance Standard 3: Resource Efficiency and Pollution Prevention: Performance Standard 3 recognizes that increasing economic activity and urbanization often generates increasing of pollution levels of air, water and soil, and consumes finite resources in a way that can threaten people and the environment, locally, regionally and globally². In addition, it is a growing global consensus that the current and predicted concentration of greenhouse gases (GHS) in the atmosphere threatens public health and the well-being of current and future generations. At the same time, using resources and preventing pollution more efficiently and effectively, together with preventing greenhouse gases (GHS) emissions and employing mitigation technologies and practices, have become more accessible and feasible in almost all parts of the world. All of that is often achieved through continuous improvement methodologies similar to those used to increase quality or productivity, and which are generally known by most companies in the industrial, agricultural and service sectors.
- Performance Standard 4: Community Health and Safety: Performance Standard 4 recognizes that the CONCESSION activities, equipment and infrastructure can increase the community's exposure to risks and impacts. In order to comply with this standard, the CONCESSIONAIRE must avoid or

²For the purposes of this Performance Standard, the term “pollution” is used to refer to hazardous and non-hazardous chemical pollutants in solid, liquid and gaseous states and includes other components such as pest pathogens, terminal water discharge, greenhouse gases (GEE) emissions, nuisance odors, noise, vibration, radiation, electromagnetic energy and the creation of possible visual impacts, including light/lighting.



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minimize the risks and impacts on the community's health and safety that may arise from activities related to the CONCESSION.

- Performance Standard 8: Cultural Heritage: Performance Standard 8 recognizes the importance of cultural heritage for current and future generations. In line with the Convention on the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to ensure that clients protect cultural heritage in the course of their project-related activities.

2 ADEQUACY TO CURRENT RULES AND LEGISLATION

Furthermore, the procedures for classifying, storing and transporting waste, to be used by the CONCESSIONAIRE, must be in accordance with the laws, Brazilian Regulatory Norms (NBR), ordinances, decrees and environmental normative deliberations in force. It is up to the CONCESSIONAIRE to adapt, at least, to the updated versions of the rules involved with the SERVICES to be provided. At the execution of its activities, the CONCESSIONAIRE must consider, at least, the Rules listed below:

- **ABNT NBR 10004 (Solid Waste - Classification):** establishes criteria for classifying solid waste in terms of risk to public health and the environment (classified into two groups: Harzadous and non-Harzadous – inert or non-inert) according to their characteristics;
- **ABNT NBR 10005 (Procedure for extracting leached extract from solid waste):** sets the requirements for obtaining leached extract from solid waste (process to determine the transfer capacity of organic and inorganic substances present in the solid waste, by means of dissolution in the extractor medium), in order to differentiate waste, classified by ABNT NBR 10004 as class I – Harzadous – and class II – non-Harzadous;
- **ABNT NBR 10006 (Procedure for obtaining solubilised extract of solid waste):** establishes the requirements for obtaining solubilised extract of solid



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waste, aiming to differentiate waste classified in ABNT NBR 10004 as class II A - non-inert – and class II B - inert;

- **ABNT NBR 10007 (Sampling of solid waste):** sets the requirements for solid waste sampling;
- **ABNT NBR 7500 (Identification for land transport, handling, movement and storage of products):** Establishes conventional symbols and their dimensioning, to be applied in transport unit and packaging to indicate the risks and care to be taken in their handling, transport and storage, according to the load contained;
- **ABNT NBR 7501 (Land transport of Hazardous products - Terminology):** defines the terms used in the land transport of Hazardous products;
- **ABNT NBR 7503 (Land transport of Hazardous products – Emergency form and envelope - Characteristics, dimensions and completion):** specifies the requirements and dimensions for making the emergency form and the envelope for land transport of Hazardous products, as well as instructions for filling in the form and the envelope;
- **ABNT NBR 13221 (Waste Land Transport):** specifies requirements for waste land transport in order to avoid damage to the environment and protect public health. It applies to waste land transport, as classified in Ordinance No. 204 of the Ministry of Transport, including those materials that can be reused, recycled and/or reprocessed, and Hazardous waste according to the definition of the Basel Convention. In the case of proper handling and disposal of waste, the classification specified in NBR 10004 must be checked;
- **ABNT NBR 9735 (Set of equipment for emergencies in land transport of Hazardous products):** establishes the minimum set of equipment for emergencies in the land transport of Hazardous products, consisting of personal protective equipment, to be used by the driver and personnel involved (if any)



