

December 4, 2018

Santa Clara Valley Water District 5750 Almaden Expy San Jose, CA 95118-3614

Attention: Katrina N. Jessop, PE, PMP

**Utility Maintenance Engineering Unit** 

**Subject:** Pure Technologies Condition Assessment

Dear Ms. Jessop:

Pure Technologies Ltd. ("**Pure**") has created various leak detection and condition assessment technologies that are protected by various North American and international patents and form an integral part of Pure's Intellectual Property Portfolio.

## PureEM® - Manned EM, PipeDiver, and PureRobotics Platform

PureEM<sup>TM</sup> is an electromagnetic (EM) inspection technology for evaluating the current condition of prestressed concrete cylinder pipe (PCCP) (among other types of concrete pipe), bar wrapped pipe, and metallic pipe.

PureEM<sup>™</sup> is deployed on manned inspection tools and other propriety condition assessment platforms owned by Pure including:

- **PipeDiver™ platform.** PipeDiver is an innovative, free-swimming condition assessment platform for water and wastewater pipelines that operates while a main remains in service.
- PureRobotics™. PureRobotics is a powerful robotic pipeline inspection system that can be configured to inspect virtually any pipe application of 16" up to 120"; virtually any BWP bar from 16" up to 72"; and virtually any BWP cylinder and metallic pipe from 16" up to 42".

The PureEM<sup>TM</sup> technology is protected by various North American and international patents. The applicable U.S. patent is listed below.

## **Electromagnetic Analysis of Concrete Tensioning Wires**

United States United States

Patent No. 6,791,318 Patent No. 6,781,369 Issue Date: 1/29/2002 Issue Date: 8/24/2004

## Soundprint® Acoustic Fiber Optic (AFO)

The Soundprint® AFO system continuously monitors PCCP for the occurrence of wire breaks. Wire breaks are reported on the next business day, whereby the progression of wire breaks can be evaluated in comparison to acceptable wire break quantities.

## **Fibre Optic Sensor Method and Apparatus**

Patent No. 7,564,540 Issue Date: 5/24/2005

<sup>\*</sup>PureEM<sup>TM</sup> has been adapted for use in metallic pipe.

To the best of our knowledge, Pure is not aware of any other company in the United States or elsewhere offering pipeline inspection platforms with the same capabilities and features. These technologies and solutions are proprietary and form an integral part of our Intellectual Property Portfolio.

If you require any further information, please feel free to contact me or Logan Fesenmair-Black, Business Development Manager at 559.999.9665 or by email at <a href="mailto:logan.fesenmair@puretechltd.com">logan.fesenmair@puretechltd.com</a>.

PURE TECHNOLOGIES U.S. INC.

John J. Galleher Jr., P.E. Vice President, West Region