NC Department of Health and Human Services

Update on EPA’s Draft GenX Toxicity Assessment

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EPA Releases GenX Toxicity Assessment

• Draft for public comment
• 60-day public comment period ending January 22, 2019
• Includes two draft toxicity values for GenX chemicals
  – Subchronic RfD = 0.0002 mg/kg/day
  – Chronic RfD = 0.00008 mg/kg/day

• NC DHHS provisional RfD = 0.0001 mg/kg/day
Similarities

• Apply to oral route of exposure (ingestion)
• Derived for non-cancer endpoints
• Identified same toxicological studies
• Used the same critical study
  – Subchronic study in mice
• Used the same critical effect
  – Single cell necrosis in the liver
• Same intraspecies uncertainty factor of 10
Differences

• Point of departure
  – Benchmark Dose Modeling versus the No Observed Adverse Effect Level

• Interspecies differences
  – Allometric scaling

• Database completeness uncertainty factor
  – EPA = 3; NC DHHS = 1

• Subchronic to chronic uncertainty factor
  – EPA = 3; NC DHHS = 10
NC DHHS Next Steps

• Current EPA assessment is draft and subject to change following public comments

• NC DHHS will reassess the provisional health goal for GenX in drinking water upon EPA’s final release
Questions?