

Variation to IPPC permit application for AGV Non Ferrous Malta Ltd.

As per ERA requirements

IPPC Form C Report

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1.0 Introduction

This report provides the information of the change of activities at AGV Non Ferrous Malta to include the temporary storage and dismantling of air conditioning units (waste electrical and electronic equipment, WEEE) and storage/export of additional batteries and accumulator types, in the pursuit of a revised Integrated Pollution Prevention and Control (IPPC) Variation Permit.

AGV Non Ferrous Malta already has an IPPC Permit (IP 0004/13/A). This existing permit covers the following activities as listed in Schedule I of the Industrial Emissions (IPPC) Regulations:

- » Temporary storage of hazardous waste (waste batteries) not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6; with a total capacity exceeding 50 tonnes, excluding temporary storage pending collection on the site where the waste is generated.
- » Storage of non-hazardous wastes (glass, metals, wood) in loose format or in other packaging (i.e. jumbo bags or similar)
- » Storage of baled non-hazardous waste (paper, cardboard, plastic and metals)

The ERA carried out site inspections of the facilities on the 6th April 2018, 13th June 2018 and 6th July 2018. During these site inspections there was evidence of the storage and dismantling of WEEE onsite, specifically the dismantling of air conditioning units. Such activities are not covered by the current IPPPC permit (IP 0004/13/A). AGV Non Ferrous Malta have been advised to stop all WEEE related activities until a variation in their IPPC permit has been applied for and approved by the ERA.

A new permit is required in order to comply with Condition 21 of the WASTE MANAGEMENT (ELECTRICAL AND ELECTRONIC EQUIPMENT) REGULATIONS (S.L. 549.89):

“21 (1) Persons who intend to operate a waste electrical and electronic equipment compliance scheme as required under these regulations, including the collection, sorting, storage, treatment, export and recycling of waste electrical and electronic equipment, on behalf of producers, shall require and obtain a valid permit from the competent authority in terms of the Waste Regulations.”

Air conditioning units are included in the category of *large household appliances*, as described in Schedule I and II of S.L. 549.89.

This report aims to provide the following details required for Part C of the IPPC application:

Section in the IPPC Permit Application	Reference Section in this Report
C1.2 Non-technical description	2.0
C1.3 The proposed variations	3.1
C2.1 Environmental Management System	4.1
C2.2 Proposed Activities	4.2, 4.3, 4.4, 4.5, 4.6
C2.3 Raw Materials	4.7
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C2.5 Maintenance	4.9
C2.6 Energy	4.10
C2.7 Water	4.11
C2.8 Risk Assessment	4.12
C2.9 Training	4.13
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C3.1 Waste	4.2
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2.0 *Non-Technical Summary*

AGV Non Ferrous Malta operates a waste management facility located in a warehouse complex, Ta'Ghadajma, in the limits of Mqabba. The facility handles both hazardous and non-hazardous waste, in accordance with the current Permit (IP 0004/13/A).

The hazardous waste handled at the facility is composed of batteries and accumulators. A wide variety of batteries are temporarily stored onsite until they are packaged and exported.

Non-hazardous waste including waste packaging, paper, cardboard, plastic, rubber, ferrous and non-ferrous metals are stored on site. The materials are separated and stored as bales or loose material within designated storage areas. The individual non-hazardous waste streams are then transferred to other local facilities or exported via registered waste brokers.

As part of the proposed alterations, AGV Non Ferrous Malta will begin handling WEEE, specifically air conditioning units. The processing of the units will be basic and restricted to separation of the plastic casings from the main units; this will be carried out manually. This variation also includes the handling, storage and export of additional batteries and accumulators. The current permit (IP 0004/13/A) does not cover the storage and processing of WEEE, as well as the handling, storage and export of additional batteries and accumulators. Therefore, AGV Non Ferrous Malta is applying for a variation of the IPPC permit in line with the national IPPC regulations (S.L. 549.77).

3.0 About the Installation

3.1 The Proposed Variations

A variation of AGV Non Ferrous Malta's current IPPC Permit (IP 0004/13/A) is required as the company plans to expand the current operations to include the handling of WEEE waste and additional batteries and accumulators, which are not covered by the existing permit.

AGV Non Ferrous Malta intends to start accepting air conditioning units at the facility. Once the air conditioning units arrive on site the internal component will be manually separated from the plastic casing. This will enable the plastic component to be dealt with separately from the rest of the unit. The handling and processing of the air conditioning units will comply with the guidelines provided in S.L. 549.89 (WASTE MANAGEMENT [ELECTRICAL AND ELECTRONIC EQUIPMENT] REGULATIONS).

