



NACWA
National Pretreatment and
Pollution Prevention Workshop
Minneapolis, Minnesota

May 15, 2014

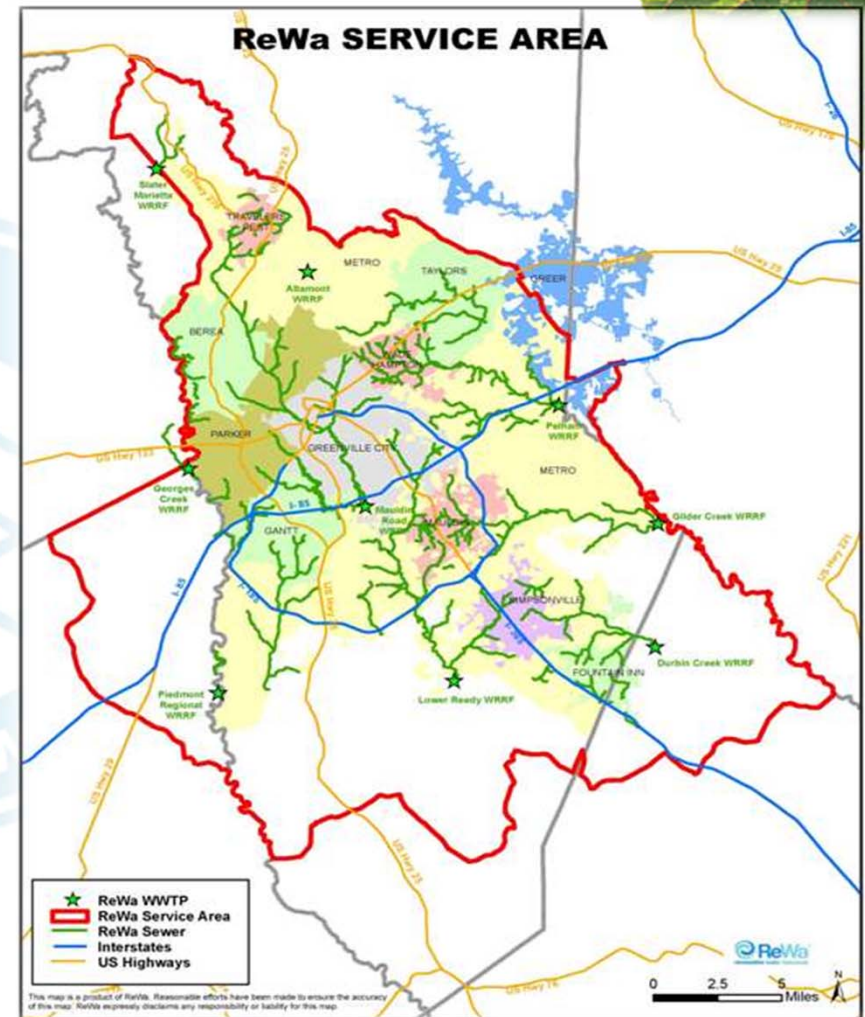
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Executive Director
Renewable Water Resources



- History of the agency
- PCBs
- Sources
- Agency regulation
- State regulation
- EPA involvement



- Regional Wastewater Utility:
 - Transportation
 - Treatment
 - Renewable Energy & Reuse
- 300 square mile service area
- Special Purpose District; nine member Board of Commissioners
- 3 River Basins





- Treatment for 400,000 people
- 5 Counties – Greenville, Laurens, Anderson, Spartanburg, & Pickens
- Treatment Capacity up to 128 MGD
- 360 Miles Trunk Sewer
- 7,205 Manholes
- 62 Pump Stations: 8 Water Resource Recovery Facilities
- 18 subdistricts with 2,065 Miles of Collection Sewer Lines

Polychlorinated Biphenyls

“PCBs”



- Synthetic organic chemical compound of chlorine attached to biphenyl, which is a molecule composed of two benzene rings.
- PCB production was banned by the United States Congress in 1979.
- Widely used today
 - See [EPA 2009 Q&A on PCBs](#)





Polychlorinated Biphenyls “PCBs”

- Widely used as dielectric and coolant fluids
 - in electrical apparatus such as transformers
 - cutting fluids for machining operations
 - carbon paper
 - in heat transfer fluid, and
 - a lot of other products

