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When what's inside has to stay inside, it's polyethylene pipe.

**Count on it.**

# Plastic Pipe Institute (PPI)

## Energy Piping Systems Division

### NPRM

### Comment and Proposal



# Outline

- What is Rework
- Steps Industry Has Already Taken
- Concerns with NPRM
- Alternate Proposal



# Rework

- Definition of “rework” from ASTM F412
  - “a plastic from a manufacturer's own production that has been ground or pelletized for reuse by that same manufacturer”
- Sources of Rework Include
  - Startup & Changeovers
  - Errors & Appearance issues
  - Inadvertent Damage





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# Evaluation of Impact of Rework GTI/OTD (2004-2006)

- Evaluated Pipes with known contamination
- Short term and long term tests
- Developed recommendations for safe use of rework





## GTI/OTD Recommendations

### PPI TN-30-2006 Requirements for the use of Rework Materials in Manufacturing Gas Pipe

- Requirements include:
  - Storage locations
  - Fines/Dust Removal
  - In Stream Magnets
  - Melt Filters
- Adopted into ASTM D2513-07







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# Concerns with NPRM



# Concerns with NPRM

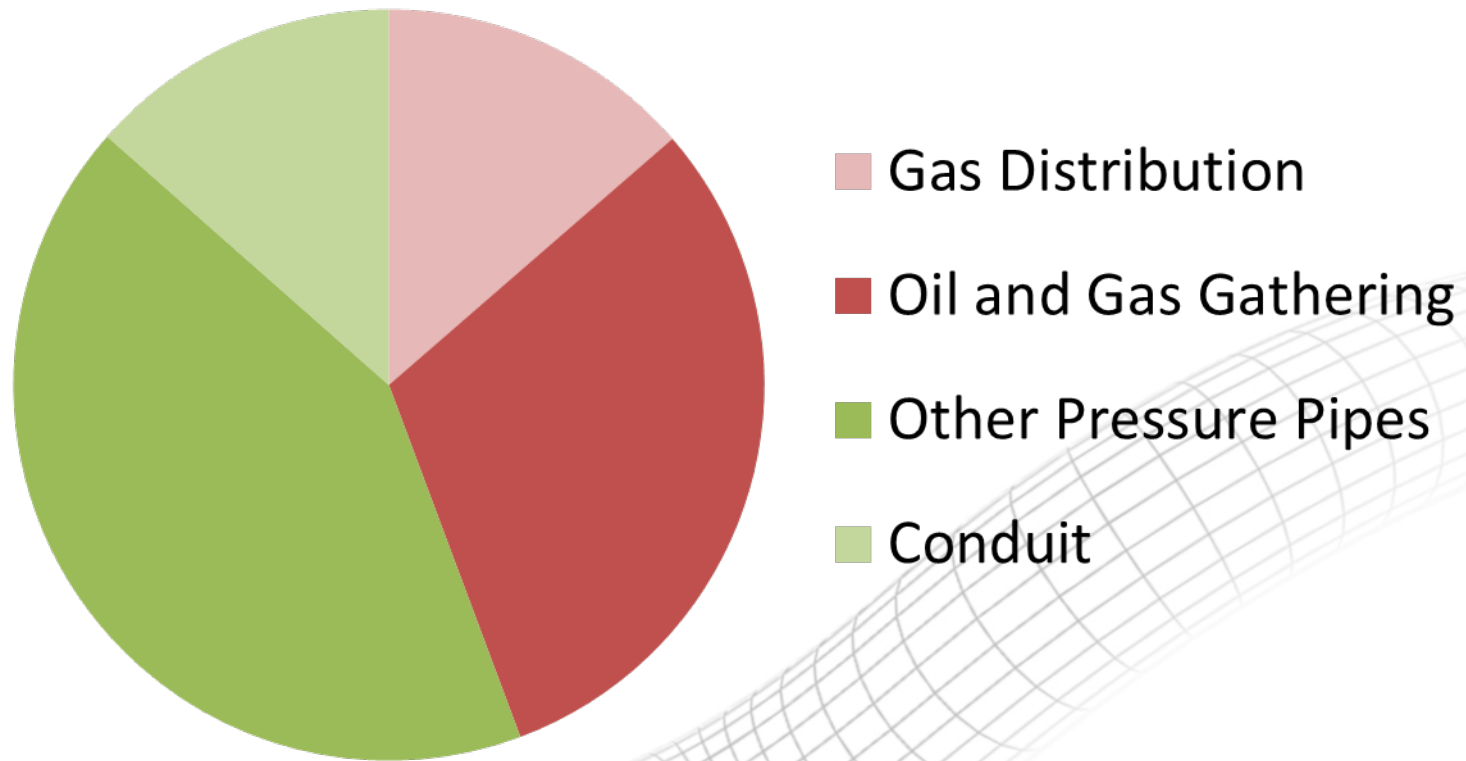
## 1. Cost

- No other market for MDPE pipe resin
- Discount to commodity product value
- Upwards of \$1to3M annually if re-used
- \$14MM if unable to find an alternate outlet.