4.0 Proposed Techniques

4.1 Environmental Management System

The existing EMS will not be amended.

4.2 Proposed Activities

The proposed new activity at the facility involves the handling of air conditioning units, which are classed as WEEE. The units will be delivered onsite where they will then be manually dismantled. The plastic casing will be separated from the rest of the unit. The air conditioning units will only be accepted and processed if they are accompanied with a valid degassing certificate. If the units do not have a valid degassing certificate, they will be stored in a designated area until they can be transported off site to a facility which can handle such waste.

The dismantling of the air conditioning units and the storage of the separated WEEE waste will be carried out in a designated area in garage 41 (as indicated in Figure 1). The separated plastic casings will be stored and processed with the other plastic waste that is already handled at the facility. The quantities of WEEE that are expected to be stored and processed onsite are summarised in Table 1. Details about the methods of storage and processing/disposal are also included.

This variation also seeks to include the storage and export of additional batteries and accumulators. These batteries (EWC 20 01 33*) will be brought to the site, shrink rapped, stored and exported. Further information is provided in Table 2.

Currently, the site is permitted to store and export lead-acid batteries, nickel-cadmium batteries, mercury-containing batteries, alkaline batteries along with other types of batteries and accumulators. No neutralisation processing or emptying procedures occur for these types of batteries and accumulators.

All batteries entering the facility are shrink-wrapped on plastic pallets with adequate trays to collect any leaking electrolytes. However, in case of accidental leakages of the batteries and spillages of the diluted acid, they are perpetually emptied immediately upon arrival, and placed in drip trays made of acid-proof material. The acid container is located within a trough which has a capacity of 110% of the container, in order to prevent any spillages from the possible crack of the container. The diluted acid is also equipped with a trough with capacity 110% that of the dilute acid container constructed in a way that prevent rapture and can only suffer, remotely, cracks that may result in the acid trickling down to the trough.

Hazardous waste (stored in warehouse 41) is segregated from the remaining non-hazardous combustible waste (stored in warehouse 42). This prevention mechanism ensures that any potential fumes released from batteries and accumulators are contained in one area. The standard procedure entails that the batteries are temporarily stored, packed and exported tale quale. Both dry and wet-cell batteries are packaged in 1000 litre double density containers per week, and are exported to Italy for treatment at an authorised treatment

plant, with all the documentation submitted to the Authority for approval prior to any transfer of the acid to the plant.

All other non-hazardous wastes leaving the site after storage and plastic wrapping are sent to licensed facilities, either locally or abroad. Disposal certificates are kept on record and made available for inspection.

Table 1: Summary of the proposed WEEE activities on site

Type of Waste	WEEE (from air conditioning units)
Category of Waste (Inert, Non-Hazardous, Hazardous)	Hazardous
EWC Code	16 02 13*
Quantity (maximum site capacity in tonnage)	3
Projected quantity of waste to be processed annually (in tonnage)	Less than 1
Method of storage and containment	Stored in a designated area
Method of processing and/or disposal	Sold locally or exported to EU countries
Waste carrier/broker	AGV Non Ferrous Malta GBR Permit: GBR/12/01277/18 and GBR/12/01278/18

Table 2: Summary of additional batteries and accumulators

Type of Waste	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
Category of Waste (Inert, Non-Hazardous, Hazardous)	Hazardous
EWC Code	20 01 33*
Quantity (maximum site capacity in tonnage)	160
Projected quantity of waste to be processed annually (in tonnage)	30 tonnes/year
Method of storage and containment	Leak proof containers/On pallets prior to shipping
Method of processing and/or disposal	Sold locally or exported to EU countries
Waste carrier/broker	AGV Non Ferrous Malta GBR Permit: GBR/12/01277/18 and GBR/12/01278/18

The activities related to the other waste streams handled onsite will not change from those listed in the current permit (IP 0004/13/A). The maximum storage capacity for each of the

other waste streams, as listed in the current permit application, are listed in Table 3. The storage areas for the incoming and outgoing waste are mapped in Figure 1.

