



# Developments in Coatings & Materials Selection for Metropolitan's Projects

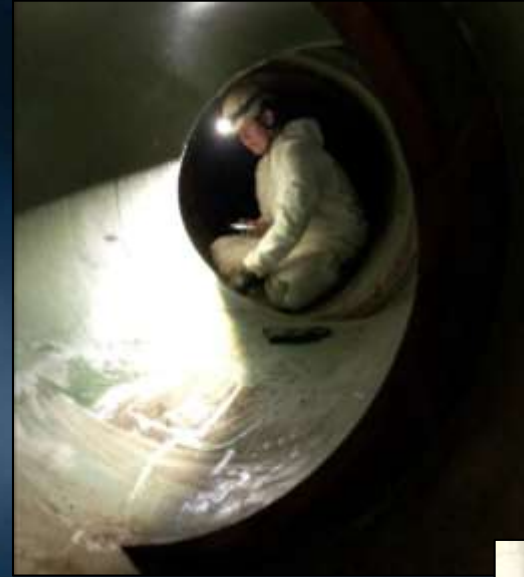
Engineering and Operations Committee

Item 6b

August 16, 2021

# Outline

- Services Provided
- Condition Assessment Examples
- Innovative Developments
- Summary



# Services Provided

## Corrosion Engineering

Condition  
Assessments

Material  
Performance Testing

Recommendations for  
Coatings & Material  
Selection





# Condition Assessment Examples



Hydroelectric Plants



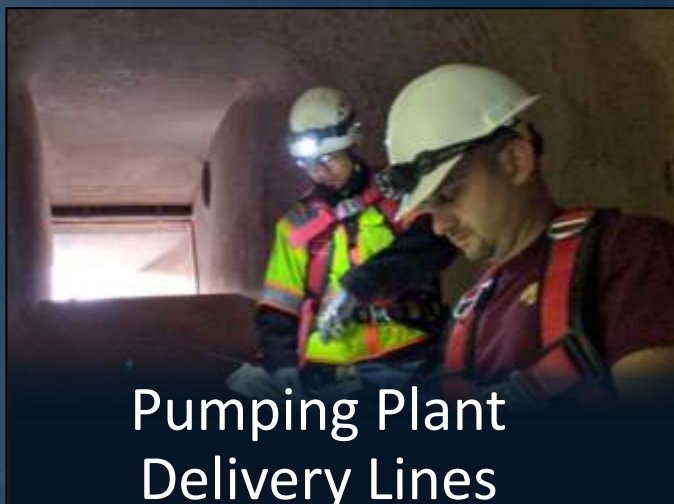
Fabricated Components



Mechanical Equipment



Pipelines

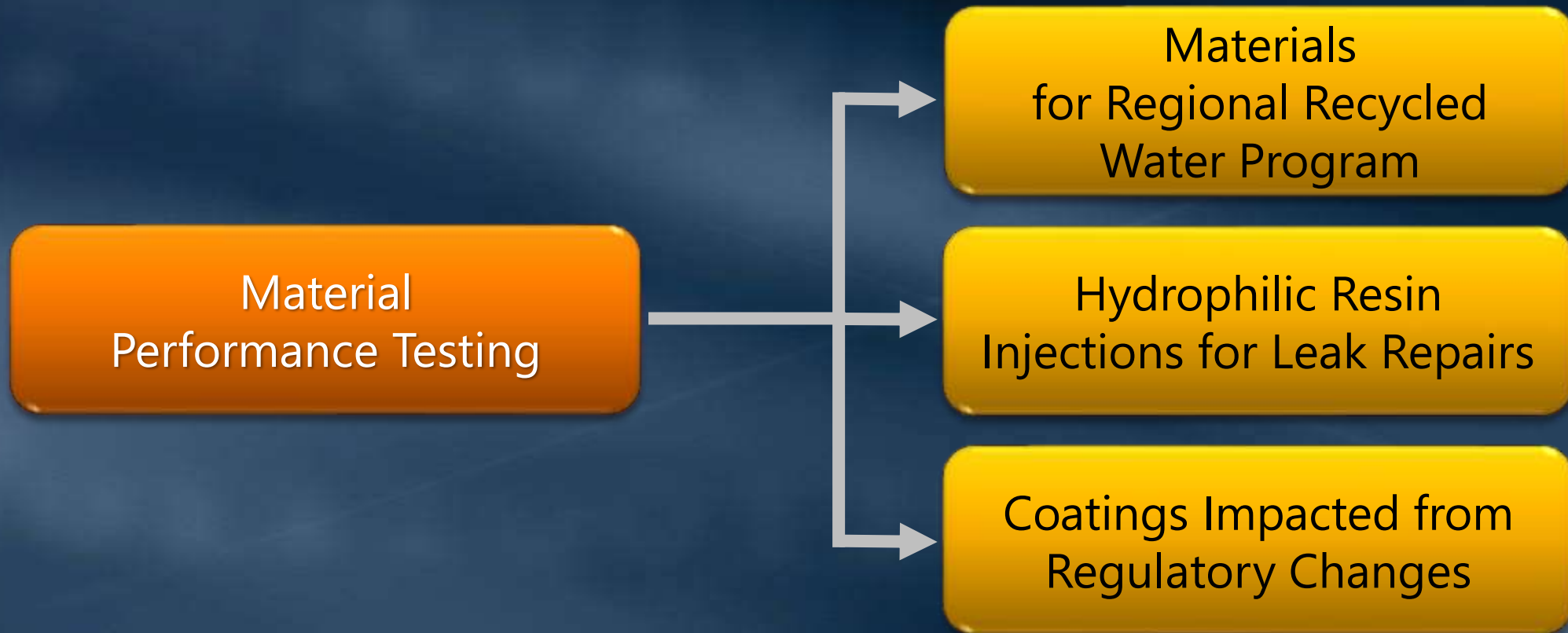


Pumping Plant  
Delivery Lines



Joint Sealant Testing for Union  
Station Headquarters Project

# Innovative Developments





# Development: Testing for RRWP





# Development: Testing for RRWP



Weymouth Laboratory



Testing Facility in Carson

# Development: Testing for RRWP

- Currently Testing
  - Various Metals
- Developing Test Plans
  - Cementitious Products
  - Coatings
  - Linings
  - Sealants
  - Adhesives
  - Plastics





# Development: Testing for RRWP

## Reoccurring Corrosion Testing



Before Immersion



After Initial Cleaning

# Development: Hydrophilic Resin Injections

## Pipelines





# Development: Regulatory Changes



# Development: Regulatory Changes



- NSF 600
- Health Effects Evaluation and Criteria for Chemicals in Drinking Water



