

Unofficial translation



**LAO PEOPLE'S DEMOCRATIC REPUBLIC  
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY**

Ministry of Industry and Commerce

ref.no: 0682/MOIC.DoIH

Vientiane, dated 17 July 2020

**Instruction**

**On plastic waste processing plants**

- Pursuant to the Industry processing no. 48/NA, dated 27<sup>th</sup> December 2013.
- Pursuant to the organization and implementations of the Ministry of Industry and Commerce no. 230/PM, dated 24<sup>th</sup> July 2017.
- Pursuant to the Decision on factory management No. 0264/MOIC.DoIH, dated 15 March 2019.
- Pursuant to the proposal letter of the Department of Industry and Handicraft No. 0463/DoIH, dated 25 March 2020.

To ensure the management of the operation of the plastic waste processing plant to meet the requirements and technical standards of the factory in accordance with the relevant laws and regulations. Aim to reduce the impact on the health of labors in the factory and reduce the impact on the environment, contribute to the implementation of socio-economic development plans in a green and sustainable direction.

**Minister of Ministry of Industry and Commerce issues instruction as follows:**

**1. Plastic waste processing plant**

Plastic waste processing plants are as follows:

1.1. To be one of the twenty-four types of processing plants as defined in Article 8 of the Law on the industry processing no. 48/NA, dated 27<sup>th</sup> December 2013, the Code of Economic Classification of the Lao PDR (LSIC) namely: Code 2221 on Manufacture of plastic appliances and Code 3830 or sub-code 38302 on recycling of waste materials.

1.2 A factory that import plastic waste materials through the processing of transformation from the original condition into semi-finished or finished plastic products using machinery and labour in the factory, those products can be sold as commodities.

**2. Requirements for operating a plastic waste processing plant**

The operation of a plastic waste processing plant must meet the conditions as following:

2.1 Licensed: 1) Enterprise registration certificate; 2) Investment or business license; 3) Factory Environment Certificate; 4) Construction Permit; 5) Certificate of factory operation.

2.2 The completed of technical standards for each area as specified in the article 3 of this instruction.

2.3 At least 1 person with specific technical skills such as chemical or environmental.

2.4 Obtained the feasibility study on the economic-technical of the factory and a joint venture in the management to monitor the technical and environmental standards of the factory (the Department of Industry and Handicrafts will have a separate guideline on the joint venture).

### **3. Standards of plastic waste processing plant**

The plastic waste processing plant shall have the technical standards as following:

3.1 Factory location;

3.2 Factory buildings;

3.3 Factory production building;

3.4 Machinery used in factory;

3.5 Production processes in factory;

3.6 Storage of plastic waste materials;

3.7 Waste treatment and disposal;

3.8 Factory safety;

3.9 Factory sanitation;

3.10 Factory management.

### **4. Technical standards of plastic waste processing plants in each aspect**

4.1. Standards of factory location

1) Plastic waste processing plant shall be located in the places as following:

New factories established to be located in industrial zones or industrial parks that can only accommodate the operation of plastic waste processing plants;

2) Factories established before this instruction, which are not located in industrial zones or industrial parks under clause (1) above, shall be located at a distance of at least 100 meters away from the official community, the official protected area and at least 250 meters away from the natural water source.

4.2. Standards of factory buildings

1) Within the scope of the factory to have the necessary constructions such as administrative offices, production buildings, warehouses for plastic waste materials, products warehouses, treatment system and waste disposal;

2) Have convenient access roads, do not obstruct traffic, ensure no impact on the environment and society, and implement comply with relevant laws and regulations;

- 3) There should be strong walls or fences around the factory, the entrance and exit shall be wide and the factory name shall be pinned in accordance with the relevant regulations;
- 4) Production building, storage of raw materials, waste, treatment system and factory waste disposal shall be located at a distance of at least 10 meters from the fence of the factory.

#### 4.3 Standards of factory production buildings

The production plant of the plastic waste processing plant must meet the main standards ཅུ following:

- 1) Strong wall structure, resistant to various impacts and suitable for business operations; Plans for the installation of machinery, waste disposal and treatment system must be approved by the industry and commerce sector. Moreover, the factory building must be certified in construction techniques by the relevant authorities in accordance with the laws and regulations;
- 2) Pillars made of concrete, steel or wood, strong and durable;
- 3) Tile or galvanized roof, height from floor to ceiling not less than 4 meters;
- 4) The floor of the building should be made of concrete and there should be no cracks, no water or slippery, the area of the building should be organized systematically, clean and tidy by drawing a dividing line within the factory, around the building shall have drainage ditches to drain water into the sewage treatment plant;
- 5) Walls made of brick or block and concrete or alumina walls;
- 6) There are general entrances and exits and emergency exits at least halfway up. The emergency exit door should be easy to open and unobstructed when used with warning symbols and easy to see. Factory buildings with two or more floors shall have stairs going up and down and there must be at least one emergency step between the floors and be usable;
- 7) Production area to suit the number of labours at a rate of at least 3 square meters per worker;
- 8) Install light bulbs or bulbs to provide adequate light and suit of each stage;
- 9) Install fans, ventilation system and etc with suitable to the working area and the number of workers. Workplaces, greenhouse with high odors and heat temperatures should be installed with a vacuum cleaner through the aerator and heat treatment system.