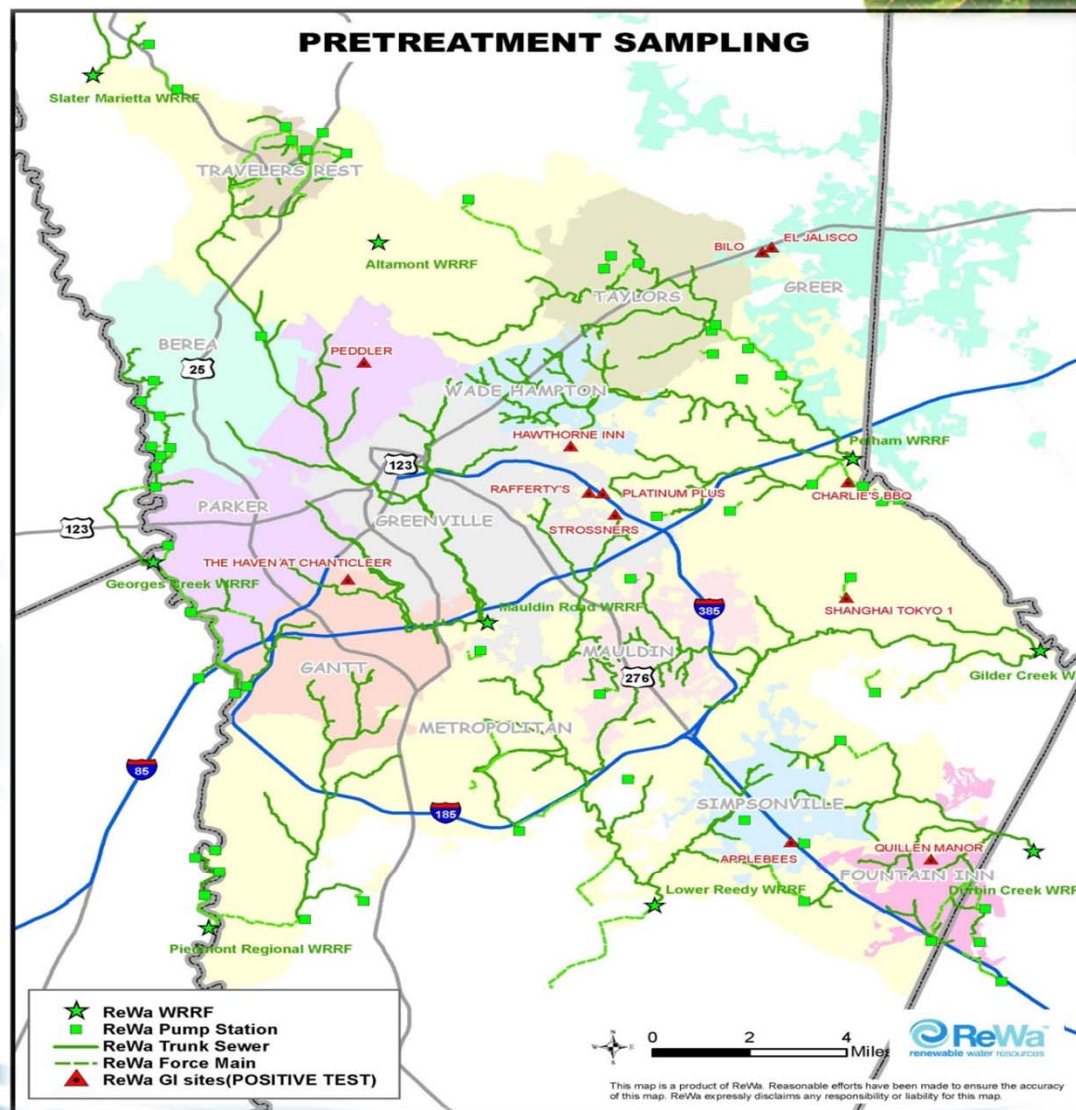




PCB Contamination and Illegal Discharge

- The source of ReWa's contamination was found to be illegally contaminated
 - Grease interceptors (12), and
 - Septic tanks (1)
- This contamination did not affect drinking water or sewer services to the community.



