

Steer Energy for Scotia Gas Networks

October 2014



#### **Steer Energy are:**

Research and Business Development House

- Technology Transfer between Oil, Gas and Water Industries
- Integrated Engineering Solutions
- Holistic Problem Solving



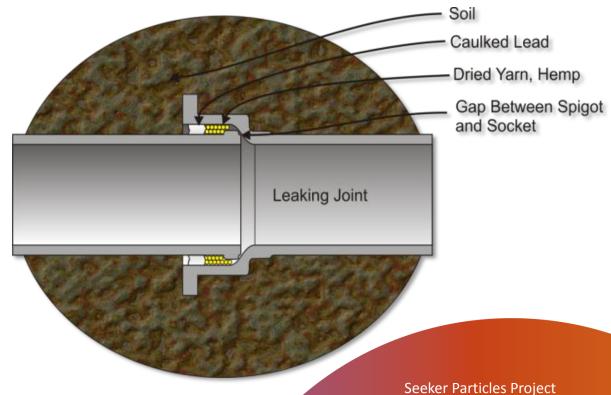
### **Project Aims: Leak Sealing**





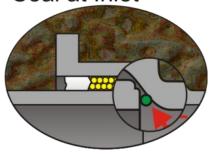
#### **Anatomy of a Leak**

Leakage Definition: Invalid flow of gas

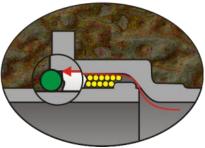


### **Anatomy of a Seal**

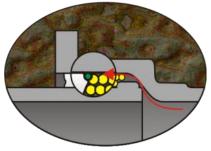
Seal at Inlet



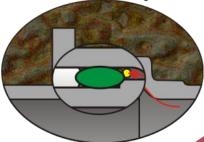
Seal at Outlet



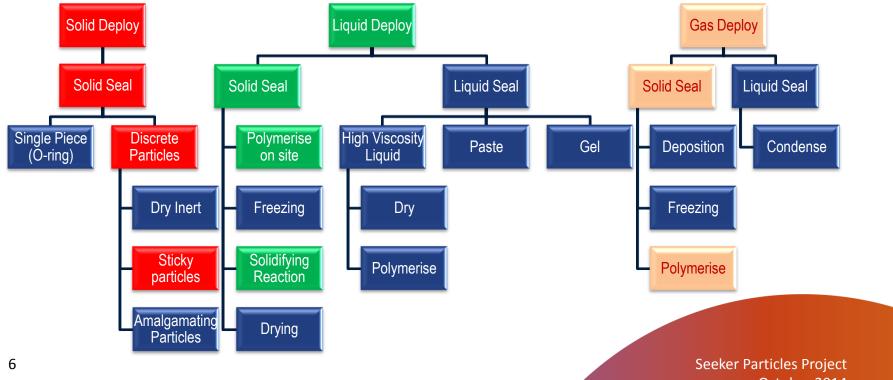
Seal at Throat



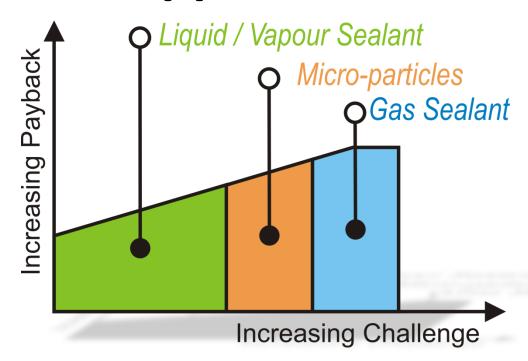
Seal in Cavity



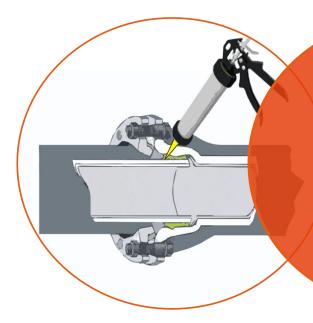
## **Sealant Solution Space**



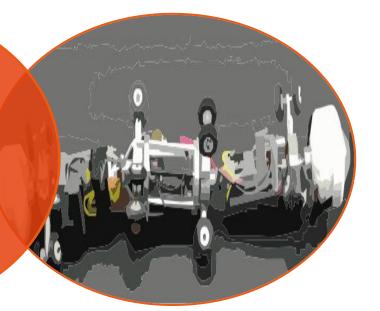
#### **Three Opportunities**



### **Seeker Particles Stage 2**



Steer Energy Leak Sealing Technology Expertise



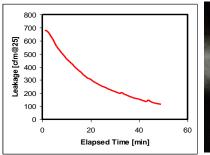
#### **Seeker Particles Stage 2**

Optimised Sealant
Design and
Application



### **Aerosol: Micro-Particle Sealing**

Developed at
Lawrence Berkley
National Labs,
>100,000 HVAC
systems sealed since
1999

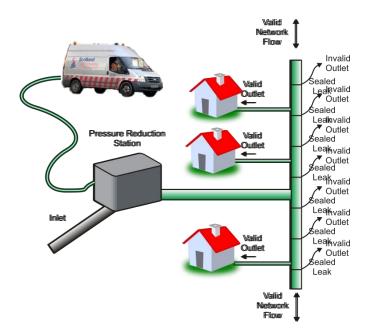






### **Gas Polymerisation**

A Gas additive which addresses leakage without affecting valid outlets



# Thank you