#### 4.4 Standards of machinery used in factory

Machinery in the factory must meet the main standards as following:

- 1) The machine must be modern and can be used effectively, ensuring the product quality and standards. Plastic waste processing plant shall install the main machinery system such as washing machine, separator, rubber grinding machine, rubber smelting machine, rubber cutting machine, rubber cutting machine, odor treatment machine, smoke, waste treatment machine and machine to produce finished plastic products (if the produced as a finished plastic products);

- 2) The installation of machinery must be following with the technical standards, the plan or manual of installation of machinery, a suitable production of supply chain and ensure safety during use;
- 3) The transmission mechanism of the machine where there is a risk of accident, such as wheels, gears, belts, chains must have caps, protective wire mesh or barrier as necessary and appropriate;
- 4) Make a list of machinery by specifying the number, horsepower, power used, brand, country of manufacture, year of manufacture and to have a user manual;
- 5) Have a plan to monitor, maintain and repair the machine in good condition and use it regularly.

#### 4.5 Standards of production processing

The production process of the plastic waste processing plant must be a proper of supply chain from the raw materials to the final products as follows:

- 1) raw material separation process;
- 2) washing process;
- 3) mainstream process;
- 4) smelting process;
- 5) grain cutting process;
- 6) plastic wrapping and packaging process;
- 7) Production process of finished plastic products (if any).

Inside the factory building or workplace, there should be no sidewalk barriers, and signs should be in Lao language indicating the production process in each stage, and well organized.

#### 4.6 Storage of plastic waste materials

Storage of plastic waste materials shall comply with the standards as following:

- 1) Store in a well-organized place in the warehouse inside the factory that is standard, such as the floor is made of reinforced concrete and ensures no water retention;
- 2) Provide a cover cloth for waste materials, can withstand rain, wind and durable, not easily torn;
- 3) Have a ditch around the boundary of the warehouse to drain the waste water that flows out of the warehouse into a special reservoir to enter through the treatment system. Do not store raw materials or wastes outside the factory premises.

#### 4.7 Standards for treatment and disposal of plant waste

Plastic waste processing plant must have standards of treatment and waste disposal system by designing the system plan then submit to the Department of Industry and Handicrafts to check the accuracy can before proceed to the construction, installation of treatment machines and waste disposal.

In the production process that causes pollution must be equipped with deodorant, smoke and drainage to drain the treatment.

Factory waste must be standardized before it can be released from the factory. For the standard value of waste to be released from the factory that have to follow the regulations of the Ministry of Industry and Commerce and the relevant regulations.

#### 4.8 Factory Safety Standards

Plastic waste processing plant must have safety standards as following:

- 1) Monitor the condition of the factory building regularly. In case the factory building is damaged or deteriorated, it must be repaired in good condition and strong walls to ensure the safety of the factory building structure;
- 2) Within the factory, install electrical systems that ensure safety, such as electrical systems, light electricity and automatic cut-off devices;
- 3) Put up warning signs, prohibition signs and draw lines on the border line or warning signs in the danger area or where there is a risk of an accident;
- 4) To install fire protection system inside the factory to be appropriate and sufficient, such as fire extinguishing equipment or fire water system, alarm system and etc;
- 5) To have a safety management team at the factory to perform the duties of monitoring, inspecting and reporting the situation of accidents within the factory to the relevant parties regularly;
- 6) All factory workers must be trained in factory safety at least once a year.

#### 4.9 Factory sanitation standards

In the plastic waste processing plant, the sanitisation standards of the factory must be as follows:

- 1) Workers in the factory must wear standard protective equipment, as appropriate, depending on the needs of each high-risk and hazardous work, such as clothing, helmets, dust masks, odors, smoke and other earmuffs to prevent noise, gloves, work accident shoes, heat masks, sunglasses and eth;
- 2) Provide medicine cabinets and first aid kits in the factory, such as painkillers, bandages, cotton, red medicine, bandages, thermometers, and blood thinners. For medium and large factories with 51 or more workers, there should be a first aid room in the factory;
- 3) Adequate water supply system such as water supply, groundwater and etc;
- 4) Provide clean drinking water, have enough glasses drinking water and be suitable for the number of workers;
- 5) Provide clean toilets, urinals with enough toilet paper for the number of staff and workers as appropriate;
- 6) Provide adequate hand washing facilities, disinfectants or soap that are hygienic and suitable for the number of staff and workers;
- 7) Provide locker rooms, rest areas, parking lots, dining areas and other facilities as appropriate;

- 8) All staff and workers of the factory must undergo regular health check-ups at least once a year in accordance with the relevant labour laws and specific regulations. If a person is diagnosed with an infectious disease or occupational disease, he/she must stop working at the factory and implement the policy towards him/her as specified in the relevant labour laws and regulations.