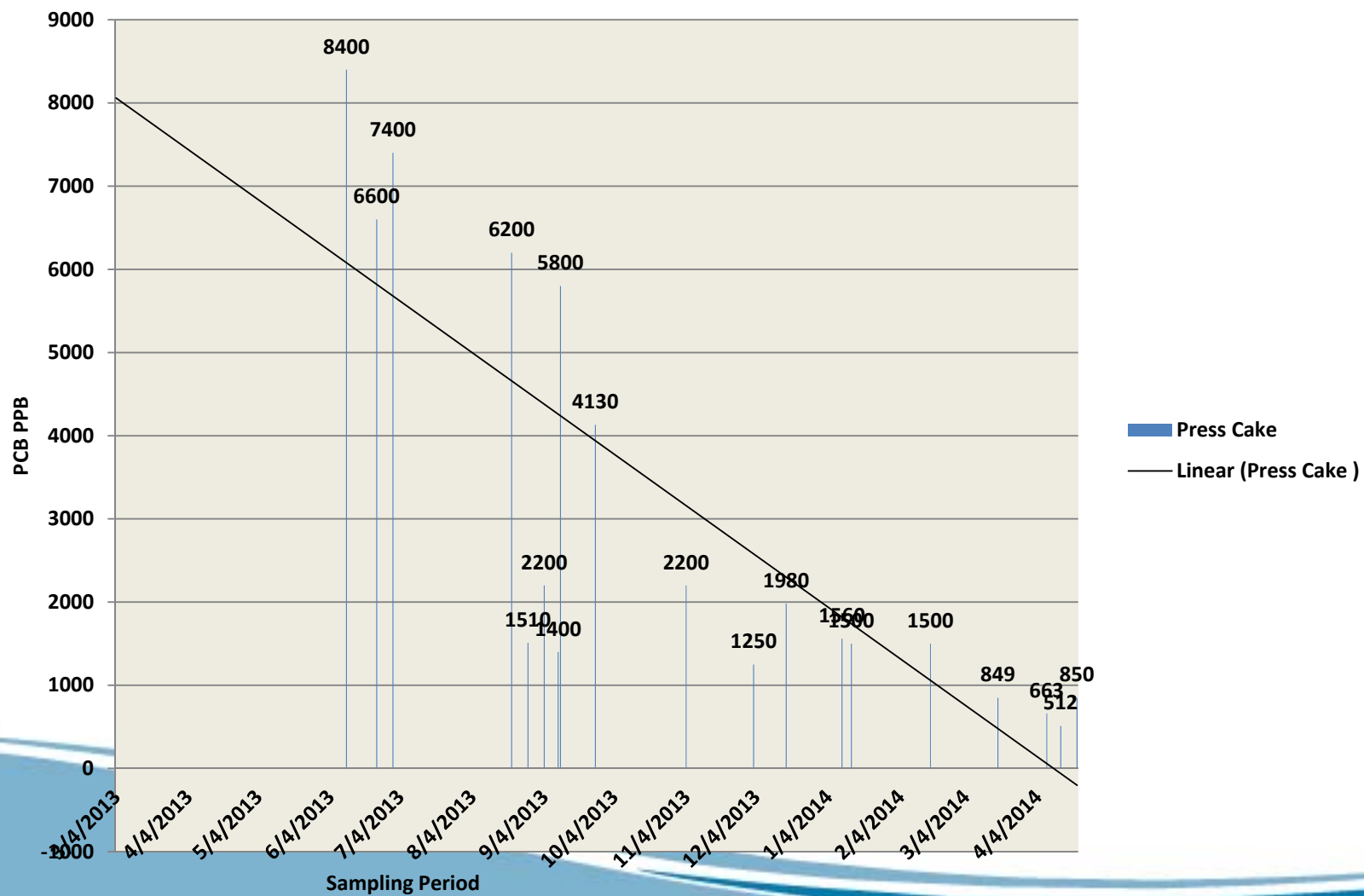


Pelham WRRF

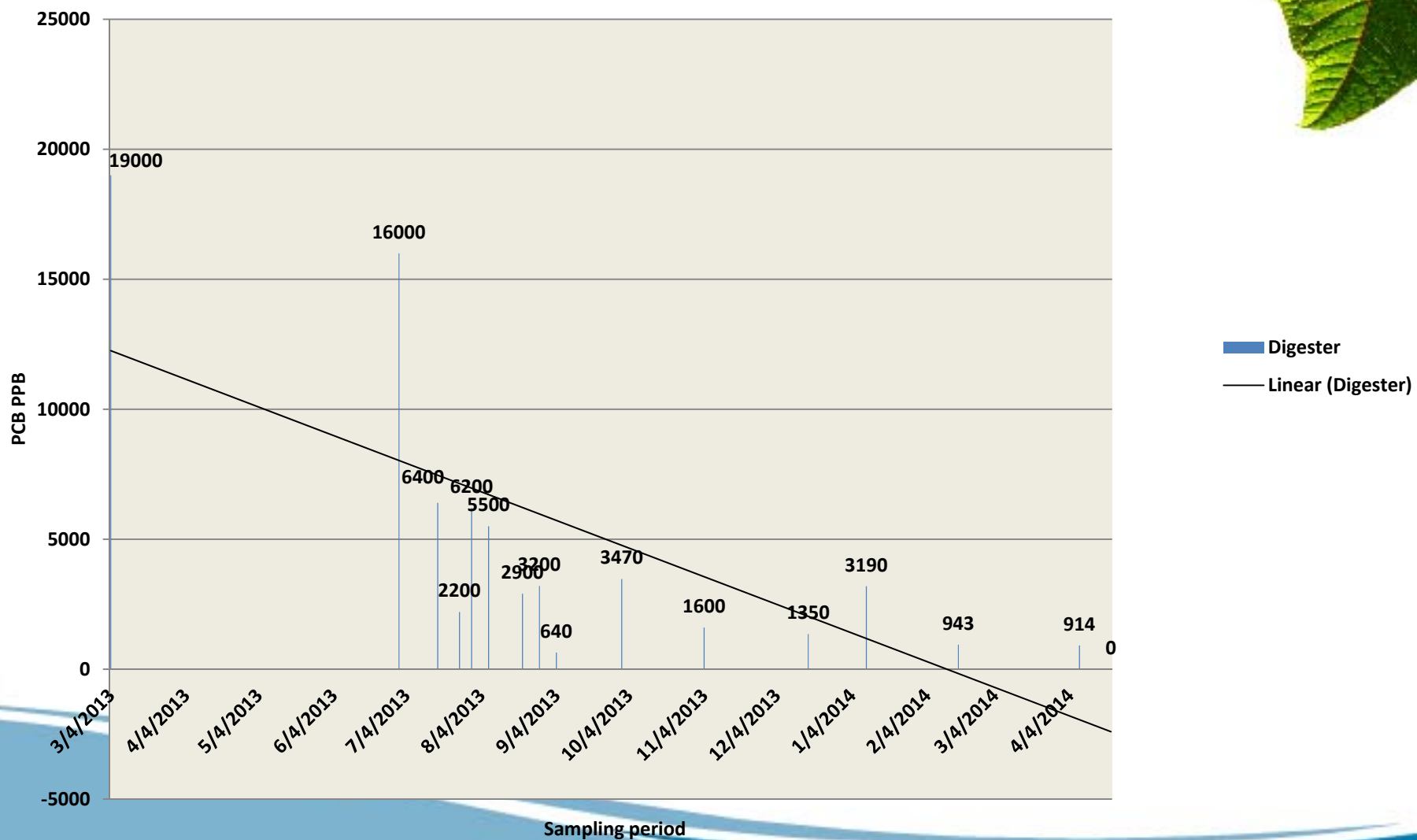


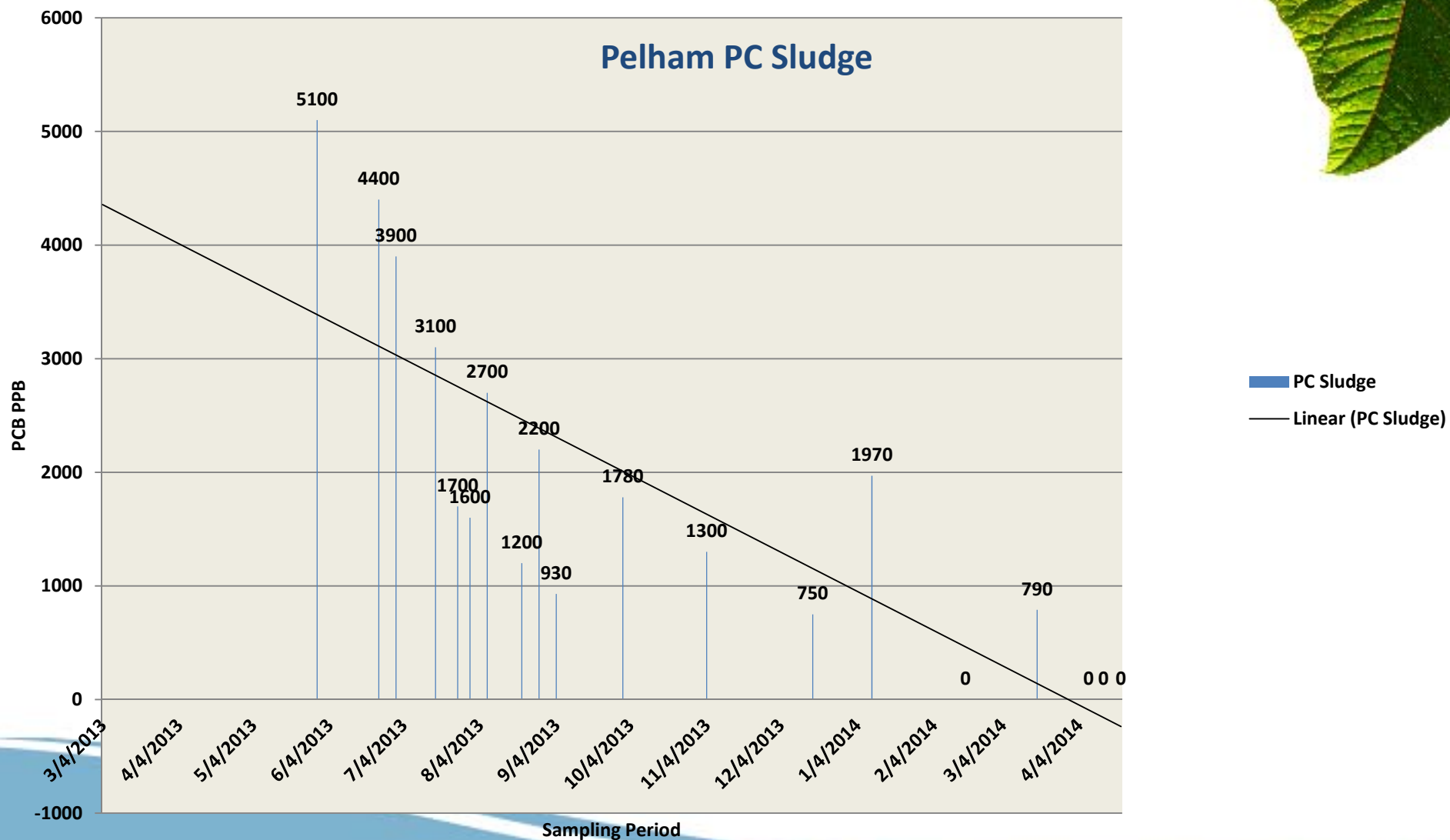


Pelham Beltpress Cake



Pelham Digester



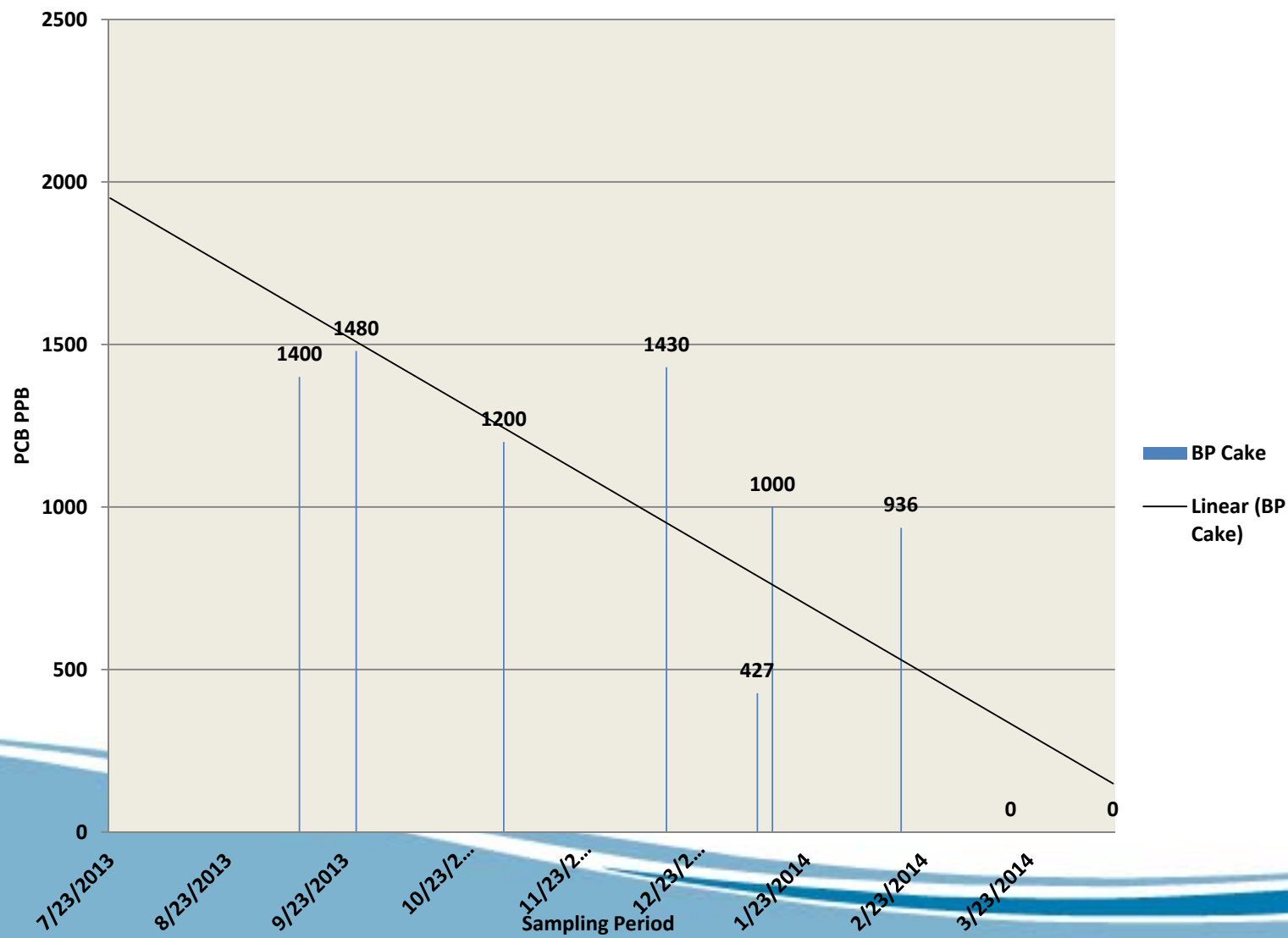


Mauldin Road WRRF



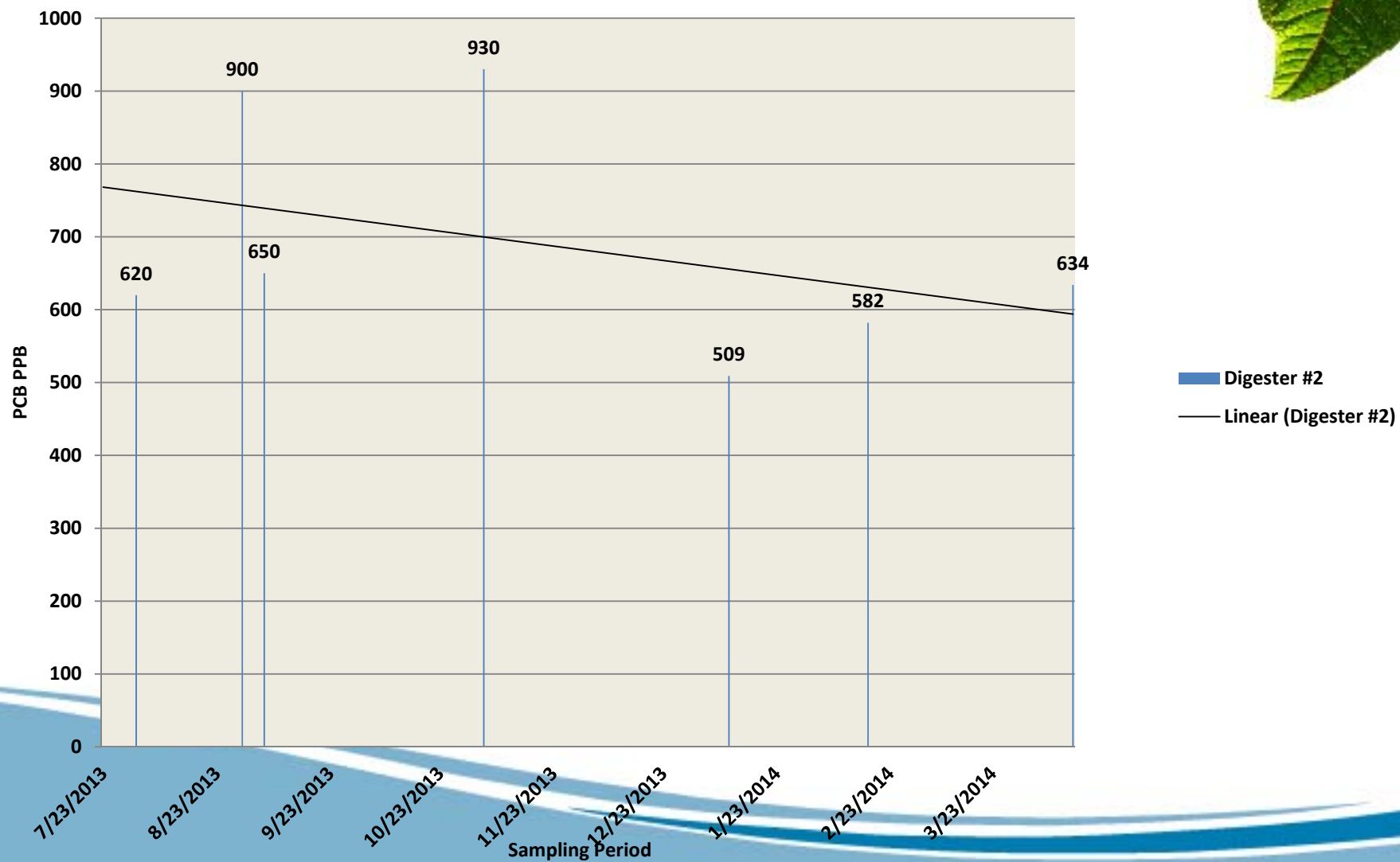


Mauldin Road Belt Press Cake

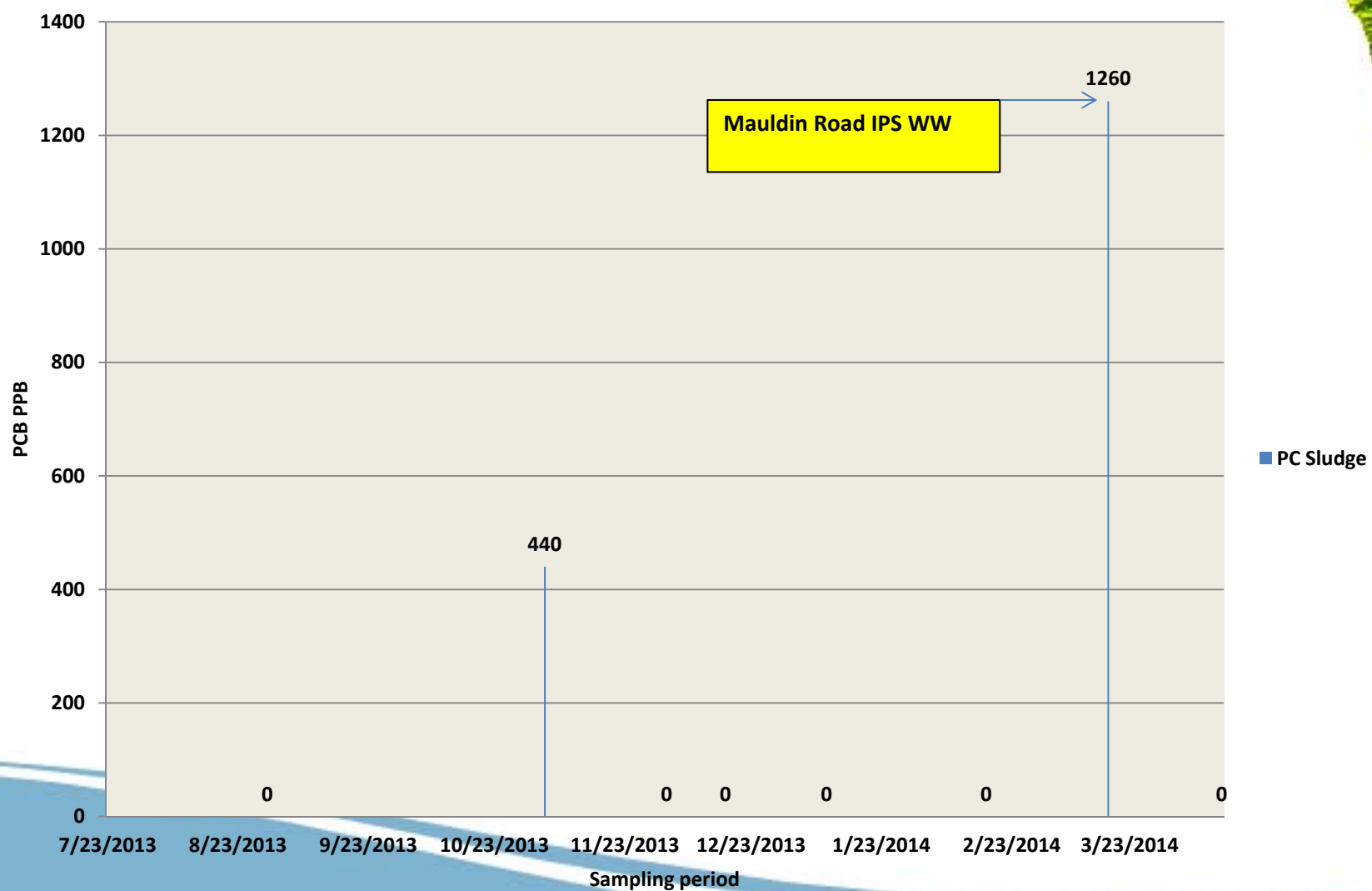




Mauldin Road Digester



Mauldin Road PC Sludge