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in the transport, signalling equipment, in the area of the occurrence (breakdown, accident and /or emergency) and portable fire extinguisher for the load;

- **ABNT NBR 8371 (Ascarel for transformers and capacitors – Characteristics and risks):** describes ascarables for transformers and capacitors, their features and risks, and establishes guidelines for their handling, packaging, labeling, storage, transport, procedures for equipment in operation and final destination;
- **ABNT NBR 9.191 (Plastic bags for packaging waste – Requirements and test method):** establishes the requirements and test methods for plastic bags intended exclusively for packaging waste for collection;
- **ABNT NBR 12235 (Storage of Harzadous solid waste):** sets the conditions required for the storage of Harzadous solid waste in order to protect public health and the environment, applying to the storage of any and all Class I Harzadous waste;
- **ABNT NBR 11174 (Storage of Class II Non-inert and Class III – Inert Waste),** what sets the conditions required to obtain the minimum conditions necessary for the storage of class II-non-inert and III-inert waste, in order to protect public health and the environment;

3 CLASSIFICATION OF SOLID WASTE

In order to interpret this ANNEX and for the correct preparation of PTDM, the CONCESSIONAIRE shall adopt the classification of STREET LIGHTING waste, as provided below.



3.1 Class I – Harzadous Waste

Class I (Harzadous) wastes are those whose physical, chemical or infectious-contagious properties can cause risks to public health and/or risks to the environment, when the waste is improperly managed.

3.2 Class II - Non-HarzadousWaste

Non-Harzadous Waste is differentiated, as detailed below:

Class II – A Non-Inert Waste: These are those that do not fit into the Class I – Harzadous waste or Class II – B inert waste classifications. Class II – A Non-Inert waste may have properties such as biodegradability, combustibility or water solubility;

Class II - B inert waste: is any waste that, when sampled in a representative way, according to ABNT NBR 10007 Standard, and subjected to dynamic and static contact with distilled or deionized water, at room temperature, according to ABNT NBR 10006 Standard, does not have any of their constituents solubilised at concentrations above the standards of water potability, except for appearance, colour, turbidity, hardness and flavor, in accordance with ABNT NBR 10004 Standard.

4 OBLIGATIONS AND RESPONSIBILITIES

In the CONTRACT execution, the CONCESSIONAIRE shall ensure that all solid waste generated is identified, classified, conditioned, transported and destined, in order to comply with the current legislation applicable at the federal, state and municipal levels.

All solid waste and/or equipment removed or replaced from the MUNICIPAL STREET LIGHTING NETWORK must be transported by the CONCESSIONAIRE (or by authorized and licensed third parties) to a temporary storage location, where sorting



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must be carried out for later classification, packaging and storage of the waste /equipment until its final destination, in accordance with current environmental legislation.

Discharge lamps (fluorescent, sodium, metallic or mercury vapor lamps, and mixed light) removed from the MUNICIPAL STREET LIGHTING NETWORK must not, under any circumstances, be broken, and must be sent to duly licensed and accredited companies for receipt. The companies in charge of treating and/or disposing of the lamps must issue the certificate proving their environmentally appropriate final disposal, in accordance with applicable legislation.

The waste generated by the CONCESSIONAIRE must be properly treated in all its stages, from replacement to final disposal. Naturally, the treatment associated with each waste varies according to its nature.

In this scenario, the CONCESSIONAIRE, for the purpose of final disposal of waste from discharge lamps, must observe the precepts established in clause 12 of the Sector Agreement signed on 11/27/2014, published on 03/12/2015, in compliance with Law No. 12,305 /2010 and Decree No. 7404 of 12/23/2010, which provides for and regulates the National Policy of Solid Waste (PNRS) and Reverse Logistics for Fluorescent Lamps. This sector agreement has been signed and actively supported by the manufacturers and importers of fluorescent lamps in Brazil, in line with the applicable legislation, especially the PNRS.

The GRANTOR may inspect the materials used in the MUNICIPAL STREET LIGHTING NETWORK, either in the CONCESSIONAIRE's or third-party's warehouses, either in the network, in the field or in its own vehicles or those of subcontracted third parties, at any time.



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The CONCESSIONAIRE shall maintain all necessary procedures to ensure traceability and quality control of all materials used in the MUNICIPAL STREET LIGHTING NETWORK.

In case of accidents, the GRANTOR must be immediately notified by the CONCESSIONAIRE. The information provision on accidents to the press and to USERS is exclusive to the GRANTOR.