Table 3: Maximum site storage capacity for all waste streams handled onsite

Waste Stream	EWC Code	Quantity (maximum site capacity in tonnage)
Paper and cardboard packaging	15 01 01 Paper and cardboard packaging	20
	19 12 01 Paper and cardboard	
Plastic and rubber	15 01 02 Plastic packaging	35
	16 01 19 Plastic	
	17 02 03 Plastic	
	19 12 04 Plastic and rubber	
	20 01 39 Plastics	
Waste packaging	15 01 03 Wooden packaging	20
	15 01 04 Metallic packaging	
	15 01 06 Mixed packaging	
	15 01 07 Glass packaging	
Ferrous and non-ferrous metals	16 01 17 Ferrous metal	70
	16 01 18 Non-ferrous metal	
	17 04 01 Copper, bronze, brass	
	17 04 02 Aluminium	
	17 04 03 Lead	
	17 04 04 Zinc	
	17 04 05 Iron and steel	
	17 04 07 Mixed metals	
	17 04 11 Cables other than those mentioned in 17 04 10*	
	19 10 02 Non-ferrous waste	
	19 12 02 Ferrous metal	
	19 12 03 Non-ferrous metal	
	20 01 40 Metals	
Batteries and accumulators	16 06 01* Lead batteries	160
	16 06 02* Ni-Cd batteries	
	16 06 04 Alkaline batteries (except 16 06 03*)	
	16 06 05 Other batteries and accumulators	
	16 06 06* Separately collected electrolyte from batteries and accumulators	
	20 01 34 Batteries and accumulators other than those mentioned in 20 01 33*	

