## Schedule

### Sunday, February 11, 2018

1:00 to 6:00 pm  **Registration**  Counter 1 (Speaker Registration) & Counter 2 (General Registration), Attendees, Presenters, and Moderators  East Foyer
Starting 1:00 pm  Poster Set-Up  East Foyer
Starting 2:00 pm  Table Top Set-Up  Indian Wells Ballroom
5:00 to 7:00 pm  Welcome Reception  Grand Salon ABCD

### Monday, February 12, 2018

7:00 am  **Registration Opens**  Counter 1 (Speaker Registration) & Counter 2 (General Registration), Attendees, Presenters, and Moderators  East Foyer
7:30 to 8:45 am  Continental Breakfast  Indian Wells Ballroom
8:45 to 10:00 am  Welcome & Keynote  Keynote Speaker: Terry Tamminen, CEO, Leonardo DiCaprio Foundation  Indian Wells Ballroom
10:00 am to 12:00 pm  **Session One**

<table>
<thead>
<tr>
<th>Track A: Leachate Characterization</th>
<th>Track B: Landfill Design - Structural Stability</th>
<th>Track C: Anaerobic Digestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert Vista AB</td>
<td>Desert Vista DE</td>
<td>Grand Salon ABCD</td>
</tr>
<tr>
<td>Moderator: Kevin Torrens, Brown and Caldwell</td>
<td>Moderator: Steven Menoff, Civil &amp; Environmental Consultants</td>
<td>Moderator: Morton Barlaz, North Carolina State University</td>
</tr>
</tbody>
</table>

State of Practice of Leachate Management & Treatment in the U.S. – Bryan Staley and Stephanie Bolyard, Environmental Research & Education Foundation
Do We Need to Re-Evaluate Our Landfill Slope Stability Analyses to Account for the Changing Waste Stream – Eric Chiado, Civil & Environmental Consultants
High Solid Anaerobic Co-digestion of Food and Yard Wastes with Biosolids for Biogas Production – Eunyoung Lee, University of South Florida
Characterization of UV Quenching Substances in Waste Liquids from ETLFs and its Implication – Renzun Zhao, Lamar University
Design and Construction of Reinforced Soil Structures Using Solid Utility Waste as Backfill Material – Marco Isola, Maccaferri
Anaerobic Digestion Pilot Project: A Case Study – Amy Knight, Civil & Environmental Consultants
Effect of Food Waste Diversion on Leachate Quality – Florentino De la Cruz, North Carolina State University
Facilitating Landfill Cell Construction Below the Groundwater Table in Central Florida using a Vertical Cutoff Wall – Tobin McKnight, Jones Edmunds & Associates
Co-digestion and AD Alternatives for Waste Management in Buenos Aires – Rodrigo Pontiggia, Maria Cielo Lorenzo, Iris Cortez, Melisa Altina, Ignacio Varde, Benito Roggio Ambiental, and James Law, SCS Engineers

12:00 to 2:00 pm  **Lunch**  Lunch Speaker: Michael E. Hoffman, Managing Director, Stifel

2:00 to 3:30 pm  **Session Two**

<table>
<thead>
<tr>
<th>Track A: Solid Waste Data/Informatics</th>
<th>Track B: Elevated Temperature Landfills</th>
<th>Track C: Coal Combustion Residues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert Vista AB</td>
<td>Desert Vista DE</td>
<td>Grand Salon ABCD</td>
</tr>
<tr>
<td>Moderator: Jon Powell, Yale University</td>
<td>Moderator: Greg Cekander, Waste Management</td>
<td>Moderator: Mind Kline, University of North Carolina - Charlotte</td>
</tr>
</tbody>
</table>