5 MINIMUM GUIDELINES REQUIRED

Below are the minimum guidelines for each stage of waste management generated by assets of the MUNICIPAL STREET LIGHTING NETWORK.

5.1 Procedures Related to Waste - Class I – Harzadous Waste

5.1.1 *Fluorescent lamps, sodium vapor lamps, mercury vapor and metal vapor lamps*

They are wastes made out of chemical components that are highly polluting and toxic to the environment. These lamps cannot be directly disposed of in sanitary landfills licensed for Class II waste, requiring prior recovery of these compounds to avoid environmental damage.

The CONCESSIONAIRE shall follow the following determinations regarding the handling of waste:

- Broken lamps (sockets), in all phases of movement, removal, storage and transport, must be handled using the necessary personal protective equipment (PPE) and in good conditions of use - gloves, apron, plastic boots and mask;



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- When there is an accidental breakage of a lamp indoors, the first step should be to open doors and windows for air circulation. The place should be cleaned, preferably by vacuuming. The shards must be carefully collected, so as not to injure whoever handles them, and placed in air tight packaging with the possibility of being sealed, in order to avoid the continuous evaporation of the released mercury;
- Workers are prohibited from ingesting food and drink or smoking during operations involving the handling of waste lamps;
- Professionals exposed to toxic wastes should undergo periodic medical examinations (including determination of the amount of heavy metals and neurological assessment).

After performing the SERVICES, all used and/or burned fluorescent lamps, sodium vapor, mercury vapor and metallic vapor lamps must be sent intact to the authorized partners responsible for their final destination, following the procedures and rules inherent to such activities.

In the PTDM, the following must be detailed: the form of transport and packaging, respecting the weight limits of each casing, temporary storage, collection or delivery to an authorized collector, recycling (when possible), treatment by an authorized company and final destination by an authorized company.

The PTDM must also include an estimate of the monthly amount of lamps removed from the MUNICIPAL STREET LIGHTING NETWORK and the way in which the identification of the packaging envelopes, the internal and external collection containers, the internal and external transport container will be carried out, and of storage locations, using symbols, colors and phrases, meeting the parameters referenced in the ABNT NBR 7500 Standard or later applied to the matter.



5.1.2 LED module

In case, the CONCESSIONAIRE decides to install LED LUMINAIRES and LED strips in the MUNICIPAL STREET LIGHTING NETWORK, these will initially be characterized as special waste, waste subject to mandatory reverse logistics. If the manufacturer proves that the values found for Harzadous waste (chromium, antimony and nickel) are above the limits defined in ABNT NBR 10005 Standard, the LED modules must be treated as Class I, Harzadous.

In PTDM, the form of transport, packaging, temporary storage, collection or delivery to an authorized collector, recycling (when possible), treatment in milling / separation, final destination for decontamination must be detailed, as the case maybe.

5.1.3 Photoelectric relay

Photoelectric relays that have the LDR (light dependent resistor) as an electronic component to control luminosity are classified as Harzadous waste, and cannot be reused, as they contain cadmium sulfide, a highly toxic and non-biodegradable heavy metal, as a light sensitive element.

In PTDM, the form of transport, packaging, temporary storage, collection or delivery to an authorized collector, recycling (when possible), treatment in milling / separation, final destination for decontamination must be detailed, as the case maybe.

5.1.4 Vehicle tires, lubricating oils, their waste and packaging

Vehicle tires, lubricating oils, their waste and packaging used in vehicles supporting the SERVICES execution are classified as Harzadous, not subject to reuse and composed of the following elements: Chromium, Cadmium, Lead, Arsenic, Dioxins (originating from the operation of the engine), Polycyclic (Polynuclear) and aromatic (originating from engine operation) Hydrocarbons.



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In PTDM, the form of transport, packaging, temporary storage, collection or delivery to an authorized collector, recycling (when possible), treatment and disposal in a licensed Harzadous waste landfill (if there is no alternative treatment) must be detailed in PTDM, as appropriate, for the wastes listed below, in a non-exhaustive way:

- Used or contaminated lubricating oils;
- Used lubricating oil packaging and disposal of the remaining lubricating oil;
- Vehicle tires;
- Air chambers and valves;
- Used oil filters and disposal of remaining lubricating oil;
- Tows and fabrics with lubricating oil;
- Sawdust or sand with lubricating oil;
- Cleaning fluid for dirty tools with lubricating oil;
- Water contaminated with lubricating oils;
- Other oily wastes/oil mixtures with fuels, solvents or other substances.

