



## **Super Slurry Specifications**

**I. Description – Super Slurry (Liquefied Cement System) is a cementitious slurry system. The system allows the use of various types of hydraulic, Portland, pozzolanic and other cements as well as additional stabilizing agents in soil stabilization, modification and full depth repair/reclamation (FDR). The slurry mixture is a suspension of cementitious materials and water at specific proportions with admixtures to enhance its physical properties. The stabilized suspension allows the use of cementitious materials where dry applications are not desirable or practical due to air quality, health, safety and environmental issues for example.**

***A. Appearance – Super Slurry is a gray cementitious fluid that maintains its suspension properties with no mechanical mixing or agitation. Its consistency is a thick batter material that feels slippery to the touch and dries to a light gray powder.***

**II. Qualitative analysis – All analyses should be performed from a delivered sample.**

***A. A 500 cc portion of the slurry should be removed from the middle of the load. A glass beaker or jar may be employed for this purpose. Allow the slurry suspension to sit with no vibration or agitation at ambient temperature for 30 minutes. Little or no separation of liquid or solid should occur. A great deal of separation denotes inconsistency and should be immediately reported to the supplier for corrective action.***

***B. The viscosity of the slurry should be a minimum of 1 minute (60 seconds) when performed according to TEX-130-E, Part IV.***

**III. Competent Supplier – A competent supplier will have no less than 12 months of experience manufacturing and delivering Super Slurry cement suspension. The supplier must be in compliance with all U.S. and international patent laws pertaining to the slurry, or must be a licensee of the patent holder of all things pertaining to the slurry.**

***A. The supplier must maintain a QA/QC system that monitors the consistency of the finished product.***

***B. The supplier must supply Mill Certificates for cementitious materials used in the finished product, upon request.***

***C. The supplier must maintain certified scales for the proportioning of the cementitious material and water. Calibration and certification reports must be made available upon request.***

***D. The supplier must weigh, batch and produce slurry on certified scales.***

***E. The supplier will produce tickets or bills of lading that clearly state the net weight of the slurry as well as the dry tonnage of cementitious material contained in the slurry.***

***F. The supplier must maintain the proportion of cementitious material above 55% of total mass of solution.***

***G. The supplier must mix all components of the slurry suspension using high energy static mixing technology. All mechanical mixing must be pump driven and cannot rely on lime slaking tanks, paddle driven mixers or other similar technology.***

**IV. Delivery Method – Delivery shall be performed by a tank vehicle that does not re-circulate or agitate the slurry material by any means other than the motion of the vehicle in normal movement. Application of the slurry will be through a gravity fed spreader type bar or tube that expels the suspension in a uniform manner behind the vehicle.**

***A. The slurry shall be usable for at least four hours after it has been batched.***

**V. Handling and Placement – Placement of the slurry will be performed in sufficient manner to achieve a dense compacted base or sub-base structure.**

***A. Placement of the slurry shall be placed upon pulverized pavement or soil that is below optimum moisture for compaction in a uniform consistent manner. Distribute slurry uniformly in successive passes until desired cement content is achieved. The substrate soil should be ripped, scarified or ground, to expose the maximum amount of surface area to be coated by the slurry. The slurry shall be mixed into the substrate material with a mixer of sufficient size and power in a timely manner.***

***B. Application Rate. The on-site owner's representative will determine the application rate to produce a stabilized mixture that meets the requirements shown on the plans.***

***C. Thorough mixing and compaction of slurry must be completed within two hours after the spreading of slurry onto substrate soil/pulverized material. The slurry may begin to dry or form a white crust when exposed to high temperatures. This will require a light application of water spraying or misting of sufficient means to return the slurry to its original gray color. Apply only the proper amount of water to achieve the desire compaction.***