

Case Officer Report

Subject: IP 0001/26 - Application for the renewal of IP 0001/09/B for the operation of an acetylene-production facility submitted by Poligas Ltd in Hal Farruġ, limits of Siġġiewi.

Date: 20th March 2026

To: ERA Board

From: Regulatory Affairs Directorate

1. Background

This report has been prepared for the determination of IP 0001/26 (renewal of IP 0001/09/B) to operate a chemical installation submitted by Mr Charles Polidano obo Poligas Ltd. The site is located in Hal-Farruġ I/o Siġġiewi. In this regard, the application was received on 17th December 2025 and lastly updated on 11th March 2026.

This application is for the production of acetylene through a chemical reaction (between calcium carbide and water) and thus falls within scope of Scope of Activity 4.1 in Schedule 1 of the IPPC Regulations (S.L. 549.77).

2. Case Officer Report

2.1. Proposal

The applicant has applied for a renewal of the current permit retaining the same activities already permitted as follows:

Activity	Description of specified activity	Limits of specified activity
Section 4.1: Production of acetylene by a chemical process	Manufacture of acetylene (C ₂ H ₂) in a closed system by means of chemical reaction of calcium carbide with water	From receipt of raw materials and associated chemicals to dispatch of finished product (including packaging) From generation of calcium hydroxide as a byproduct to the reuse in road construction
Directly associated activities	Collection of cooling/process water in watertight underground cistern for reuse	From generation of wastewater to disposal/recycling

2.2. Supporting Documents Recommended for Approval

- Documents: IP0001/26 – *Permit Document*
- Documents: IP0001/26/32A – *Conditions provided & enforced by the Environmental Health Directorate.*

2.3. Applicable Law/ Policy

The onsite activities fall within scope of Schedule 1 of S.L. 549.77, Section 4.1 (a):

- Production of organic chemicals, such as simple hydrocarbons (acetylene).

The proposal is to comply with:

- Environment Protection Act (CAP. 549)
- Industrial Emissions (Framework) Regulations (S.L. 549.76)
- Industrial Emissions (Integrated Pollution Prevention and Control) Regulations (S.L. 549.77)
- Environmental Permitting (Procedure for Applications and their Determination) Regulations (S.L.549.172)
- BREF Document - Best available techniques (BAT) specified for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector (May 2016)

2.4. Site Description and Constraints

The site is located at Hal Farruġ, limits of Siggiewi within a large industrial yard housing Poligas and other industrial activities onsite. Adjacent to this yard is a bird sanctuary and the Luqa airport runway in an Industrial Area. The site lies within the middle tier of the groundwater safeguard zone, and close to an ecological corridor from Wied Xkora to Wied Il-Kbir including Wied Musa, Wied ta' Kandja and Wied Silliani. The whole industrial site is also within a buffer zone for megalithic remains.

2.5. Site History

The following permitting history is noted on site:

Number	Title	Status
IP 0001/09/A	Production of acetylene (C ₂ H ₂)	Granted on 11 th September 2012 for a period of 4 years
	Extension of validity	Granted on 27 th January 2017 till 11 th June 2017
	Extension of validity	Granted on 14 th July 2017 till 11 th December 2017
IP 0001/09/B	Renewal	Granted on 13 th April 2022 for a period of 4 years
PA 1591/04	Outline application to consolidate existing construction plant and including extensions and improvements to existing facilities.	Granted on 31 st May 2007
PA 3214/06	Construction and sanctioning of proposed extensions/ alterations to existing plant.	Granted on 31 st May 2007
PA 3354/10	Proposed sanctioning of alterations & extensions to approved permit PA 3214/06. Proposal includes extension to existing Hollow Core Block production area, localized enclosures to approved external	Granted on 13 th May 2021

	plant storage areas & replacement and additions of various plant equipment.	
PA 1821/22	Proposed sanctioning of minor extensions to plant footprint approved in PA03354/10	Granted on 6 th October 2022

2.6. Consultations

- *Intra-ERA Feedback*

Internal consultation was carried out to determine any pending items. In terms of compliance, it was noted that improvement programme items 2 (recertification of settling pits) and 5 (Installation and implementation of a leak detection system) were addressed. The other IP items [IP 6 – submission of a proposal for line purging; IP 7 - Submission of BAT for Large Volume Organic Chemicals; and IP 8 - Operator to apply for a sewer discharge permit with Water Services Corporation] remained pending. From a waste management perspective, the waste metal drums which used to contain the calcium carbide were requested to be listed as waste, and the applicant complied accordingly.

- *Feedback from External Consultees*

The **Planning Authority (PA)** indicated that the acetylene plant is covered by PA 1821/22. The PA had no further comments, other than any deviations from the approved permit shall be subject to a development planning application.

