New Providence Ecology Park – Bahamas
Converting a Dump into a World Class Landfill

Dr. Tony Sperling, P.Eng.
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New Providence Ecology Park
Looking North
State of Landfill at Takeover
Major fires were an annual affair
NPEP Statistics

- Landfill services 275,000 residents and 4.0 million tourists to New Providence Island
- Site receives approx. 410,000 tonnes/year
- 9,500 loads per month, approx. 400 loads per day
- 2/3 C&D waste, 1/3 MSW
- Concrete rubble
- Tires
- 90,000 gallons/day of septage sludge
Compacting and Cover was Job #1
Excavating a Storm Water Retention Pond
The MSW Active Face
CAT 826 Compactor – Pushing Long
MSW Active Face on a Dry Day
And on a Rainy Day
Strategic Use of Incoming Waste
D6 Dozer Packing C&D Structural Layer
Soil Loads – Payload of Gold!!
Completed tipping pad
Smooth Drum Vibratory Compactor
Eliminates surface roughness prior to cover
Results of Efficiency Efforts

- **Dozers and compactors reduced from 6 to 3**
- **Fuel burn reduced from 17,000 gallons/month to 14,000 gallons/month**
- **Cover soil reduced from 12,000 yd³/month to 2,500**
- **Cost savings realized:**
  - $690,000 per year for cover soil @ $10.50/yd³
  - $1.5 million per year from consolidating to 1 active face
  - $888,000/year savings by strategic equipment purchase
Brush, pallets and green waste ground up
Legacy Tire Pile
Tire Shredder – Old and Tired
NPEP Landfill Fire Team
Spotter Training
Septage Lagoon
Polishing Wetland Under Construction
Spreading Cover during onset of Dorian
Hurricane Dorian in full force – Sept. 03, 2019
Minor flooding occurred at site