Solid Waste Generation and Composition: The Evolving Ton – Kim Smith, State University of New York- Stony Brook
Case Study of a Florida Elevated Temperature Landfill – Debra Reinhart, University of Central Florida
Technical Update on Brine Encapsulation R&D – Kirk Ellison, Electric Power Research Institute
Impacts of Temperature on Waste Stabilization – Paul Van Geel, Carleton University
A Thermodynamics Based Protocol for Assessing the Suitability of Geopolymer Formulations for Solidifying/Stabilizing Coal Combustion Residues – Monday Okorokwou, University of California-Los Angeles
Accounting for Non-hazardous Industrial Waste in the United States: A Triangulation Approach – Jonathan Krones, Yale University
Coal Ash Landfill Leachate Impacts at a ZLD Power Plant – Ivan Cooper, Civil & Environmental Consultants
Impact of Methodology and Assumptions on MSW Estimates – Bryan Staley and Debra Kanter, Environmental Research & Education Foundation
Heat Generation and Accumulation in Municipal Solid Waste Landfills – Morton Barlaz, North Carolina State University
Mineralogy Optimization for Metal and Halide Immobilization in Co-disposed Flue Gas Desulfurization Brines and Bituminous Coal Fly Ash – Wenlong Zhang, Georgia Institute of Technology
## Schedule

### Monday, February 12, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 to 9:15 am</td>
<td>Continental Breakfast</td>
<td>Indian Wells Ballroom</td>
</tr>
<tr>
<td>9:30 to 10:00 am</td>
<td>Session Three</td>
<td></td>
</tr>
<tr>
<td>10:00 to 10:30 am</td>
<td>Track A: Landfill Emissions I</td>
<td></td>
</tr>
<tr>
<td>10:30 to 11:00 am</td>
<td>Track B: Characterizing Elevated Temperature Landfills</td>
<td></td>
</tr>
<tr>
<td>11:00 to 11:30 am</td>
<td>Track C: Waste Management Planning</td>
<td></td>
</tr>
<tr>
<td>11:30 to 12:00 pm</td>
<td>Track D: Environmental Research &amp; Education Foundation</td>
<td></td>
</tr>
</tbody>
</table>

### Tuesday, February 13, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 to 8:30 am</td>
<td>Track A: Leachate Disposal at POTWs</td>
<td></td>
</tr>
<tr>
<td>8:30 to 9:15 am</td>
<td>Track B: Recycling &amp; Diversion</td>
<td></td>
</tr>
<tr>
<td>9:30 to 10:00 am</td>
<td>Track C: Closure/Post Closure</td>
<td></td>
</tr>
<tr>
<td>10:00 to 10:30 am</td>
<td>Track D: Leachate Organic Matter Impacts on Wastewater Quality</td>
<td></td>
</tr>
</tbody>
</table>

- - -

## Session Three

### Track A: Landfill Emissions I

**Desert Vista DE**
Moderator: Geoff Brawner, Cornerstone Engineering Group

1. **Atmospheric Modeling to Assess Wind Dependance in Trace Emission Method Measurements of Landfill Methane Emissions** – Paul Irion, University of Delaware
   - Characterizations of Emission Sources as a Precursor to Predicting Emitted Conditions
   - Analysis of Emission Datasets
   - **Scenario Modeling**

2. **Monitoring – Quantitative Whole Landfill Emissions and Surface Monitoring** – Deb Gruver, University of New Mexico
   - Evaluation of Emission Datasets
   - **Scenario Modeling**

3. **Refractory Test for Quantifying Heat Generation of Waste** – Navid Jafar, Louisiana State University
   - **Soil Properties**
   - **Reactivity Test**

### Track B: Characterizing Elevated Temperature Landfills

**Desert Vista DE**
Moderator: Bryan Stolby, Environmental Research & Education Foundation

1. **Oxidation of Methane, Methane Oxidation: Field-scale Test Sections Experiment – Tony Abichou, Florida State University**
   - **Oxidation of Methane**

2. **Oxidation Capacity of Un-composted Yard Waste and Other Waste Materials – Goro Yamanaka, Nexis Corporation**
   - **Oxidation Capacity**

### Track C: Waste Management Planning

**Grand Salon ABCD**
Moderator: Bob Gardner, SCS Engineers

1. **Sensitivity Analysis of Life Cycle Costs for Solid Waste Management** – Bob Gardner, SCS Engineers
   - **Cost Sensitivity Analysis**

2. **Beneficial Use of Coal Combustion Residuals for Coal Ash Impoundments – Rick Fullerton, Civil & Environmental Consultants**
   - **Beneficial Use**

### Track D: Environmental Research & Education Foundation

**Grand Salon ABCD**
Moderator: Deb Gruver, University of New Mexico

   - **Decision Support System**

2. **Testing of a Methane-Inhibiting Enriched Landfill Bio-cover for Brady Road Resource Management Facility in Winnipeg, Manitoba, Canada – Moniek Wierink, KGS Group**
   - **Testing**

