

Marsa Thermal Treatment Facility

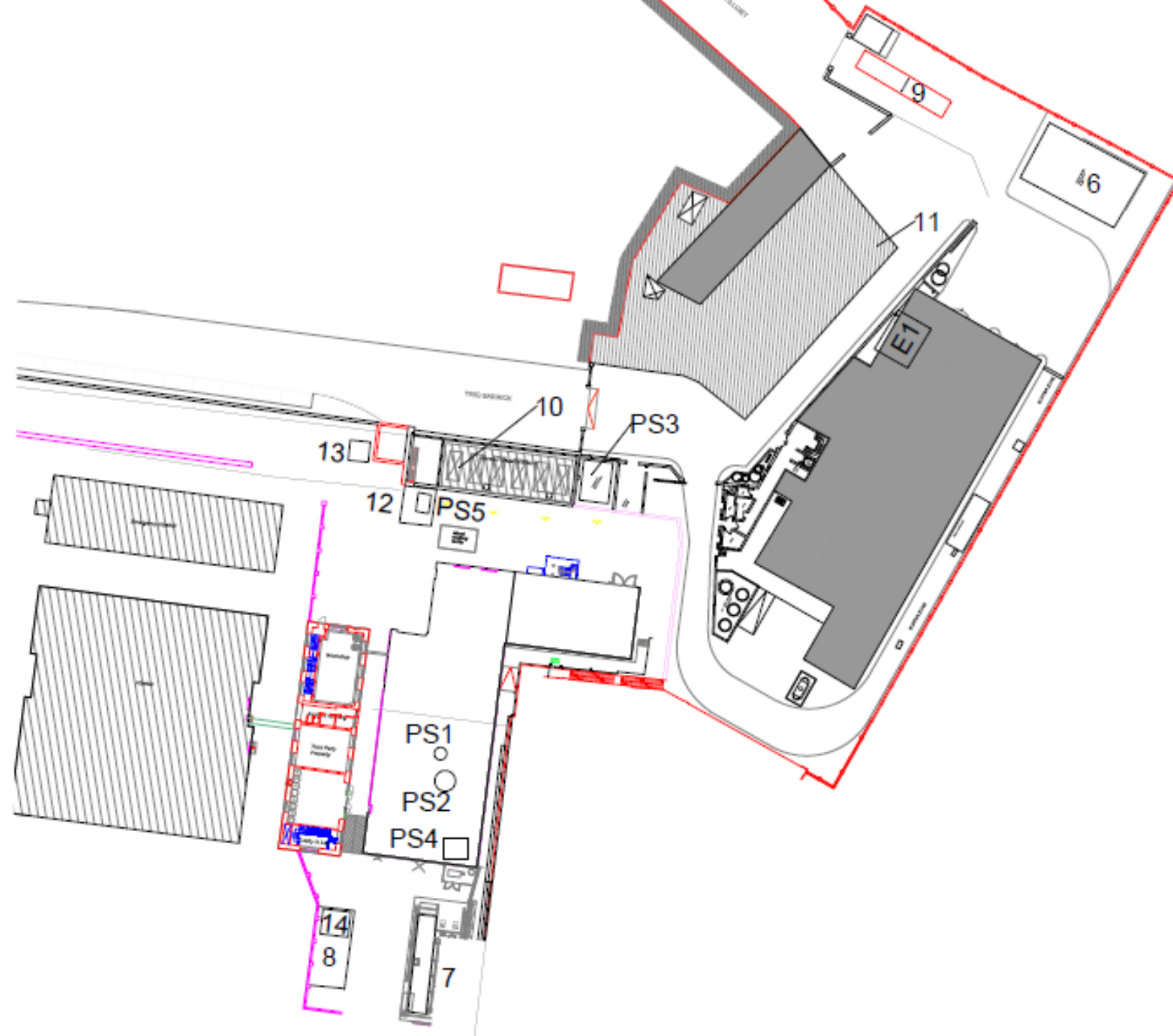
Application for
Renewal of IPPC
Permit IP 0004/07/B



Block Diagram

Legend

PS1	Emission point for Main Stack (I)
PS2	Emission point for Emergency Stack (I)
PS3	Emission point for Emergency Generator (A)
PS4	Emission point for Emergency Generator (I)
PS5	Emission point for Bin Washer Boiler (I)
6	Waste Water Treatment Plant
7	Pharma Store
8	Hazardous Waste Store/Pharma
9	Weighbridge
10	Fuel Storage Facility
11	Chemicals Storage
12	Bin Washer Boiler (I)
13	Weighing Platform
14	Quarantine Area
E1	Sewer Discharge Point



Activities carried out through IP 0004/07/B

The Marsa Thermal Treatment Facility (MTTF) consists of a waste management facility originally designed for the treatment of abattoir wastes, that was eventually adapted to treat a specific range of clinical and other hazardous wastes.

