Illicit Discharge Detection & Elimination Program

Prepared for:
Doylestown Township and Citizens

Doylestown Township, Pennsylvania
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Agenda

• Current Status IDD&E
• 2018 Inspections, Sampling, Results
• DNA Sampling
• Going Forward 2019
• Takeaways
• Q&A
Current Status of IDD&E

• Year 16 of the Program
• GHD completed typical hot spot IDD&E sampling
• Doylestown Township remains in compliance
• New Permit received in 2019
• September 2019 – Next MS4 report due
IDD&E – Dry Weather Inspection

Doylestown Township
Septage Management Program
Streets by Cycle

Cycle I
Start: January 2004
End: December 2004

Cycle II
Start: January 2005
End: December 2005

Cycle III
Start: January 2006
End: December 2006
• Focused Inspections & Sampling
  – Historical Hot Spots (Areas 1, 2, and 3)

• Sample Analysis - Fecal coliform at all locations with flow
  • Area 1 – 11
  • Area 2 – 10
  • Area 3 – 1

• Data Review – Chose 5 locations (Areas 1 and 2) for DNA fingerprinting
  – 4th year of DNA sampling
  - 5 samples per year since 2015
  - In 2018, 5 Outfalls sampled
DNA Fingerprinting

DNA Tests

- Goose
- Cow
- Ruminant (e.g. deer)
- Dog
- Human
Area 1 – 11 Inspections

- 11 samples
- 5 samples FC > 200 col/100 ml
- Maximum FC = 3200 col/100 ml

- DNA testing (2 samples)
  - Both samples were positive for Human
  - One also positive for Dog
IDD&E Sampling - 2018

Area 2 – 10 Inspections

- 10 samples
- 5 samples FC >200 col/100 ml
- Maximum FC = >6000 col/100 ml

- DNA testing (3 samples)
  - 2 positive for Human
  - 2 also positive for Dog
IDD&E Sampling - 2018

Area 3 – 2 Inspections

• 1 sample
• 1 samples >200 col/100 ml
• Maximum FC = 240 col/ml

• No DNA samples collected
IDD&E Sampling – 2015 through 2018

Area 1

2015 - 6 >200 col/ml
2016 - 2 >200 col/ml
2017 - 5 >200 col/ml (Max >600)
2018 - 5 >200 col/ml (Max 3200)

Area 2

2015 - 4 >200 col/ml
2016 - 5 >200 col/ml (Max = 1,700)
2017 - 7 >200 col/ml (Max = 600)
2018 - 5 >200 col/ml (Max = >6000)

Area 3

2015 - No FC >200 col/ml
2016 - No FC >200 col/ml
2017 - 1 >200 col/ml (Max = 2200)
2018 - 1 >200 col/ml (Max = 240)
IDD&E – Going Forward 2019

• GPS outfalls and observation points using new CSDatum program, Update Outfall Map

• Complete inspections/Historical hot-spot sampling (Areas 1, 2, and 3) using new CSDatum program (~30 locations)

• Additional Inspections & Sampling as requested by Township

• Comply with current permit PAG-13

• Additional source investigations as needed
  – Dye tracing
  – TV inspections
  – DNA testing
IDD&E – Takeaways

• Township in Compliance
• Continue Inspections/Sampling
• GPS outfalls, Update Outfall Map
• Septic System Maintenance
• Public Participation
• Pollution Prevention and good housekeeping
• **Goal is to Improve Water Quality!**
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