4.2.1 Site Plan Showing the Location of the Current and Proposed Activities

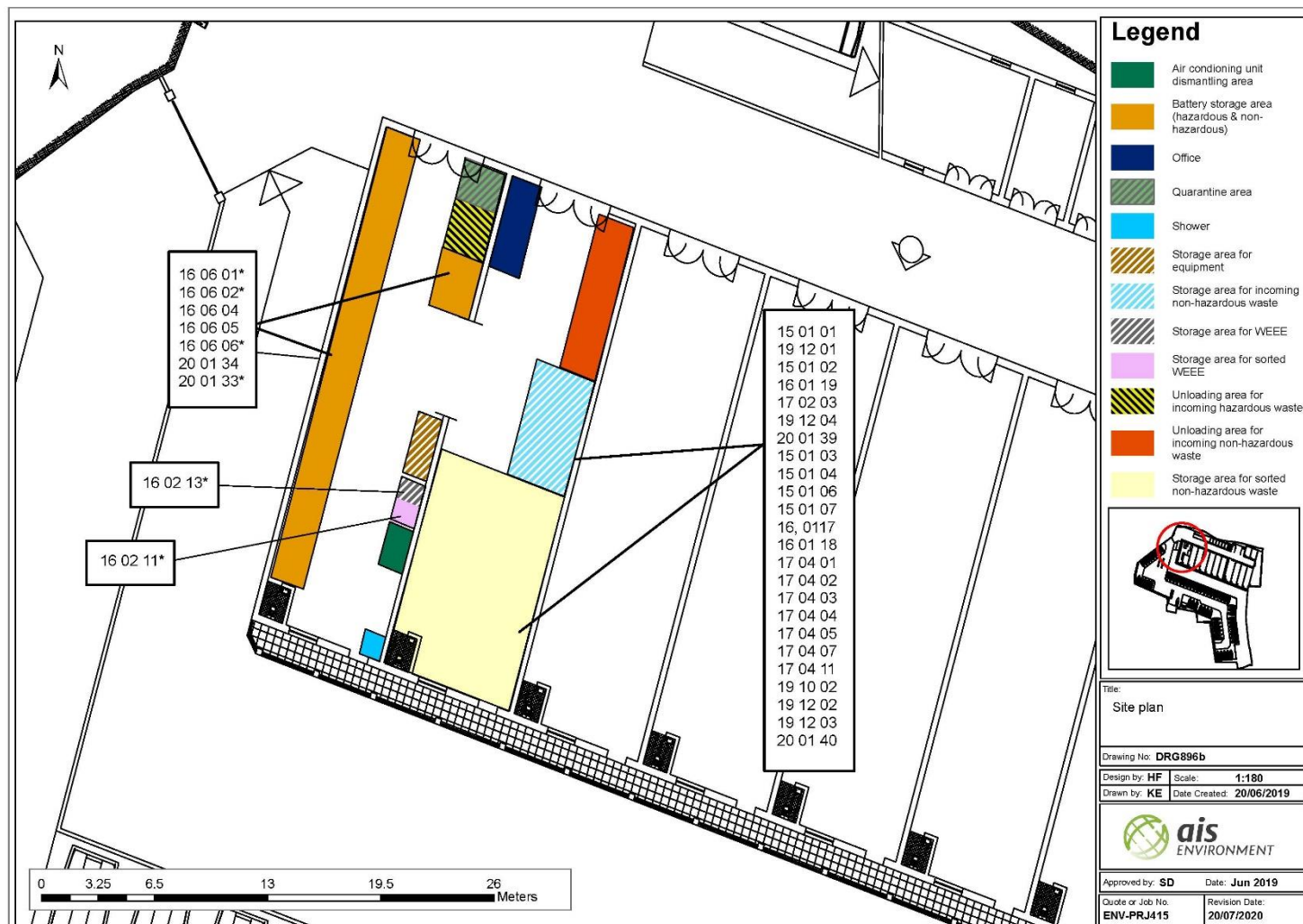


Figure 1: Site plan showing the location of the current and proposed activities

4.3 Proposed techniques and measures to prevent and reduce waste and emissions of substances and heat

As AGV Non Ferrous Malta is a waste management facility, the main aim of the business is to prevent and reduce waste generation from other sites.

The waste that is derived directly from the facility will not change as a result of the handling of WEEE and additional batteries and accumulators. The waste generated on site is limited to small quantities of municipal solid waste from the offices and the consumption of food by the employees.

Any unpermitted waste will continue to be stored in a non-leaking skip or similar container in a designated area until it is transported offsite.

The dismantling of the air conditioning units (WEEE) will be carried out manually. Therefore, the proposed variation will not result in any additional vehicular emissions.