Main permitted activities:

- Incinerator or waste incineration plant, from the receipt, temporary storage and incineration of specified wastes, together with the flue-gas treatment, and temporary storage on site of residues generated.

Activities carried out through IP 0004/07/B (cont.)

Associated permitted activities:

- Waste heat recovery boiler and economiser, for energy recovery.
- Blood coagulator for the sterilisation of blood, and separation of blood coagulum from water.
- Waste water treatment plant, for treatment of waste waters on site.
- Autoclave intended for treatment of animal by-products received on site, and eventual disposal in the incinerator.
- Diesel tank farm, to store fuel for on-site use.
- Diesel Generator to generate electric power in case of electricity failure.

Scope of Application Renewal

This permit renewal seeks the Competent Authority's consent for:

- Continued operations as approved under IP 0004/07/B, with the exception of the temporary suspension of the autoclave activities, pending repairs;
- To address various points where environmental mitigation requires improvement, including projects that shall be the subject of a separate request for variation.

Documentation submitted as part of the Application

- Introduction & Non-Technical Summary
- Plant Specifications
- Drawings, Plans & Certifications
- EMS Documentation (incl. Waste Acceptance Procedures, Operational Procedures, Maintenance Schedule)
- Emergency Response Plan
- Environmental Monitoring Data
- Waste Water Treatment Plant Contingency Plan
- BAT Conclusions
- Future Improvements
- ERA Review
- Statutory Consultation Feedback

Mitigation Measures

- Operations have been considered in the light of the Waste Incineration Best Available Technique (BAT) conclusions published in 2019.
- Air emissions are controlled as follows:
 - Oxides of Nitrogen are abated via dosing of Urea;
 - Acid Gases are abated using a Sodium Bicarbonate;
 - Dioxins, mercury and volatiles are abated using Activated Carbon;
 - Particulate matter are abated by Bag Filters.
- Waste water is treated via the Waste Water Treatment Plant.
- Ashes are collected and disposed of in authorised facilities either in Malta or abroad.

Mitigation Measures (cont.)

- In order to mitigate odour, Wasteserv has submitted to the Authority, a Method Statement detailing:
 - Enforcement of instructions and practices related to a 'closed-door policy' and house keeping;
 - Change in procedure w.r.t acceptance of fallen animals at night;
 - MOU with the VRD enabling a higher disposal rate for fallen animals or ABPs found in an advanced stage of decomposition;
 - Update to infrastructure on site (misting system around the site perimeter, fast roller shutters in the Shredder Room, and shed for the Marshalling Area);
 - Investment in storage capability (reefers) and abatement equipment (Ioniser and Regenerative Thermal Oxidizer);
 - Execution of a qualitative and quantitative odour characterisation exercise and implementation of an Odour Management Plan (OMP).

Future Improvements

As briefly mentioned in the previous slide, Wasteserv has committed to the following improvements:

- A shed shall be erected to enclose the Marshalling Area. Via this structure, bins temporary storage and/or queuing takes place inside, thus limiting odour and nuisance. The shed shall be equipped with fast roller shutters.
- Air from the Marshalling Area, Shredder Room and Autoclave Plant Room shall be treated using an Ionizer.
- An RTO shall in turn process air from those Autoclave processes which contribute to heavy odour (unloading of cooked products from the autoclave chamber and during the pressing process).

Conclusions

- Scope of the renewal is to continue and improve operations at the MTTF.
- Application includes details regarding plant specifications, drawings plans & certifications, environmental monitoring data, environmental management systems, on-going improvements and also future improvements.
- The application process considered issues related to waste management, emissions to air and water, odour and noise nuisances, and reviewed the applicability of Best Available Technique.
- The application has been reviewed by ERA and other Competent Authorities (including Civil Protection Dept. & Environmental Health Directorate), and replies have been provided with respect to queries raised.