#### 4.10 Factory management

The plastic waste processing plant shall have a plan for factory management, production management and implementation of any standard, such as the 5S system (5S) through certification from the Industry and Commerce Sector or comply with international standards (ISO) through the certification from relevant agencies.

### **5. Raw materials plastic waste for the factory**

Raw materials plastic waste to be processed in the factory can be used locally or imported with the conditions as following:

5.1 The use of raw materials plastic waste from domestic can be used for all types except plastic waste of infectious diseases.

5.2 Plastic waste raw materials imported from abroad must be in the form of plastic sheets, bags, hard rubber into sticks, sheets or lumps and must be clean, can be produced as a product of at least 80% and can be imported only as follows:

- 1) Acrylonitrile Butadiene Styrene (ABS);
- 2) Low Density Polyethylene (LDPE);
- 3) High Density Polyethylene (HDPE);
- 4) Polyamide6 (nylon) (PA6);
- 5) Polyamide66 (nylon) (PA66);
- 6) Polyethylene (PE);
- 7) Polyphenylene ether (PPE);
- 8) Polycarbonate (PC);
- 9) Polybutylene terephthalate (PBT);
- 10) Polyvinyl chloride (PVC);
- 11) Polyethylene terephthalate (PET);
- 12) Methyl Methacrylate (MMA);
- 13) Polymethyl methacrylate (PMMA);
- 14) Polypropylene (PP);
- 15) Cross linked polyethylene (XLPE).

5.3 Prohibit the import of plastic waste raw materials not specified in clause above 5.2 and plastic waste with the characteristics as following:

- 1) Types of infectious diseases;
- 2) Unclean, with a foul odor or stench;

- 3) Plastic waste materials that contain harmful elements or contaminants that can change properties such as explosives, flammable liquids, flammable solvents, water borne substances provide flammable, provide flammable, oxidized, peroxic, toxic, pre-corrosive and toxic gases when in contact with air and water;
- 4) Cannot be reproduced.

## **6. Transportation of plastic waste raw materials**

Imported from the domestic and abroad to be shipped to the factory must be packed tightly in lumps, packaged or placed in standard sealed containers and containerized vehicles or covered with cardboard to ensure no odor or spillage during shipment.

## **7. Preparation of annual action plan**

The operation of plastic waste processing plant to create an action plan, summarizing the annual activities in print form instance (Form 1) production plan, (Form 2) sales plan, (Form 3) annual demand plan and (Form 6) summary of the import of raw materials, spare parts, machinery, equipment and mechanical vehicles for production, determined by the actual production capacity of the factory and submitted to the Department of Industry and Handicrafts, Ministry of Industry and Commerce for approval.

The annual action plan of the plastic waste processing plant, if necessary, can be revised once a year in case the actual import cannot meet the annual demand plan (Form 3), the rest is considered a waste.

## **8. Import of plastic waste**

### **8.1 Requirements for importing plastic waste**

The import of plastic waste for processing in the factory must meet the requirements as following:

- 1) Must be a plastic waste processing plant that meets the conditions specified in this instruction;
- 2) There must be an annual import demand plan for raw materials based on Form 3, which has been approved by the Department of Industry and Handicrafts;
- 3) There must be a certificate of origin of plastic waste from the government authorities or any relevant organization of the country of origin that specifies the type, quantity, cleanliness, etc;
- 4) Must fulfil tax, duty and other obligations in accordance with the relevant laws and regulations;
- 5) The plastic waste material to be imported must be wrapped in cubes according to the appropriate size, wrapped or in a tightly closed container.

### **8.2. Procedures for importing plastic waste**

To import plastic waste for processing at the factory have to follow the steps as following:

- 1) To submit a written request to import each case to the Department of Industry and Handicrafts attached annually plan and related documents such as: ❶ purchase order, ❷ commercial invoice, ❸ certificate of cleanliness of plastic waste from the government or any relevant organization

of the country of origin, ④ photographs of plastic waste, ⑤ authorization of documents, ⑥ copy registered enterprises, ⑦ copy of the certificate of environmental plant, ⑧ copy of factory operation certificate ⑨ copy duties taxes, duties and other obligations;