4.4 Flow Diagram of the Current and Proposed Installation Activities

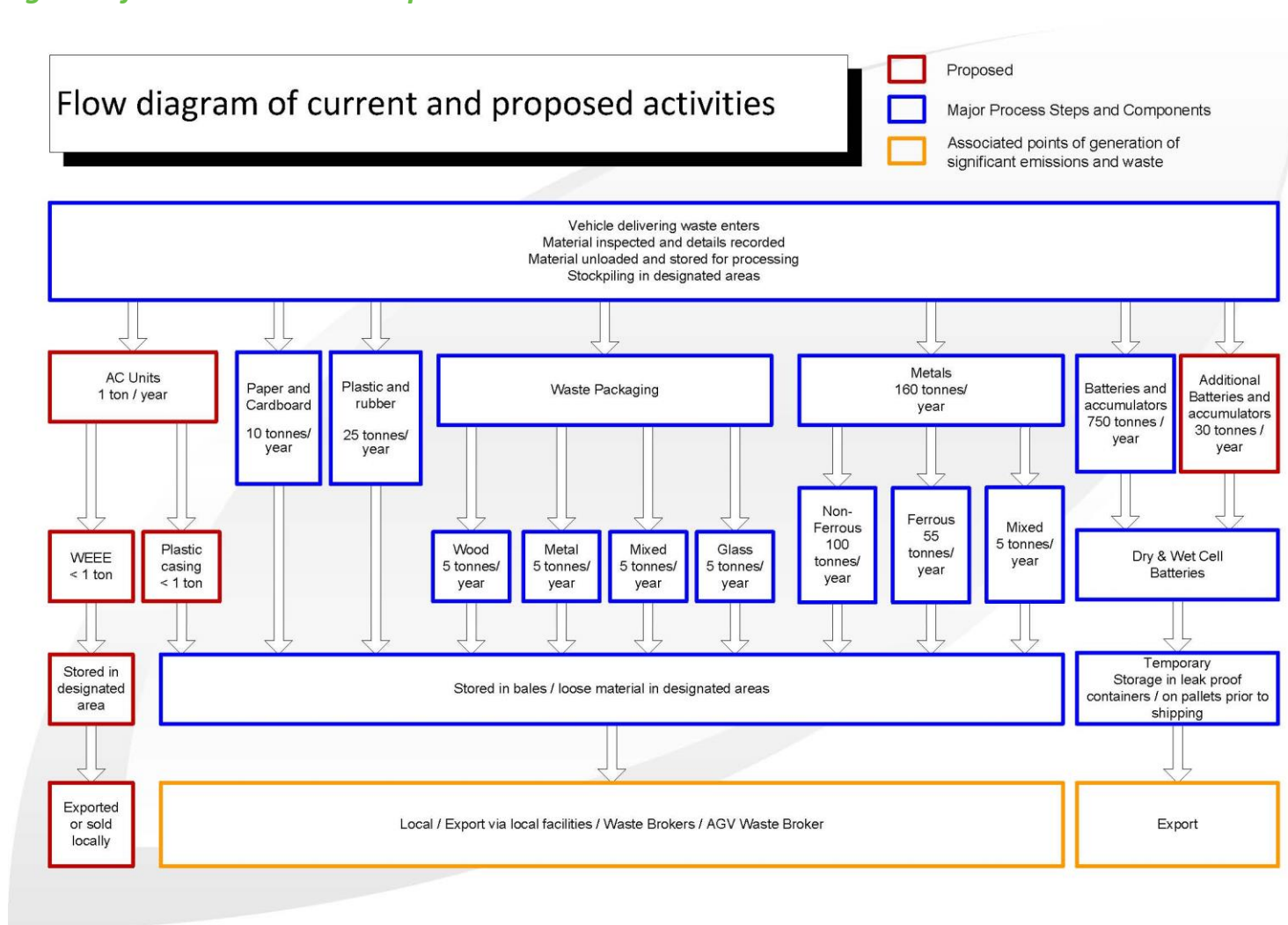


Figure 2: Flow diagram outlining the current and proposed activities at AGV Non Ferrous Malta

4.5 Comparison of the proposed changes inline with relevant BAT conclusions

The proposed variations will not affect the comparisons with the BAT conclusions that were previously presented for the current IPPC permit (IP 0004/13/A).

A comparison of the AGV Non Ferrous Metal activities with the most recent BAT conclusions (2018) is included in this report in Appendix 1.

4.6 Consideration of alternatives to the proposed activities and techniques

No alternative technologies, techniques or methods were considered.

4.7 Raw Materials

As AGV Non Ferrous Malta is a waste management facility, the raw materials required for the proposed activities will be produced at other sites. Details of the type of items and expected annual processing amounts are described in Section 4.2.

No additional raw materials will be required for the handling and dismantling of WEEE and additional batteries and accumulators.

4.8 Ozone depleting substances and fluorinated greenhouse gases

There will be no additional equipment/machinery required for the proposed activities that contain ozone depleting substances and fluorinated greenhouses gases, with a fluid charge of 3kg or more.

4.9 Maintenance

There will be no changes to the existing maintenance programme as approved in IP 0004/13/A.

The areas that will be used to store and process the new proposed waste types on site will be included in the routine site inspections. The inspections aim to identify signs of damage, deterioration or leakage in the separate working and storage areas. Inspections are performed on a regular basis to enable any issues that may arise to be tackled promptly and efficiently.

4.10 Energy

It is not envisaged that the proposed variations will result in any significant changes in the annual energy consumption at the facility.

The measures that are already in place to reduce energy consumption at the facility will continue to be adhered to. No new measures will be implemented.

4.11 Water

No significant changes are expected in the annual water consumption at the facility operated by AGV Non Ferrous Malta as a result of the proposed activities.

4.12 Risk Assessment

The proposed variation in activities will not change the outcomes and recommendations made in the existing emergency plans and risk assessment.

4.13 Training

No additional training programmes are required for the proposed variation in activities. The technically competent person proposed in the previous application will not be changed.

4.14 Cessation

Should AGV Non Ferrous Malta cease to operate, any remaining air conditioning units will be transported to another registered facility.

5.0 Proposed Emissions

5.1 Rainwater

There will be no changes in the rainwater handling systems onsite.

5.2 Noise and Vibrations

The proposed activities will not result in the generation of significant noise or vibrations as the processes will be carried out manually.

5.3 Monitoring

The proposed variation in activities will not necessitate an emission monitoring programme.

Detailed records of the quantities of additional waste types delivered and removed from the site, waste carriers and final destinations will be kept. The aforementioned monitoring is already carried out on site for the other waste streams that are handled by AGV Non Ferrous Malta.

6.0 Impact on the Environment

6.1 Environmental Effects

The handling and dismantling of air conditioning units as well as additional batteries and accumulators is not expected to result in any adverse environmental effects. The facility will ensure that all waste is handled correctly in line with all local and EU waste regulations. Additionally, the proposed activities will not have a significant impact on any other neighbouring sites.

7.0 Expenditure Plan

The proposed variations in on site activities will not result in any significant changes to the existing expenditure plan as approved in the current IPPC Permit (IP 0004/13/A).

Appendix 1

Comparison of Site Activities with the Bat Conclusions of 2018