**Petroleum for the Inland (Retail) Fuel Market Regulations – S.L. 545.22**

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| Technical Proposal Supporting Document[[1]](#footnote-1) for the Design/Material Alteration of a Petroleum-Filling Station (Commercial Site) |

1. **General**

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| Reference No.: | Date: | New Development:  Refurbishment/Material Alteration: |
| Developer Name: | Petroleum-Filling Station (Commercial Site) Address: | |

1. **Competent Person details:**

|  |  |  |
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| Full Name: | ID Card/Passport No.: | REWS Competent Person No.: |
| Land Line Tel. No.: | Mobile No.: | E-mail Address: |

1. **Design Specifications:**

The design of the proposed Petroleum-Filling Station (Commercial Site) shall satisfy the following minimum requirements:

*Please fill in all required and relevant sub-sections by ticking “ ” as appropriate. The Competent Person shall give a rationale to any unticked items, together and relevant mitigation measures, where applicable, in the supporting documentation for the consideration of the Regulator.*

* 1. **Fill Points:**
     1. ≥ 4 m from public thoroughfare/property boundary
     2. ≥ 12 m from residences/public buildings
     3. Galvanised steel for above ground part
     4. Double wall to EN 14125 ‘*Thermoplastic and flexible metal pipe-work for underground installation at petrol stations’* for below ground part
     5. Adequate collision prevention
     6. Stage 1b Vapour Recovery Systems as per requirements of LN 54/2009 and subsequent amendments
  2. **Fuel Storage tanks:**

