



# R2E2 Update

Stakeholder Committee

July 09, 2014





# Agenda

- R2E2 Updates Since Last Meeting
  - 30% design workshops
  - Project scope reductions and increases
  - Construction Cost estimate
- Fluidized Bed Incinerator
  - 60% Workshop
- Contract 33 Primary Switchgear and Utility Relocation
  - Construction Status
- Schedule—What's next?
  - Major equipment pre-purchase and pre-select
  - Final design
  - Construction
- Open Discussion



# Design Workshops

- All 30% workshops complete – including the added unit process of P-Release - held May 30, 2014
- 60% workshops - schedule and status:
  - HSW and Septage - April 17, 2014
  - Solids and Site Civil – May 1, 2014
  - Digesters and Biogas – June 19, 2014
  - Fluidized Bed Incinerator, Nutrient Recovery, and P-Release Anaerobic Zone 60% workshops are pending
- Process Hazard Analysis conducted June 2 & 3, 2014



# Project Scope Reductions/Increases

- Scope reductions were assessed in “zero delta” workshops and accepted as follows:
  - Reduced size of biogas storage tank
  - Reduced size of biogas compression/conditioning facility
  - Made septage receiving improvements a deductive alternate
  - Removed anaerobic zone improvements from R2E2 project
- One additive scope item was accepted – use of thickening centrifuge in lieu of gravity belt thickener



# Cost Estimate

- The team continues to look for ways to reduce costs
- Below is a summary of cost progression:
  - Facility Plan = \$147,000,000 in 2011 dollars
  - BODR (includes increased FBI and dryer sizing)
    - \$124,000,000 in 2011 dollars
    - \$144,000,000 in 2016 dollars (midpoint of construction)
  - Current estimate is \$146,000,000 in 2016 dollars



# Fluidized Bed Incinerator Procurement

- Submittal review is ongoing and model development is progressing
- Fluidized Bed Incinerator (FBI) model completion and 60% design workshop is scheduled for late July, 2014
- Deductive and additive change orders are being reviewed





# Primary Switchgear and Utility Relocation (Contract 33)

- Initial contract to transition GBF electrical supply into new switchgear, relocate utilities and access roads, and construct new storage building
  - Awarded to Miron Construction
  - Notice to Proceed April 14, 2014
  - Mobilized on site May 2014
  - Construction is progressing on sludge piping relocation, electrical duct bank installation and primary switchgear facility
  - Contract Completion scheduled for July 15, 2015



# Primary Switchgear and Utility Relocation



**Ostrenga backfills Switchgear Bldg. base slab with CABC and compacts**





# Primary Switchgear and Utility Relocation



**Mudlab for Switchgear Bldg. complete**



# Primary Switchgear and Utility Relocation



**Miron carpenters complete base slab perimeter forms**





# Primary Switchgear and Utility Relocation







# Primary Switchgear and Utility Relocation



**Miron completes setting of EMH riser sections**





# Primary Switchgear and Utility Relocation



**NEI installs duct bank from EMH-6**



# Procurement Schedule

- Pre-selection documents to qualified vendors:
  - Co-gen package: Issued Dec. 2013; Proposals Due Jan. 2014
    - Pre-selection of Caterpillar was recommended and notice of intent to purchase is progressing
  - Centrifuge package: Issued Dec. 2013; Proposals Due Jan. 2014
    - Pre-selection of Centrysis was recommended and notice of intent to purchase is progressing
  - Nutrient Recovery proposal package being developed for vendor pre-selection – RFP scheduled for issue late July 2014



# Design Schedule (Contract 34)

- Design completion has pushed to Spring 2015
- Nutrient Recovery vendor pre-select and design is the critical path - the 60% workshop October 2014
- Remaining 60% workshops - FBI, and Anaerobic Zone and P-release scheduled for July and August, 2014
- Bid in Spring of 2015 and Construction start Summer 2015



# Open Discussion





# Schedule – What's Next

- Post today's presentation on website
  - Continue to update our customers through external newsletter and website
- Next Customer Meeting
  - Fall 2014



# R2E2 Update

Thank you for coming!