---

## Session Four

### Track A: Leachate Disposal at POTWs

**Desert Vista DE**
Moderator: Brian Brown, Waste Management

   - **Facility Cutoff**

2. **Two Year Results on Production of Stakeable Products from MSW – Luc Durocher, Organic Waste Systems, Inc.**
   - **Two Year Results**

### Track B: Recycling & Diversion

**Desert Vista DE**
Moderator: Craig Bartlett, Region of Durham (Ontario, CA)

1. **Forcing a New Path – A Plan for Controlling Landfill Gas Migration – Post Closure Case** – April Zheng, Region of Waterloo (Canada)
   - **Plan**

2. **Landfill Closure and Post Closure Costs Using Decision Tree Modeling** – John Clouse, Brown and Caldwell
   - **Costs**

### Track C: Closure/Post Closure

**Grand Salon ABCD**
Moderator: John Clouse, Brown and Caldwell

1. **Landfill Gas Migration at a Closed Facility with Saturated Waste – John Clouse, Brown and Caldwell**
   - **Migration**

2. **Mitigating Acid Mine Drainage Using Stabilized Flue Gas Desulfurization Material – Chin-Min Cheng, Kyoto University (Japan)**
   - **Mitigation**

### Track D: Leachate Organic Matter Impacts on Wastewater Effluent Quality

**Indian Wells Ballroom**
Moderator: Scott Besson, Environmental Research & Education Foundation

1. **Characterizing Thermophilic Waste Decomposition at a Landfill Experiencing Elevated Temperatures** – Renovis de la Cruz, North Carolina State University
   - **Characterization**

2. **Composite Liner Systems: Measured and Modeled Leachate Leakage – Monika Niemczyk, KGS Group**
   - **Liner Systems**

---

## Session Five

### Track A: Leachate Treatment

**Desert Vista DE**
Moderator: Annan Zhao, Lamar University

1. **Siting of a Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing – David Popow, ProkDer, Moncton, New Brunswick, Canada**
   - **Siting**

2. **Closing The Gap: Designing the Final Landfill Closure Project – Marc Zhu, Waterlinc Global**
   - **Closing**

### Track B: Coal Combustion Residuals I

**Desert Vista DE**
Moderator: Ken Godbole, Southern Company

1. **Operational Data Comparison for Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Comparison**

### Track C: Organics Diversion

**Desert Vista DE**
Moderator: Wendling Richter, Environmental Management Foundation

1. **Operating Data Comparison for Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Operating Data**

### Track D: Environmental Research & Education Foundation

**Indian Wells Ballroom**
Moderator: Deb Gruver, University of New Mexico

1. **Long-term Performance Analysis of Double Composite Liners: Measured and Modeled Leachate Leakage – Monika Niemczyk, KGS Group**
   - **Performance Analysis**

### Track E: Challenging/Emerging Contaminants in Landfills

**Grand Salon ABCD**
Moderator: Kurt Shaner, Waste Connections

1. **Comprehensive Treatability Evaluation of 1,4-Dioxane Removal from Landfill Leachate – Chao Zhou, Geosyntec Consultants**
   - **Treatability Evaluation**

### Track F: Challenging/Emerging Contaminants in Landfills

**Grand Salon ABCD**
Moderator: Marla Enright, University of Central Florida

1. **Environmental Testing of a Methane-Inhibiting Enriched Landfill Bio-cover for Brady Road Resource Management Facility in Winnipeg, Manitoba, Canada – Moniek Wierink, KGS Group**
   - **Environmental Testing**

### Track G: Geosynthetics

**Indian Wells Ballroom**
Moderator: Randy Rockwell, Roceso Geosynthetics

1. **Siting of a Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Siting**

### Track H: Challenging/Emerging Contaminants in Landfills

**Indian Wells Ballroom**
Moderator: Wendling Richter, Environmental Management Foundation

1. **Long-term Performance Analysis of Double Composite Liners: Measured and Modeled Leachate Leakage – Monika Niemczyk, KGS Group**
   - **Performance Analysis**