PTDM should also include an estimate of the monthly amount of oil generated, in liters, and the way in which the identification of packaging elements, internal and external collection containers, internal and external transport containers and places of storage, using symbols, colors and phrases, meeting the parameters referenced in the applicable standard.

5.1.5 Batteries

The cells and batteries used to support the SERVICES execution are classified as Harzadous, not reusable and composed of the following highly toxic and non-biodegradable heavy metals: such as cadmium, lead, mercury, lithium, zinc-manganese and alkali- manganese.

In PTDM, the form of transport, packaging, temporary storage, collection or delivery to an authorized collector, recycling (when possible), treatment and disposal in a licensed

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Harzadous waste landfill (if there is no alternative treatment) must be detailed in PTDM, as appropriate.

5.1.6 *Ascarel oil*

It is prohibited, according to Interministerial Ordinance No. 19, of 01/29/1981, the installation of any component in the MUNICIPAL STREET LIGHTING NETWORK that contains ascarel oil³. This ban is due to the high polluting potential of this chemical element, in addition to the risks to human health associated with it. Even though there are no records of use in the infrastructure of the MUNICIPAL STREET LIGHTING NETWORK, equipment containing ascarel oil may be found. The handling or removal of waste containing ascarel oil must only be carried out by companies and/or third parties, duly licensed to perform this activity, and strictly following the legislation in force.

After processing this equipment by a qualified third party, the CONCESSIONAIRE shall forward to the GRANTOR the final disposal certificate (report), attesting that the equipment/waste containing ascarel oil was properly disposed.

5.2 Procedures Related to Waste - Class II - Non-Harzadous Waste

All non-Harzadous waste, generated as a result of the SERVICES execution, must be included in PTDM, not being able among them:

- Brackets of LUMINAIRES;
- LUMINAIRES;
- Electrical installations (wiring, connectors);
- Electromagnetic ballasts;

³Ascarel is used as an insulator in electrical equipment, being a highly toxic oil, resulting from a mixture of petroleum-derived hydrocarbons, containing Alocchlor 124, polychlorinated biphenyl (PCB).



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- Electronic ballasts;
- Drivers;
- Cement poles;
- Metal poles;
- Waste generated in the office.

For each of the items listed above, it must appear in PTDM, minimally:

- Characterization (Class A or B, inert or non-inert, reusable or recyclable waste);
- Handling method;
- Storage place;
- Storage time;
- Collection procedure;
- Type of transport;
- Reuse procedures;
- Procedures and responsible for recycling (when applicable);
- Form and persons responsible for the treatment;
- Final disposal procedure;
- Estimated monthly volume (in units or Kg).

5.3 Minimization of Solid Waste Generation

The minimization of solid waste generation consists of reducing the generation of the amount of all types of waste generated throughout the CONCESSION period, at the stage of its generation, before the stages of storage, collection, treatment or final disposal. A viable way to promote the minimization of solid waste generation is to combat waste. Another applicable way is to reuse discarded materials, when possible and permitted by applicable legislation (for example, cardboard boxes, jars and



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containers, after a disinfection and cleaning process). Finally, it is also possible to achieve minimization through waste recycling.

The processes that involve the minimization of solid waste generation must be carefully planned and operated by the CONCESSIONAIRE, to avoid putting the health of the workers involved at risk, as well as avoiding contamination of the environment. All these minimization processes must be detailed in PTDM.

5.4 Segregation of Materials

Segregation consists of properly separating or selecting solid waste according to the adopted classification. Ideally, such an operation should be planned as an ongoing process. It should expand to all types of waste progressively, with a view to safety, reuse and cost reduction due to its treatment or reprocessing.

PTDM shall provide for segregation procedures that at least guarantee:

- Reduction of risks to the employees' health and the environment, preventing potentially infectious or special waste, which are usually small fractions, from contaminating other waste generated in SERVICES provision;
- Increased effectiveness of reuse and recycling.

5.5 Storage and Conditioning

The temporary packaging of Harzadous waste waiting for recycling, recovery, treatment and/or final disposal can be carried out in containers, drums, tanks and/or in bulk.



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Waste storage is understood to be its temporary or permanent containment, always using the following steps: reuse, recycle and/or recover.

In the case of discharge lamps, special care must be taken with regard to the mercury vapor that is given off from the lamps when broken.

