YYOTo 001 Sorting of waste, Tornio plants

This guideline covers the sorting at source of metals and small waste (hazardous waste, wood, paper/cardboard, energy fraction and landfill waste) and other separately collected waste fractions (such as bio waste, waste electrical and electronic equipment, concrete, asphalt, rock material).

1. Sorting at source of metals and waste

Sorting reduces the adverse environmental impact of waste and the costs of waste management as well improves the reuse of waste. The departments are responsible for ensuring that the waste containers are sufficient, and they also take care of the general functioning of sorting in their areas. More waste containers can be ordered from L&T contact person Heikki Herrala, tel. +358 (0)50 069 6396.

Fractions corresponding to municipal waste are sorted into different waste fractions at the plant area. Also, metals are collected separately for recovery. In early 2016, the collection of bio waste began in break rooms and dining areas.

Metals

Steel and iron scraps

All internal steel and iron scraps must be brought to the melt shop through the raw materials reception unit. The raw materials reception unit will inspect the scraps in order to determine whether or not they are viable for reuse. The reception unit will also designate the correct unloading location and, if necessary, provide instructions on the weighing of the load. The raw materials reception unit is located west of the melt shop, door P191, and is open on weekdays from 6:00 a.m. to 9:30 p.m. (tel. 3136, +358 (0)40 712 0271). Outside the opening hours, internal scraps must not be brought to the raw materials storages, as scraps cannot be delivered without a reception inspection and a designated unloading location.

The maximum piece size of scrap is 1.5 m x 0.5 m x 0.5 m. Oversized steel is taken for flame cutting to the location specified by the melt shop. Demolition work carried out at the plant is subject to instructions issued on a case-by-case basis. The work is performed either by Outokumpu or an external contractor, as instructed in the contract. The person responsible for the demolition/renovation/maintenance/etc. work at the department is also responsible for providing appropriate instructions on sorting any surplus materials of the project.

Copper and aluminium scrap (cables, cable racks, etc.)

There are separate collection bins for copper and aluminium scraps at the departments' electrical repair shops. When the containers are full, the electrical repair shop's supervisor ensures that the department's container is emptied in the plant's collection point located in the western end of the cold-rolling mill (see the map below). The forklift truck unit is responsible for the emptying (tel. 5900).

Larger pieces of copper and aluminium scrap are taken directly to the collection point.

A roll-off is ordered for the demolition work site from the L&T contact person (tel. +358 (0)50 069 6396) or the L&T production manager (tel. +358 (0)500 683 880). The supervisor supervising the demolition work is responsible for ensuring that the scraps are taken to the right place.

L&T is responsible for removing the waste delivered to the collection point.

Hazardous waste

Hazardous waste includes waste fractions that could cause harm to health or the environment due to their properties.

Hazardous waste must be kept separate from other waste fractions and placed in intermediate storage in separate, clearly marked collection bins at the departments. The hazardous waste must be taken for processing from the collection bins to a plant which has the appropriate permits required by the operations.

Typical hazardous waste generated in the operations of the plants include waste oil, oil-containing waste, aerosol bottles, chemical waste, batteries and fluorescent tubes, etc.

Matters concerning hazardous waste fall under the responsibility of the plant services' supervisor of construction and contracting work (tel. +358 (0)40 843 5095).

Energy fraction, combustible waste

Waste that cannot be recycled as materials but that can be utilised in energy production is suitable for energy fraction. Energy fraction is collected in containers and compactors marked with orange energy fraction labels.

Materials that can be disposed of as energy fraction include packaging plastic, soiled cardboard, expanded polystyrene, paper towels and plastic (not PVC). Energy fraction must be kept separate from the other waste fractions so that it can be later be put to use successfully.

Wood waste

Non-impregnated waste wood that is suitable for fire wood is collected on separate waste wood roll-offs and containers. The containers and roll-offs are emptied on the marked ("jätepuutavaraa" [waste wood]) collection site in the plant area. Wood waste is taken to be utilised in energy production. The environmental engineer is the contact person (tel. +358 (0)40 516 8744).

NOTE! Recyclable, intact pallets are collected next to the wooden containers and from there, they are delivered to be reused as pallets.

Impregnated wood is taken to the collection point located on the yard of Caverion's base of operations.

Paper and cardboard

To be disposed of in paper collection boxes

- office paper and cardboard (with staples)
- magazines, advertisements
- shredded paper in sacks
- books with covers

To be disposed of in cardboard cages

- cardboard boxes
- brown paperboard
- kraft paper
- corrugated cardboard
- No need to remove labels, adhesive tape or staples

Not to be disposed of with paper and cardboard

- wet or soiled paper/cardboard
- plastic
- tissue paper: paper towels and toilet paper
- aluminium paper, waxed paper

- foiled packaging, liquid packaging cardboard
- expanded polystyrene
- other materials that are not paper or cardboard

Paper and cardboard are delivered for reuse.

Oily interleaving paper generated at the cold rolling mill is collected in separate collection bins for interleaving paper.

Landfill waste

Waste fractions not mentioned above should be deposited in landfill waste containers. Landfill waste includes PVC plastic (e.g., plastic folders and pockets, old pipes), safety footwear, all protective gloves, fibreglass, fire mats and tarpaulins. Landfill waste is deposited at the City of Tornio's Jäkälä waste treatment plant.

2. Other waste fractions collected separately

<u>Bio waste</u>

At plant canteens, control rooms and break rooms, bio waste is sorted separately from landfill and energy waste. In addition to leftovers, paper napkins are sorted into bio waste containers. Other waste generated in connection with meals is considered mixed waste (plastic, cartons for yoghurt, juice and milk). Bio waste is taken to the City of Tornio's Jäkälä waste treatment plant for composting. L&T Oy provides monthly reports on the waste quantities.

Interleaving paper

Oily interleaving paper waste generated at the cold rolling mill is collected in separate collection bins and taken to be recycled. L&T Oy provides monthly reports on the quantities.

Waste electrical and electronic equipment (WEEE)

Waste electrical and electronic equipment includes decommissioned household appliances, IT equipment, consumer electronics, power and electronic tools and certain supervision and control equipment, such as:

- refrigerators, washing machines, electric stoves and ovens, microwave ovens, vacuum cleaners
- electrical radiators, air conditioning equipment
- IT hardware, photocopiers, electrical typewriters, calculators, phones
- radios, televisions, cameras, recorders
- electric drills, saws and other similar tools
- fire detectors, thermostats
- electrical measurement, weighing and adjustment devices as well as monitoring and control equipment

The collection point for waste electrical and electronic equipment is located at the western end of the cold rolling mill (see the map). From the collection point, the scrap is taken for processing to a plant where hazardous substances are separated from the devices and material that can be recovered.

Concrete and asphalt

Concrete and asphalt waste at work sites is collected on a separate roll-off, ordered from the L&T production manager (tel. +358 (0)500 683 880). L&T also arranges the emptying of the roll-offs in the intermediate storage area, from where crushed concrete and asphalt are subsequently taken to earth construction sites for reuse. Waste must be weighed before intermediate storage.

Soil and rock materials

TEPA/Infra (developer engineer as the person responsible) specifies the locations for depositing soil and rock materials in the plant area. TEPA/Infra informs departments, the design office and project organisations of the deposit locations.

Work supervisors and the supervisor of construction and contracting work in technical services are responsible for the supervision of the deposit locations (only these materials may be taken to the area). When the area is full, the persons responsible in the TEPA/Infra project are notified, and they will specify the new location. The supervisor of construction and contracting work in technical services is responsible for the aftercare of the deposit locations.

Appendix:

Map: Location of the recycling point.