The **Water Services Corporation (WSC)** had no objection for issuing this permit given the fact that there is no discharge of trade effluent from this premises. However, they requested the permit holder to regularise their position in terms of compliance to discharge permitting requirements. Following discussions between ERA, the WSC and Poligas, an inspection by WSC was carried out in March 2026. During this inspection, WSC determined that the site requires three separate domestic sewer discharge permits: one for the acetylene production facility, one for the batching plant, and one for the Poligas/Polimesh operations. Amendments to the permit conditions have since been proposed by WSC and are being recommended for approval.

The **Environmental Health Directorate (EHD)** provided standard conditions which were included as an approved document to this permit.

The **Regulatory for Energy & Water Services (REWS)** had no objection to this application.

No feedback was received from the other Authorities which were consulted namely: the Malta Competition & Consumer Affairs Authority (MCCA), the Occupational Health & Safety Authority (OHSA), the Civil Protection Department (CPD), and the Energy & Water Agency (EWA).

- *Representations from Public*

Public Consultation Dates: 7th February to 21st February 2026

Responses Received: NIL

2.7. Discussion

The ERA notes that the renewal application is not proposing any changes to the current operations. As part of this renewal application, the permit conditions were revised and standardised.

Regulatory consultation was carried out from 2nd February to 17th February 2026. No objections were received from any regulatory bodies, however the EHD provided a list of conditions from their end which were included as an approved document to the permit.

In terms of previous Improvement Programme (IP) items, the following were addressed:

- IP Item 2: Recertification of settling pits, underground cisterns and bunds (addressed during lifetime of permit)
- IP item 5: Installation and implementation of a leak detection system (addressed during lifetime of permit)
- IP item 6: Submission of a proposal for line purging (addressed during renewal)
- IP item 7: Submission of BAT-LVOC (large volume organic chemicals). The scope of this BAT stipulates that *“These BAT conclusions cover production of the aforementioned chemicals in continuous processes where the total production capacity of those chemicals exceeds 20 kt/year.”*. Through discussions with the operator, it was determined that this BREF is not applicable to this site in view that the production volumes, which amount to ~5 tonnes per annum, do not meet the threshold criteria. Hence this IP item has been rendered obsolete.

A BAT assessment in relation to BAT-CWW (common waste water and waste gas treatment/management systems in the chemical sector) was carried out as part of this renewal, however given the nature and the limited scale of the operation, the majority of the BAT conclusions are not relevant and/or the site was already in line with the BAT conclusions. Applicability is limited in view of the fact that no waste gas is generated. The reaction produces a gas that is itself a product (acetylene), not a waste stream. Water, apart from being used as a reagent, also functions as cooling water, which is recirculated and reused within the process. Therefore, the generation of wastewater is negligible to almost non-existent. In terms of operations, Poligas Ltd. follows bespoke international guidelines specifically related to acetylene production, which were provided as part of the Environmental Management System. These documents and standards are far more relevant to this industry than the BAT requirements, which typically address large-scale chemical manufacturing and are therefore more generic in nature.

- IP item 8: Requirement for operator to apply for a sewer discharge permit with Water Services Corporation (WSC). The operator indicated that the site has no sewage connection areas and thus a sewer discharge permit is not required. Following an inspection by WSC, it resulted that a sewer discharge permit will still be required for the acetylene production plant. WSC are now in contact with the operator and such requirements are being tackled directly between the Operator and WSC. Therefore, this IP item is also being considered obsolete since it is covered by updated permit conditions provided by WSC.

Due to the above IP items being addressed, and no new IP items being proposed as part of this renewal, the bank guarantee amount has been reduced according to the approved IPPC risk calculation matrix.

During a site visit was conducted on 18th February 2026, it was determined that the Poligas Ltd. operates its acetylene plant on an intermittent basis, following airtight production processes and multiple filtration stages while using explosion-proof equipment and appropriate safety measures. VOC emissions are minimised through closed-system operation, and acetone handling is limited. The site adheres to several management systems, including ISO 14001 and ISO 9001. Water used on site is largely recycled. During the inspection the applicant had declared that there was no sewer connection present. Some minimal calcium hydroxide slurry overflow was observed from the reservoir; hence a condition has been included in the permit which states that the slurry reservoir requires more frequent emptying. In line with circular economy principles, calcium hydroxide slurry is reused in construction within the Polidano complex, while metal drums and spent scrubbing material are returned abroad for recycling. All requested updates from the

inspection were submitted on 11th March 2026. Additionally, the reporting on the amount of calcium hydroxide slurry generated for reuse is being recommended for inclusion in the Annual Environmental Report.

An invoice for the annual fee of 2026 has been sent to the applicant on 17th March 2026. The settlement of this fee is being included as a post-decision requirement.

2.8. Financial Matters

Application Fee	€2,750 (Renewal) - Paid
Financial Guarantee	€14,000 (Previously €31,650)
Annual Fee	€275 per annum and a variable sum depending on the number of inspections.

