

Summary of PetroFix[™] Application Instructions

This document summarizes key PetroFix equipment and application concepts. Please refer to the full-length PetroFix application document for more in-depth instructions at this *link* or see our application video at www.petrofix.com/apply.

Installation Equipment and Supplies Needed

- Water source for mixing
- Access to electricity
- Appropriate Personal Protective Equipment (PPE)
- Direct Push Rig (such as a Geoprobe®) and associated probe tooling (see Application Instructions for details)
- Mixing tanks-recommended tank sizes should range from 50 to 350 gallons to aid in easy mixing and for measuring injection volumes per point
- Grout and mortar mixer with paddle for homogenizing PetroFix in its 55-gallon drums
- Injection tooling with fluid delivery sub-assembly

- Injection pump rated to at least 200 psi and at least 5 gpm
- Injection hosing and pressure relief valve with a bypass
- Hosing between mixing tank/drum and pump
- Pressure gauges to monitor injection pressure
- Flow meter for tracking injection volumes (or use visual drops in tanks)
- Granular bentonite or grout to abandon completed injection boreholes
- Quick-set concrete or asphalt patch for surface closing

Important Considerations

- PetroFix is intended to be applied using low injection pressures (typically from 20 to 100 psi) and high volumes (as a rule-of-thumb injection rates are usually between 2 and 7 gpm) to avoid soil fracturing. Common tooling recommended for injection is top-down or bottom-up multi-port tooling (See figure of multi-port tool). Download full-length PetroFix application instructions for more information.
- Budget extra time for the project to collect soil cores to document that injection tooling and injection volumes/pressures are achieving successful product distribution. This allows for important field adjustments to be made as needed to achieve distribution. Review full-length PetroFix Application Instructions for more information on recommended procedures for verifying PetroFix distribution.



Typical Multi-Port Injection Tool

- Do not mix PetroFix Electron Acceptor blend (EA blend) from the 20 lb buckets into undiluted PetroFix Remediation Fluid in the drums or totes. Always add the EA blend with PetroFix after it has been mixed and diluted with water.
- PetroFix should be homogenized in the product container before transferring into the mix tank. We recommend using a high torque, double handle mixer such as a QEP or Rigid thinset grout and mortar power mixer with QEP 30" pro spiral mixing paddle.
- Store at temperatures between 40°F and 95°F. Freezing and hot weather technical memo can be accessed at www.petrofix.com/resources or at this *link* here.
- Do not allow material to freeze or store in direct sunlight.

Technical Support

Available Monday through Friday 7 AM to 5 PM PT

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For product delivery coordination, please contact **Customer Service** at 949.366.8000 or at customerservice@regenesis.com For more technical information on applying PetroFix or sampling post-injection please go to www.PetroFix.com/resources



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