The CONCESSIONAIRE shall follow the following determinations regarding the waste storage and conditioning:

- Burned-out or unserviceable lamps must be kept intact, preferably packed in their original packaging, protected against possible shocks that could cause them to break, and stored in a dry place;
- If it is not possible to reuse the original packaging, packaging made with reused cardboard, cut and glued in a format compatible with the lamps, must be provided;
- Packages with intact burned-out lamps must be placed in any portable container in which the waste can be transported, stored or otherwise handled, so that leakage is avoided in the event of lamp breakage, or in appropriate transport boxes (containers) provided by recycling companies;
- Broken lamps (sockets) must be packed in a drum (portable container, hermetically closed, made with metal plate or plastic material – type plastic drum) internally coated with a special plastic bag to avoid contamination;
- Each container must be identified as to its content, and this identification must be carried out in order to resist their manipulation, as well as the conditions of the storage area in relation to possible weather;
- The storage place must comply with the conditions established by environmental agencies, as well as be properly sign posted to prevent access by strangers. It is recommended to mark the area (flag) with the words "Lamps for Recycling";



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- Containers and/or drums must be located in a covered, dry and well-ventilated area, and the containers must be placed on a concrete base or other material (pallets) that prevent the percolation of substances into the soil and ground water. It is recommended that the area also have a drainage system and collection of contaminated liquids;
- At the end of the activities, the remaining containers and/or drums, as well as the possibly contaminated bases and soil, must be properly treated and/or cleaned.

5.6 Transport of Solid Waste

For the transport of solid waste, the recommendations specified by the Brazilian Traffic Code – CBT and by the National Land Transport Agency – ANTT must be met.

Road transport of Harzadous products by public road, as it represents a risk to people's health, public safety or the environment, is subject to the rules and procedures established by the Regulation for Road Transport of Harzadous Products, ANTT Resolution nº. 3,665/11 and amendments, complemented by the instructions approved by ANTT Resolution No. 5,232/16 and amendments, without prejudice to the provisions of the specific rules for each product.

Also, with regard to the transport of Harzadous products, ANTT Resolution No. 420, of February 2004, presents the following measures to be adopted for the transport of Harzadous products in national territory:

- Classification;
- List of Harzadous Products;
- Special Provisions Applicable to Certain Articles or Substances;
- Harzadous Products Packaged in Limited Quantity;

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- Provisions Relating to Packaging;
- Marking and Labeling;
- Identification of Transportand Cargo Units;
- Documentation;
- Prescriptions Relating to Transport Operations.

The process of internal displacement and external transport of Class II waste basically comprises three phases:

- 1st Phase – Removal of waste: transport of waste removed from the place where they were installed to an intermediate/temporary storage location;
- 2nd Phase – Intermediate: transport of waste removed from the temporary/intermediate storage location to a central storage location awaiting recycling, treatment or appropriate final disposal;
- 3rd Phase – Final destination: transport from the central storage location to the appropriate recycling, treatment or final disposal site.

In order to speed up this process and ensure its efficiency, the phases may be performed by agents other than the CONCESSIONAIRE. In case of subcontracted companies, the CONCESSIONAIRE shall require at least the following documents:

- Environmental operating license, issued by the competent environmental agency at the municipal, state and/or federal levels;
- Proof of inclusion in the Federal Technical Registry, issued by IBAMA;
- Debt Clearance Certificate, issued by IBAMA;
- Annual Waste Inventory, issued by IBAMA;
- Evidence documents (licenses, permits, monitoring documents defined by the environmental agency) of the systems and technologies adopted in the outsourced services.



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During the external transport of Class I waste, the procedures of the corresponding technical standard must be followed.

The following determinations are given for external transport:

- Identifying the shipment (container, drum and cases) with the following information:
 - Loading date;
 - Number of items;
 - Location where items were taken from (origin);
 - Destination of loading.
- Transport in compliance with the segregation criteria (they cannot be transported together with food products, medicines or products intended for human or animal use and/or consumption, or with packaging intended for these purposes);
- Protect against bad weather and do not tip over the containers that are transporting lamps to prevent implosion from occurring;
- Vehicles must have closed bodies so that transported waste is not exposed;
- Vehicles must present, on the three sides of their body work, information on the type of waste transported and identification of the company or city hall responsible for the vehicle (according to the related standard, there is no specific symbol for loads that contain mercury, only one called "Toxic Substances");
- In case of contracting third parties for transport, to protect itself from future liabilities and to control the transport of waste, the generator must fill in the Manifest for Transport of Wastes - MTR, according to the applicable standard;
- The transport of waste must comply with specific environmental legislation (federal, state or municipal), when existing, and must be accompanied by an



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environmental control document provided for by the competent organ, which must inform the type of packaging;

- The transport can be carried out by the CONCESSIONAIRE or by a third party specialized in the transport of hazardous products, provided that the safety recommendations, the transport rules are obeyed, and the supporting documents mentioned above are presented.

