WATER EFFICIENCY RESEARCH:
Fostering International Collaboration

WORLD PLUMBING COUNCIL
GENERAL MEETING
Frankfurt, Germany, 13 March, 2017
THE NEEDS

- Challenges facing the plumbing industry that require research are profound and numerous
  - Opportunistic pathogens in water distribution and premise plumbing - legionella
  - Dispersion of resistant pathogens from sanitary systems
  - New models for pipe sizing in domestic, commercial and institutional buildings
  - Increased use of non-potable water systems in buildings
  - Transport of solid wastes in building drains and sewers
  - Best practices for improved water and sanitation in developing nations
THE PLUMBING EFFICIENCY RESEARCH COALITION (PERC) EXPERIENCE

- A US Based Association Coalition
  - MOU Development – 1+ Years
  - Work Plan / Budget Development – 1+ Years
  - Nice ceremony at EPA, but no funding
  - Seeking Funding – 1+ years

Formal MOU Signing at EPA Headquarters 2009
PERC’S INTERNATIONAL OUTREACH

- 2009 CIB W026 – Dusseldorf
  - Discussions, notably with Professor John Swaffield
  - Debate of need for research on DLT
  - Ongoing discussions - Agreement that the PERC Work Plan was unique
  - Prof. Swaffield’s participation at the 2010 IETS (now EWTS)
    - Ranking of variables, toilet paper focus

- 2010 CIB W062 – Sydney
  - Discussions, notably with Steve Cummings and Jeffrey Clark
  - Toilet paper testing discussed
PERC’S INTERNATIONAL OUTREACH

- MOU Signed between PERC and AS Flow at EPA HQ
  - Agreed to share data, results and consult on next steps
  - Discussions on toilet paper led to one of the most important findings from the PERC studies
THE WPC RESEARCH DATABASE EXPERIENCE

Resulted from an update provided on PERC at the 2013 WPC General Meeting during the ISH Fair

Discussed at the 2013 CIB W062 in Nagano, Japan and at the 2014 CIB W062 in San Paulo, Brazil
THE WPC RESEARCH DATABASE

EXPERIENCE

Database launched in December of 2015

Currently ~120 registered users

Impact to date =
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Impact to date = NIL
DISCUSSION: OBSTACLES TO INTERNATIONAL COLLABORATION ON PLUMBING ISSUES

- General Obstacles:
  - Time - Collaboration is time consuming, More entities equates to more difficulties
  - Plumbing isn’t sexy – Viewed as low-tech, “dirty job”, does not attract young minds
  - Plumbing research is expensive, often long-duration work plans, often monotonous

- Private Sector:
  - Competitive issues, Losing “control” of data, Results may trigger regulatory action, Staffing constraints

- Academia:
  - Competition for grant $, Need to publish, Copyright issues, IP

- Government:
  - Competition for funding, Special interest opposition; Grants often require $ spent in country
DISCUSSION: OBSTACLES TO INTERNATIONAL COLLABORATION ON PLUMBING ISSUES

So, what can WPC and its members do to foster better levels of international collaboration on plumbing research?
THANK YOU!

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