# Development: Regulatory Changes



Laboratory Application



Coated Test Samples

# Development: Regulatory Changes



Cathodic Disbonding Test



Examples of Failed Coatings



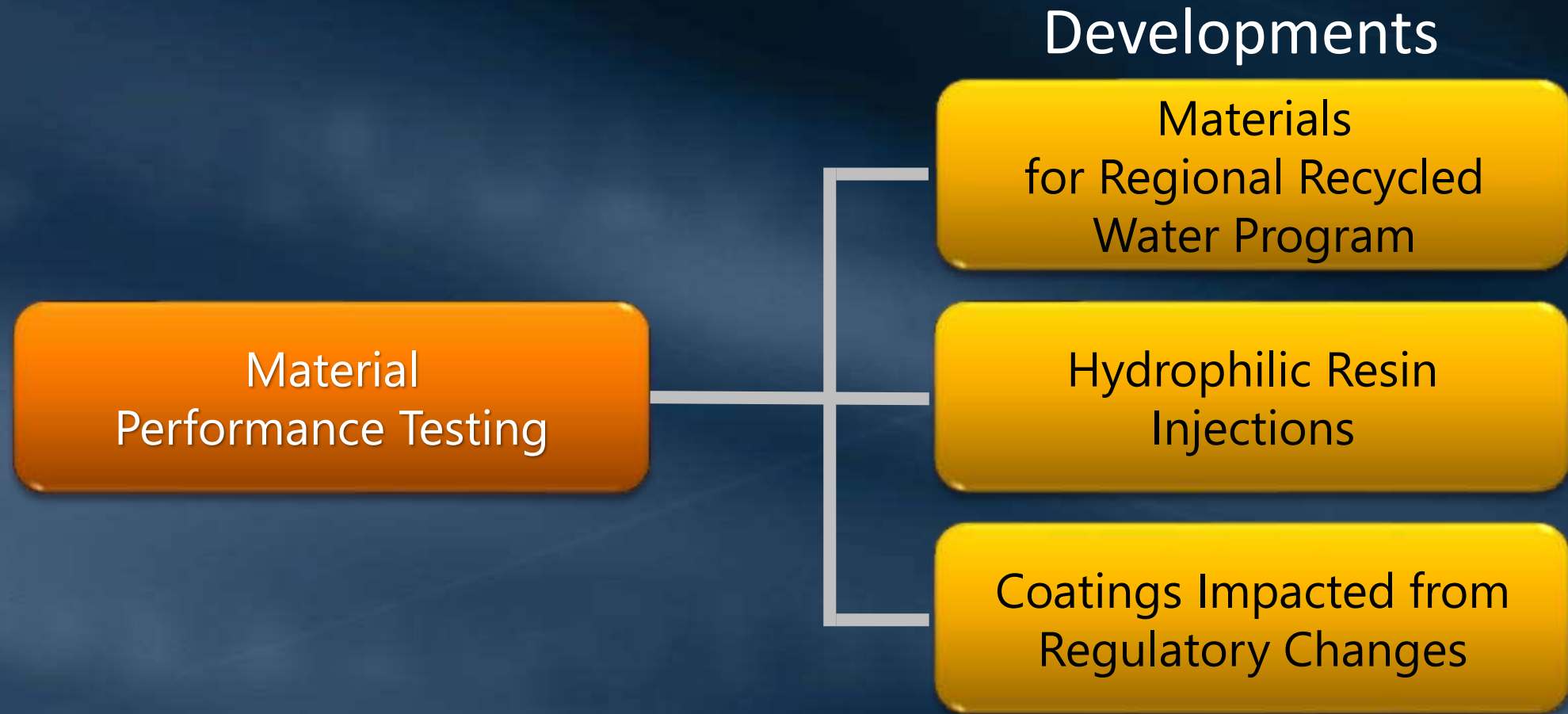
# Development: Regulatory Changes

- Approved Coatings List
  - Available to
    - Staff
    - Contractors
    - Member Agencies

## SECTION 1: ALPHABETICAL LISTING OF APPROVED COATINGS & MATERIALS

Manufacturer & Product	09900 Category	Service Section
<u><b>3M</b></u>		
7600 3M Classic Roofing Granules Light Grey, 11 Grade		16
Scotchkote 134 Fusion Bonded Epoxy Coating	CS-3S CE-2	15
Scotchkote 203 (206N) Fusion Bonded Epoxy Coating	CE-2	15
Scotchkote 413 Spray Grade Fusion Bonded Epoxy (Blue)		15
<u><b>Adhesives Technology Corp.</b></u>		
Ultrabond HS200 Epoxy Gel		18
<u><b>Aervoe</b></u>		
MRO Cold Galvanize Coating 147	NS-3	5
Upside Down Marking Paint		2
<u><b>Akzo Nobel</b></u>		
10-7208 Corvel Gray Epoxy Powder Coating	CE-2	15
Interpon 100 HR AJ128QF (formerly 10-5112) Corvel Blue Fusion Bonded Epoxy	CE-2	15
Interzone 954 High Solids Modified Epoxy Coating	CS-1	15
<u><b>Ameron International Coatings</b></u>		
See PPG Protective & Marine Coatings		
<u><b>Arkema</b></u>		
Primgreen 2 Acid Etchant	CE-2	15
Rilsan 1464 ES, EC Nylon 11 Powder Coating	CE-2	15
Rilsan 2117 MAC ES Nylon 11 Powder Coating	CE-2	15
Rilsan Waterborne Primer		15
Rilsan1488 CM-FB Nylon 11 Powder coating	CE-2	15
<u><b>Ashland Chemical</b></u>		
Hetron 922		4

# Summary





# Summary