5.7 Treatment and Final Disposal of Solid Waste by Third Parties

In PTDM, all obligations, responsibilities and qualifications, both of the CONCESSIONAIRE and of the companies that may be subcontracted to carry out all stages of the management of solid waste generated throughout the CONCESSION period must be exposed.

To assist the GRANTOR's inspection and the determination of related performance indexes, PTDM must list all certificates to be issued by the subcontracted companies and presented by the CONCESSIONAIRE to the GRANTOR and the INDEPENDENT VERIFIER. To prove the compliance of the solid waste management procedures generated by the CONCESSIONAIRE, during the CONCESSION TERM, the CONCESSIONAIRE shall ensure that 100% (one hundred percent) of the waste generated each quarter has certification, issued by accredited, licensed and authorized companies, for the performance of these services.

For the purpose of calculating the amount of Class I waste – Hazardous Waste properly managed, according to applicable legislation, the CONCESSIONAIRE will be responsible for registering in the REGISTRATION OF THE MUNICIPAL STREET LIGHTING NETWORK, soon after the execution of any of the SERVICES under its responsibility, all components removed from the THE MUNICIPAL STREET LIGHTING NETWORK, which present wastes with such characteristics.



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In this way, when measuring the performance indicators, the amount of Class I waste – Hazardous Waste properly managed by the CONCESSIONAIRE will be compared with the total number of components that had contaminating waste and that were removed from the STREET LIGHTING park in the period.

The CONCESSIONAIRE shall require, for each of the subcontracted companies, at least the following documents:

- Environmental licensing (operating license), issued by a competent environmental agency at the municipal, state and/or federal levels;
- Proof of inclusion in the Federal Technical Registry, issued by IBAMA;
- Debt Clearance Certificate, issued by IBAMA;
- Evidence documents (licenses, permits, monitoring documents defined by the environmental agency) of the systems and technologies adopted in the outsourced services.

PTDM should also include the details of the types and technologies of treatment and final destination that will be carried out, for each group of waste.

5.8 Environmental awareness

The CONCESSIONAIRE is responsible for including an Environmental Education program in PTDM for its employees, which will serve as an important tool to ensure the adoption of standards of conduct more suited to the waste management model proposed by the CONCESSIONAIRE. The implementation of this program should also provide conditions for professionals to know clearly their responsibilities, in relation to their co-workers, in relation to the environment, as well as their role as citizens.



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In addition, when carrying out training, all employees of the CONCESSIONAIRE who have direct contact with the waste generated must be properly instructed on the use of personal protective equipment (PPE).

The CONCESSIONAIRE shall make the rational use of water, training its personnel in the proper use of water, avoiding waste, maintaining special and privileged criteria for the acquisition and use of equipment and complements that promote the reduction of water consumption, carrying out checks and, if where applicable, periodic maintenance of networks and devices.

The CONCESSIONAIRE shall train its personnel on the rational use of electric energy, maintaining special and privileged criteria for the acquisition of products and equipment that present energy efficiency and consumption reduction, carrying out checks and, if applicable, periodic maintenance of its appliances and equipment electrical.

The CONCESSIONAIRE shall train its personnel on the rational use of inputs, using quality materials and equipment with a long lifespan, to reduce the amount of solid waste generated.

5.9 Pruning and Suppression of Tree Vegetation

The CONCESSIONAIRE shall identify interferences in STREET LIGHTING POINTS due to the presence of afforestation and request from the GRANTOR the pruning or transplants strictly necessary for the proper SERVICES provision, compliance with performance parameters and other obligations of the CONTRACT and ANNEXES.

Only pruning or transplanting may be requested, in the described procedure, of trees that are directly interfering with STREET LIGHTING, and the CONCESSIONAIRE must prioritize technical alternatives, if feasible, before requesting pruning or transplanting of trees to the GRANTOR, since these activities are the responsibility of the GRANTOR.



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Waste from urban tree pruning is classified as public waste, which is generally the GRANTOR's responsibility to properly dispose of it.

The rest of the tree pruning cannot be deposited with other types of materials under the CONCESSIONAIRE's responsibility.