

**CITY OF AUSTIN ELECTRIC UTILITY DEPARTMENT**

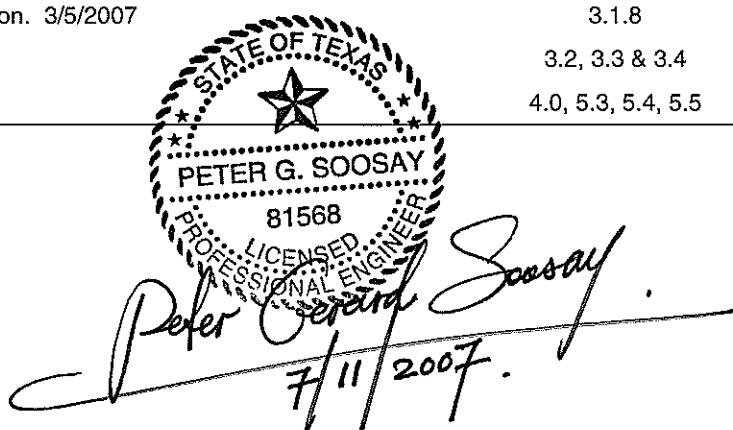
**PURCHASE SPECIFICATION**

**FOR**

**POLYURETHANE FOAM BACKFILL**

DATE	PREPARED BY	ISSUANCE/REVISION	APPROVAL PROCESS SUPV. / MATERIALS SUPV.
3/5/2007	Peter G. Soosay	ISSUANCE	_____
3/29/2007	Peter G. Soosay	Revision	_____
7/11/07	Peter G. Soosay	Revision	_____

REASON FOR REVISION	AFFECTED PARAGRAPHS
Changed gallon rating to 1 gallon. 3/5/2007	3.1.8
Added new sections (3/29/07)	3.2, 3.3 & 3.4
Deleted (7/11/07)	4.0, 5.3, 5.4, 5.5



This specification, until rescinded, shall apply to each future purchase and contract for the commodity described herein.  
Retain for future reference.

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**PURCHASE SPECIFICATION**  
**FOR**  
**POLYURETHANE FOAM BACKFILL**

**1.0 SCOPE AND CLASSIFICATION**

**1.1 SCOPE**

- 1.1.1 The City of Austin (COA) Electric Utility Department is hereinafter referred to as Austin Energy (AE). Austin Energy requires a qualified Manufacturer to provide polyurethane foam backfill.
- 1.1.2 The qualified Manufacturer, shall have at least five (5) years of experience, in the manufacture, of the polyurethane foam backfill.

**2.0 APPLICABLE SPECIFICATIONS**

- 2.1 The polyurethane foam backfill, provided by the Manufacturer, shall be in compliance with the latest Industry and ASTM standards, including:

- 2.1.1 ASTM D732 – 02 – Standard Test Method for Shear Strength of Plastics by Punch Tool
- 2.1.2 ASTM D1621 – 04a – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- 2.1.3 ASTM D1622 - 03 – Standard Test Method for Apparent Density of Rigid Cellular Plastics
- 2.1.4 ASTM D1623 – 03 – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics

**3.0 MANUFACTURER REQUIREMENTS**

- 3.1 The polyurethane foam backfill, shall have the following characteristics:

- 3.1.1 Easy to mix in the field, using a cordless power drill.
- 3.1.2 Able to retain the inherent chemical composition, at an ambient temperature of 70° F.
- 3.1.3 Retain its compressive strength (§ 3.1.5), in the presence of moisture. Standing water present in the hole dug for a pole, will be pumped out by the Austin Energy Construction Crew. The existing moisture in the hole, shall not reduce the compressive strength of the polyurethane foam.

- 3.1.4 Retain a minimum density of five (5) pcf.
- 3.1.5 Retain a minimum compressive strength of 70 psi.
- 3.1.6 Provide a minimum yield of ten (10) cubic ft, for a five (5) gallon kit, in the absence of any water.
- 3.1.7 Provide a minimum yield of six (6) cubic ft, for a three (3) gallon kit, in the absence of any water.
- 3.1.8 Provide a minimum yield of two (2) cubic ft, for an one (1) gallon kit, in the absence of any water.
- 3.2 The Manufacturer's data shall be stamped on the backfill container and shall not be more than 120 days old, from the date of manufacture, to the day the material is delivered to Austin Energy.
- 3.3 All kits shall have the unit of measure, expressed in cubic ft.
- 3.4 Each kit shall come with a mixing container, for stirring the chemical components in the field.

#### 4.0 BID REQUIREMENTS

- 4.1 The Bidder shall provide with the bid, a list of at least five (5) references (Contact Name, Contact Telephone Number, Company Name and Address), who currently use their polyurethane foam backfill.
- 4.2 The Bidder shall provide with the bid, an Independent Test Laboratory certified test report, for each polyurethane foam backfill(§ 3.1.6, § 3.1.7, § 3.1.8). This certified test report, shall include the following information:
  - 4.2.1 Density (pcf)
  - 4.2.2 Compressive Strength (psi)
  - 4.2.3 Yield (cubic ft.)