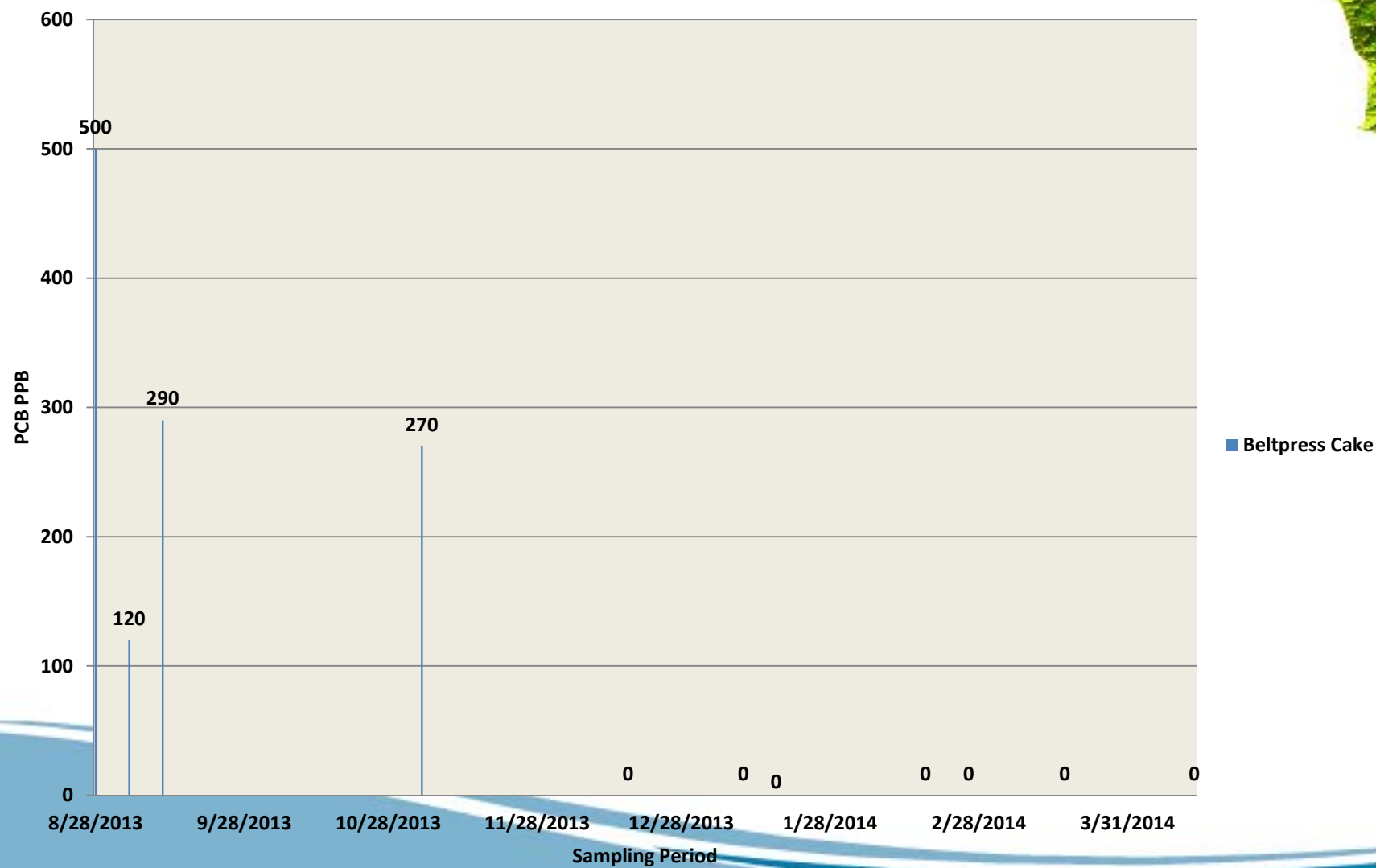


Lower Reedy WRRF





Lower Reedy Beltpress Cake





Decontamination Efforts Negotiated with EPA and DHEC

- Solids
 - +/> 50 ppm (Pelham only)
 - < 50 ppm goes to local landfill
 - Water is filtered before returning to the headwork
- The cost of disposal
 - has exceeded \$3,000,000
 - will exceed \$5,000,000



Regulatory Changes

- Preventative testing and source detection activities