- 2) Import of plastic waste materials to be imported through international border checkpoints near the factory;
- 3) The Department of Industry and Handicrafts shall consider in accordance with the annually operation plan of the factory and issue the import certificate within 7 working days from the date of receipt of complete and correct documents. In case of incomplete or incorrect documents shall notify the applicant within 5 working days from the date of receipt of the documents; After the import certificate is issued, a copy of the document must be sent to the Department of Industry and Commerce of the province or the capital where the factory is located within 5 working days to monitor the actual import.
- 4) The operator of the plastic waste processing plant shall submit the import certificate to the customs officer at the international border checkpoint to monitor and inspect the actual import;
- 5) Plastic waste imported from abroad to the factory before opening the waste container to the factory owner to notify the Department of Industry and Handicrafts or the Department of Industry and Commerce of the province, the capital to coordinate with the relevant agencies to inspect. For factories located in industrial zones, industrial parks or special economic zones, the factory owner shall notify the Department of Industry and Commerce of the province or the capital to coordinate with the committee in charge of the inspection area. The Department of Industry and Handicrafts will examine some cases that are considered necessary and cases that are suspected;
- 6) In case of non-standard import of plastic waste as specified in clauses 5.2 and 5.3 in clause 5 of this instruction that must return to the country of origin immediately. The factory or importing company is responsible for all return costs.

### 8.3 Certificate of import of plastic waste

- 1) Consideration of issuing import certificates, the Department of Industry and Handicrafts shall consider in accordance with the annual import plan that has been approved each time based on the actual production capacity of the factory;
- 2) The import certificate is valid for 180 days from the date of issuance of the certificate. The import certificate can be renewed once but not more than 90 days.

## **9. Fees and service charges for importing plastic waste from abroad**

Imports of plastic waste from abroad must be subject to fees and charges as stipulated in the Presidential Decree on Fees and Service Charges.

## **10. Improving and adapting plastic waste processing plant**

Plastic waste formed prior to this instruction shall be amended and adjusted as follows:



- 1) The plastic waste processing plant that has been licensed and operated in the past must be fully upgraded in accordance with the requirements as specified in clause 2 and comply with the technical standards as specified in clause 3 and clause 4 of this instruction;
- 2) In case any factory does not meet these requirements and standards, the factory operator shall make a plan to improve the factory and submit it to the Department of Industry and Handicrafts to examine the compliance with the conditions and technical standards as specified in this instruction. After the factory renovation plan is approved, the factory can be renovated. During the factory renovation, the Department of Industry and Handicrafts, in collaboration with the Provincial, Capital of the Department of Industry and Commerce, will follow up periodically until the factory renovation is completed. During the renovation, the plant shall temporarily stop production in the improved part;
- 3) When the factory renovation is completed, it can apply to the Department of Industry and Handicrafts to consider the factory operation in accordance with the Decision on factory management No. 0264/MOIC.DoIH, dated 15 March 2019.
- 4) After complying with the conditions and standards as specified in this instruction and getting permission from the Department of Industry and Handicrafts, the production can resume.

#### **11. New plastic waste**

Setting up new plastic waste processing plant have to follow the requirements and standards set out in the instruction and implement the procedure for setting up a factory as determined in the Decision on factory management No. 0264/MOIC.DIH, dated 15 March 2019. However, it is necessary to wait for a new legislation to replace Order No. 0930/MOIC.DIH, dated 31 July 2019, by agreeing to allow the business to operate on a plastic waste processing plant, it is possible to obtain a document to set up a new plant.

#### **12. Measures against violators**

Violators of this instruction will be subject to the measures as following:

- 1) Plastic waste processing plants, if they do not comply with the conditions and standards as specified in this instruction, will be subject to measures in accordance with Articles 53, 54 and 55 of the Decision on factory management No. 0264/MOIC.DIH, dated 15 March 2019, related laws and regulations;
- 2) In case that the import of plastic waste does not meet the standards as specified in clauses 5.2 and 5.3 in clause 5 of this instruction, it shall be adjusted in accordance with Article 55 of the Decision on factory management No. 0264/MOIC.DIH, dated 15 March 2019, related laws and regulations;
- 3) Recycled plastic pellets from plastic waste, if not food grade quality, are not allowed to be used in the finished product of any type of food container or beverage container. Violation cases

will be implemented in accordance with the Decision on factory management No. 0264/MOIC.DIH, dated 15 March 2019, related laws and regulations in each case;

### **13. Implementation**

Assigned to the Department of Industry and Handicraft to disseminate the instruction of the Department of Industry and Commerce of the provinces, the capital, the Office of Industry and Commerce of the districts, the city for management for monitor, inspect and coordinate with relevant authorities to implement this instruction effectively.

### **14. Effectiveness**

This instruction is effective from the date of its signature and fifteen days after posted in the Lao official gazette.

Minister

[Seal and Signature]

Ms. Khemani Pholsena