# Concerns with NPRM

## 2. Oil and Gas Gathering







# Concerns with NPRM

## 3. Little or No Benefit

- Only addresses rework and not other sources of contamination
- Pressures operators to minimize scrap
- No direct means of compliance



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# PPI Proposal

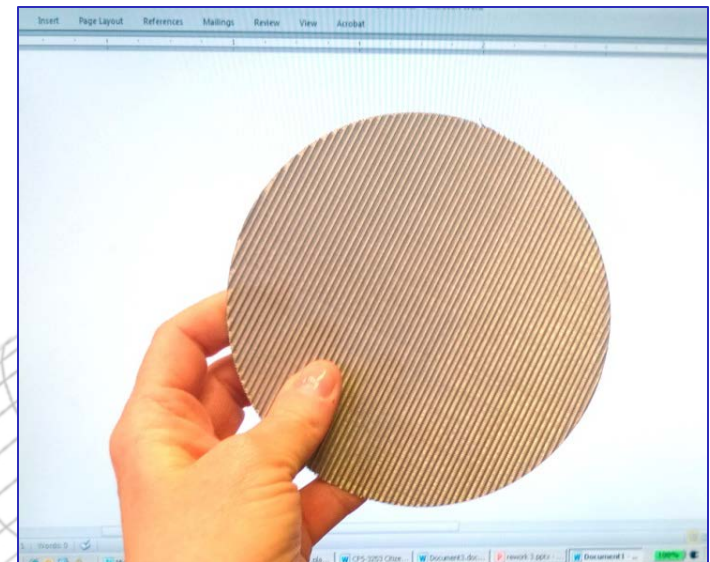
Adopt ASTM D2513-09a and limit the use of Rework to diameters >2"IPS



# Benefits to PPI Proposal

## 1. Keep all benefits of ASTM D2513-09a

- Materials Have the Highest Resistance to Slow Crack Growth
- Melt Filtering Requirements to 0.017" maximum
- Clean product handling requirements
- No financial penalty

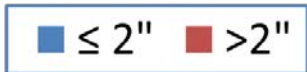
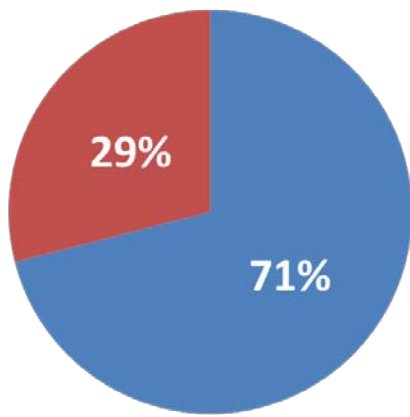


# Benefits to PPI Proposal

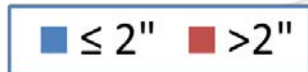
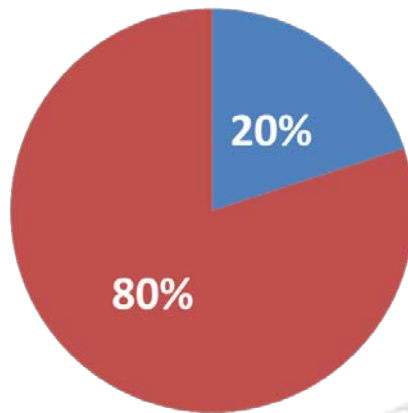
## 3. Limit Rework use to Pipes > 2" IPS

- No rework in >70% of the pipes
- No financial penalty to manufacturers

**Feet**



**Pounds**





# Next Steps

- ASTM WK39660
  - New project to develop a “Standard Practice for Preventing Contamination in Plastic Gas Pipes and Fittings”
  - Auditable Standard





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--ASTM D2513-09a, ``Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings," (December 1, 2009), (except section 4.2 pertaining to rework material shall apply only to pipe diameters larger than 2"IPS) (ASTM D2513).