 - Day tanks
 - Random sampling
- Five haulers have tested positive for PCBs since procedural changes





Regulatory Changes Cont.

- Food Service Establishments and waste haulers
 - Regulation of grease traps
 - Control of haulers by manifest loads
 - Enforcement and fines
- The Grease Control Regulation changes
 - Increased testing requirements
 - Grease trap lock-down
 - Wash-down of hauler vehicles when rotating between septage and grease disposal, etc.

To view the recent changes to Grease Control and Hauled Waste Program Documents, visit <http://www.rewaonline.org/sewer-use-regulation.php>



Cost to Date

Summary MPCU (PCB) Expense @ 4-30-14

Expense	Sum of Net
Chemicals	379,124.17
Equipment Fuel Oil	7,785.28
Legal	104,150.21
Miscellaneous	140.46
Operating Outside Tech Services	2,082,589.86
Outside Tech Services	44,715.97
R&M Equipment	8,199.73
R&M Electrical	4,713.32
R&M Equipment	64,929.54
Solids Disposal	686,750.25
Grand Total	\$3,383,098.79



Legislative Impact

- Old State Regulation
 - [503 Regulations](#) provide for up to 50 ppm on land application
 - Annual survey
 - No numeric number for water quality



Legislative Impact

- Negotiated regulation
 - If PCB level < 1ppm no action
 - If PCB level is 1-10 reportable
 - If level is above 10, report, test fields, and coordinate with DHEC on further action under applicable state law
 - Quarterly testing provisions
 - 503 level of 50 ppm remains in place
 - 5 year sunset clause on this regulation



Legal Actions

- Utilities
 - Subpoena
 - Prosecution
 - Arrest

- Haulers
 - Suspensions
 - Indictments





QUESTIONS?

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