1. **Buried tanks (if applicable)**
   * 1. Buried, double wall with leak detection and water detection
     2. EN 12285-1 ‘*Workshop fabricated steel tanks. Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids’* with leak detection
     3. Pit lined with fuel-resistant self-healing geotextile membrane with minimum permeability of 5×10-9 cm/s
2. **Above-ground tanks (if applicable)**
   * 1. Above-ground, double wall with leak detection/containment and water detection
     2. EN 12285-2 ‘*Workshop fabricated steel tanks. Horizontal cylindrical single skin and double skin tanks for the aboveground storage of flammable and non-flammable water polluting liquids’* with leak detection/containment
   1. **Automatic Tank Gauging:**
      1. EN 13352 ‘*Specification for the performance of automatic tank contents gauge*’
   2. **Pipe Work (excluding air vents):**
      1. All pipe-work Double wall with leak detection
      2. Suction System only with non-return valve
      3. EN 14125 ‘*Thermoplastic and flexible metal pipe-work for underground installation at petrol stations*’
   3. **Air Vents:**
      1. > 4 m above ground level
      2. > 3 m spherical distance windows/openings
      3. Galvanised steel for above ground part
      4. Adequate collision prevention
   4. **Flame arrestors:**
      1. EN ISO 16852 ‘*Flame arrestors. Performance requirements, test methods and limits for use*’
   5. **Leak Detection (tanks and pipework):**
3. **Tanks**
   * 1. EN 13160 ‘*Leak detection systems. General requirements and test methods for interstitial spaces, leak protecting linings and leak protecting jackets*’ (if applicable)
     2. For buried tanks: Class I leak detection for new installations; Class I or Class II leak detection for existing installations (if applicable)
     3. For above-ground tanks: Class I leak detection for new installations; Class I or Class II leak detection for existing installations ***and/or*** Containment in a bunded area designed to retain 110% of the leaking or spilled product, i.e. 110% of the capacity of the storage tank(s). Bund is open to atmosphere and has to be maintained appropriately (if applicable)
4. **Pipework**
   * 1. EN 13160 ‘*Leak detection systems. General requirements and test methods for interstitial spaces, leak protecting linings and leak protecting jackets*’
     2. Class I leak detection for new installations; Class I or Class II leak detection for existing installations
   1. **Tank access chambers for buried tanks (if applicable):**
      1. Covered to EN 124 ‘*Gully tops and manhole tops for vehicular and pedestrian area. Design requirements, type testing, marking, quality control*’
      2. C250 or higher
      3. Fuel leak-proof
   2. **Overfill Prevention Devices:**
      1. EN 13616 ‘*Overfill prevention devices for static tanks for liquid petroleum fuels*’
   3. **Dispensers:**
      1. ≥ 4 m from public thoroughfare
      2. ≥ 9 m from residences/public buildings
      3. ATEX certified
      4. Adequate collision prevention
      5. Stage 2 Vapour Recovery including manufacturer certifications and provisions for monitoring of petrol vapour capture efficiency (as per requirements of LN 54/2009 and its subsequent amendments)[[2]](#footnote-2)
      6. EN 13617-1 ‘*Petrol-filling stations - Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units*’
   4. **Breakaway couplings:**
      1. EN 13617-2 ‘*Petrol filling stations. Safety Requirements for construction and performance of safe breaks for use on metering pumps and dispensers*’
   5. **Hoses:**
      1. EN 13483 ‘*Rubber and plastic hoses and hose assemblies with internal vapour recovery for measured fuel dispensing systems. Specification*’
      2. Length 3-4 m from dispenser housing
   6. **Automatic nozzles:** 
      1. EN 13012 ‘*Petrol filling stations. Construction and performance of automatic nozzles for use in fuel dispensers*’
      2. Stage 2 vapour recovery for all EN 228 dispensers
   7. **Oil/water interceptor - forecourt:**
      1. EN 858-1 ‘*Separator systems for light liquids (e.g. oil and petrol). Principles of product design, performance and testing, marking and quality control*’
      2. EN 858-2 ‘*Separator systems for light liquids (e.g. oil and petrol). Selection of nominal size, installation, operation and maintenance*’
      3. Class 1 type
      4. Lined with a fuel leak-proof membrane
   8. **Drainage Pipework:**
      1. EN 752 ‘*Drain and sewer systems outside buildings*’
   9. **Canopy and Lighting Units:**
      1. Flame retardant as per Class E of EN 13501-1 ‘*Fire Classification of construction products and building elements. Classification using test data from reaction to fire tests*’
   10. **Buildings in the vicinity:**
       1. 4 m from dispensers and fill points
       2. All ducting into buildings sealed
       3. Fire detection systems with automatic dialler and audible alarms present
   11. **Outside Payment Terminal (OPT):**
       1. ATEX certified if within the hazardous zone
       2. ≤ 100 litres per transaction limit
       3. 3-minute time limit on each transaction
   12. **Forecourt surface (including road-tanker delivery stand):**
       1. Impermeable to fuel
       2. Concrete membrane
   13. **Hazardous zones equipment:**
       1. All equipment within Hazardous Zone 0 and 1 is compliant to ATEX 95 equipment directive 94/9/EC
   14. **Electrical Installation:**
       1. As per S.L. 545.24 ‘*Electrical Installation Regulations’*
       2. No overhead electrical cables are present over forecourt area
   15. **Emergency Isolators:**
       1. One emergency stop, to stop fuel dispensing and isolate dispensers’ electrical supply in the forecourt area; and an emergency telephone system
       2. One emergency stop, to stop fuel dispensing and isolate dispensers’ electrical supply in the surrounding buildings; and an emergency telephone system
       3. One fireman switch isolating all electrical supply within the Petroleum-Filling Station (Commercial Site) and associated buildings at the forecourt entrance
5. **Attachments Required:**

The following documents are hereby being attached with this proposal:

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|  | **Supporting Documents**[[3]](#footnote-3) | **Reference No.** |
|  | * 1. Technical Proposal |  |
|  | * 1. Site Plan[[4]](#footnote-4) (Scale 1:2500) |  |
|  | * 1. Forecourt Layout |  |
|  | * 1. Tank Farm Layout (including a cross-section of the tanks in the pit) |  |
|  | * 1. Filling Pipework |  |
|  | * 1. Suction Pipework |  |
|  | * 1. Air Vent Pipework |  |
|  | * 1. Vapour Recovery Pipework |  |
|  | * 1. Sleeves layout for ATG, OPT, Leak detection and Wetstock monitoring |  |
|  | * 1. Forecourt Drainage Layout[[5]](#footnote-5) (incl. oil/water interceptors) |  |
|  | * 1. Warning Signs and Other Fire Fighting and Emergency Equipment Layout |  |
|  | * 1. Documentation as required by the ‘Guidelines on Development Requests’5 |  |
|  | * 1. Copy of the screening letter associated with the development issued by PA |  |
|  | * 1. EIA certification issued by ERA (if applicable)[[6]](#footnote-6) |  |
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1. **Declaration by the Competent Person**

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| I, the undersigned Competent Person whose full details are given in Section 2.0, hereby declare that I have carried out this Petroleum-Filling Station (Commercial Site) design-proposal with the necessary diligence and care and that such design is in full conformity with the relevant bye-laws, regulations, legislation in force, the checklist of  Section 3.0 of this document and according to the latest issue of the ‘Blue Book’[[7]](#footnote-7). I also declare that any mitigation measures proposed are in accordance with the latest issue of the ‘Blue Book’.       /     /  Signature[[8]](#footnote-8) of Competent Person Date Official Rubber Stamp |

1. **Data Protection Notice**

In processing your personal data, the Regulator will comply with binding legislative requirements imposed by the General Data Protection Regulation EU 2016/679 (the “GDPR”) and national Maltese law requiring an adequate data protection standard.

The processing of your personal data by the Regulator shall be done in the exercise of official authority vested in the Regulator and, or in compliance with a legal obligation.

In terms of these legal bases, the Regulator processes your personal information with the Department of Customs, the Department of Health, the Civil Protection Department, the Transport Authority, the Occupational Health and Safety Authority, the Planning Authority, the Environment and Resources Authority, the Malta Competition and Consumer Affairs Authority, the Energy and Water Agency and the National Statistics Office.

You may access the Regulator’s Data Privacy Policy at: <https://www.rews.org.mt/#/en/a/51-privacy-policy>.

1. **Two copies** of this ‘*Technical Proposal Supporting Document for the Design/Material Alteration of a Petroleum-Filling Station* *(Commercial Site)*’ are to be filled in electronically, printed and signed by the Competent Person and subsequently sent to the Regulator for Energy and Water Services together with **two copies** of the requested supporting documentation accompanied by a covering letter for evaluation. [↑](#footnote-ref-1)
2. Technical details of the monitoring plan for vapour recovery need to be specified in the Technical Proposal. This is to include details on how compliance with the hydrocarbon capture efficiency and the vapour/petrol ratio required by the legislation shall be monitored, including information on the frequency of monitoring and related equipment/test standard to be used. [↑](#footnote-ref-2)
3. All drawings shall be suitably scaled, dated, signed by the Competent Person, assigned a unique number and printed in colour where appropriate. ***Two*** copies of each drawing shall be attached. Minimum drawing size shall be A3. [↑](#footnote-ref-3)
4. The Site Plan should indicate the site boundary in red and salient extreme boundary co-ordinates of the site (5-digit co-ordinate UTM grid). [↑](#footnote-ref-4)
5. Please refer to ‘Guidelines to Periti on Development Requests’: [http://www.rews.org.mt/Downloads/licences/Guidelines%20to%20Architects%20.pdf](http://www.mra.org.mt/Downloads/licences/Guidelines%20to%20Architects%20.pdf). [↑](#footnote-ref-5)
6. An official document by ERA stating that the development does not require an EIA shall be presented when an EIA is not necessary. [↑](#footnote-ref-6)
7. The ‘Blue Book’ refers to the ‘*Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations*’ jointly published by the  
   APEA and the Energy Institute. [↑](#footnote-ref-7)
8. To be signed in wet ink. [↑](#footnote-ref-8)