3. Recommendation:

The Regulatory Affairs Directorate recommends the GRANTING of the Permit for a period of ten (10) years, subject to the following conditions as post decision requirements:

- (a) Submission of a bank guarantee of €14,000
- (b) Settlement of annual fee for 2026 amounting to €275

The proposed permit conditions include

- (a) Standard conditions applicable to this sector;
- (b) Site-specific conditions:
 - No other effluent other than domestic sewage shall be discharged from this premises into the sewer network directly or indirectly unless permitted or otherwise by the WSC. ¹
 - The calcium hydroxide slurry reservoir is to be emptied frequently to prevent overflow above ground.
 - Yearly reporting on the annual quantity of calcium hydroxide slurry reused.

¹ Condition enforced by other Authorities.

Annex 1: Site Plan

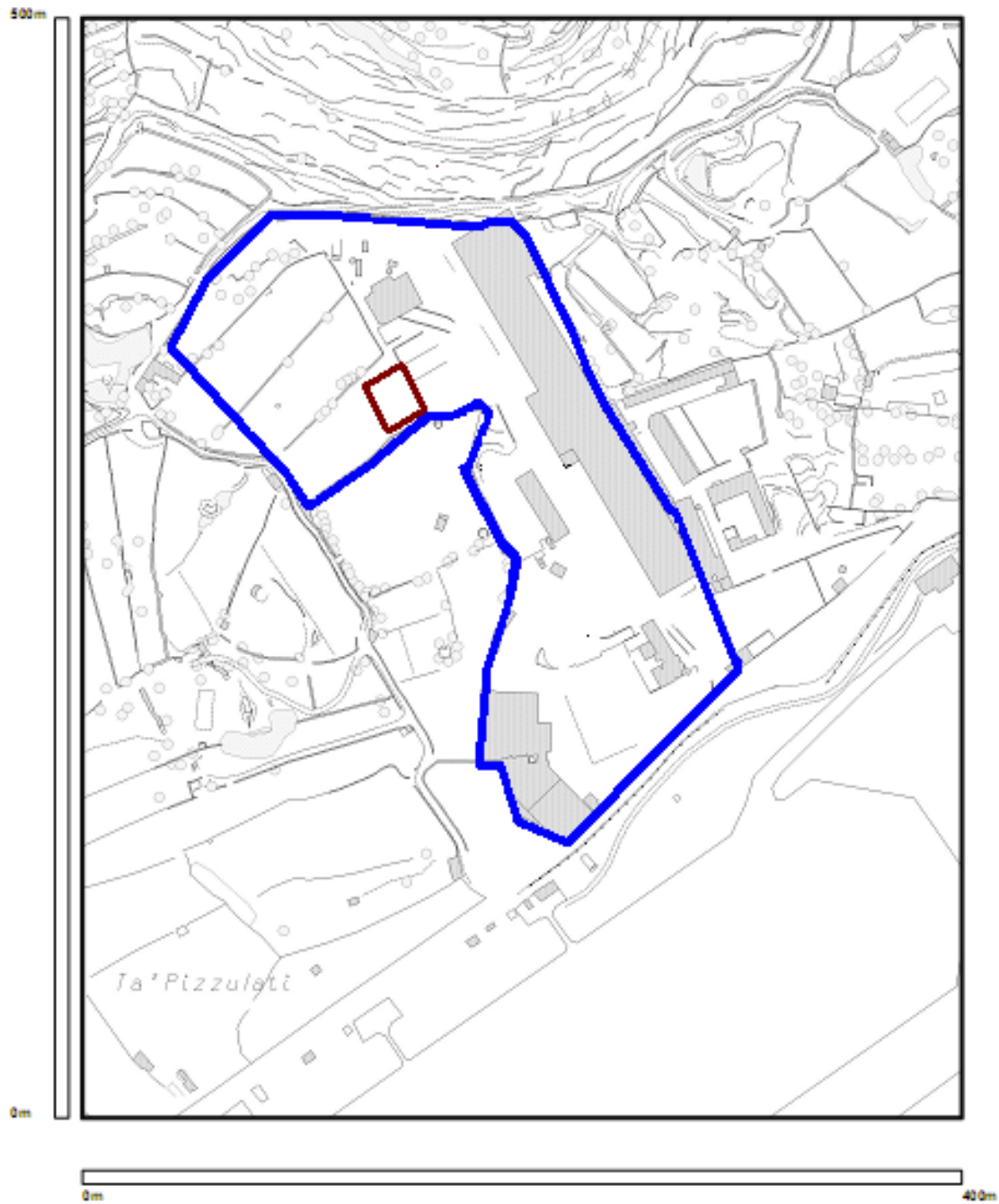


Fig. S3.1: Site of installation, showing extent of area (outlined in red) authorised for operations specified in Condition 1.2.1. *The extent of the site boundary is indicative and should not be used for interpretation purposes.*