---

### Session Six

### Track A: CH4 Oxidation

**Desert Vista DE**
Moderator: Roger Green, Waste Management

1. **Methane Oxidation: Field-scale Test Sections Experiment – Tony Abichou, Florida State University**
   - **Methane Oxidation**

### Track B: Geosynthetics

**Desert Vista DE**
Moderator: Randy Rockwell, Roceso Geosynthetics

1. **Siting of a Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Siting**

### Track C: Challenging/Emerging Contaminants in Landfills

**Grand Salon ABCD**
Moderator: Kurt Shaner, Waste Connections

1. **Comprehensive Treatability Evaluation of 1,4-Dioxane Removal from Landfill Leachate – Chao Zhou, Geosyntec Consultants**
   - **Comprehensive Treatability Evaluation**

### Track D: Environmental Research & Education Foundation

**Indian Wells Ballroom**
Moderator: Deb Gruver, University of New Mexico

1. **Methane Oxidation: Field-scale Test Sections Experiment – Tony Abichou, Florida State University**
   - **Methane Oxidation**

### Track E: Challenging/Emerging Contaminants in Landfills

**Indian Wells Ballroom**
Moderator: Kurt Shaner, Waste Connections

1. **Siting of a Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Siting**

### Track F: Challenging/Emerging Contaminants in Landfills

**Indian Wells Ballroom**
Moderator: Wendling Richter, Environmental Management Foundation

1. **Siting of a Leachate Treatment Technology Transition from Sequencing Batch Reactor to Membrane Bioreactor with Effluent Polishing** – David Popow, ProkDer, Moncton, New Brunswick, Canada
   - **Siting**
## Tuesday, February 13, 2018

**3:30 to 5:00 pm**  
**Session Seven**

<table>
<thead>
<tr>
<th>Track A: Temperature Monitoring and Control</th>
<th>Track B: Landfill Air Regulations</th>
<th>Track C: Composting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert Vista AB</td>
<td>Desert Vista DE</td>
<td>Grand Salon ABCD</td>
</tr>
<tr>
<td>Moderator: Mike Beaudoin, Republic Services</td>
<td>Moderator: Matt Stutz, Weaver Consultants</td>
<td>Moderator: Craig Bartlett, Region of Durham (Ontario, CA)</td>
</tr>
</tbody>
</table>
| Continued Development of Temperature and Pressure Instrumentation for Elevated Temperature Landfills – Nicholas Yafrate, Geosyntec Consultants | PANEL DISCUSSION: Evolving Landfill Air Regulations, Interpretations, and Enforcement Initiatives Under a New Administration – Matt Stutz, Weaver Consultants Group  
Amy Van Kolken Banister, Waste Management  
Niki Wuestenberg, Republic Services  
Kerry Kelly, Waste Management  
Patrick Sullivan, SCS Engineers | Time for a Change? The Challenges and Lessons Learned for the Transition from Windrow Operations to Aerated Static Pile Composting – Maura Dougherty, Tetra Tech – CEG |
| Heat Exchange at Landfills: Evaluation of Preliminary Data from an Instrumented Municipal Solid Waste Landfill – Leticia Nocko, University of California-San Diego | | Correlating Water Quality Types to Groundwater Contamination at Compost Sites – John Norgard, State University of New York-Stony Brook |
| 5:00 to 6:30 pm Reception & Poster Viewing | | What Works: Ten Years of Odor Control Evolution in the (Food and Source Separated Organic) Waste Processing Industry – Kyle Muffels, GHD |

## Wednesday, February 14, 2018

**7:00 to 8:15 am**  
**Continental Breakfast**

**8:30 to 9:45 am**  
**Session Eight**

<table>
<thead>
<tr>
<th>Track A: Sulfur in Landfill Gas</th>
<th>Track B: Health and Safety</th>
<th>Track C: Landfill Gas Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert Vista AB</td>
<td>Desert Vista DE</td>
<td>Grand Salon ABCD</td>
</tr>
<tr>
<td>Moderator: Frank DeOrio, O’Brien &amp; Gere</td>
<td>Moderator: Sarah Foster, CPF-Associates</td>
<td>Moderator: Christopher Bareither, Colorado State University</td>
</tr>
<tr>
<td>Causes of Increasing Sulfur Content in California Landfill Gas – Patrick Sullivan, SCS Engineers</td>
<td>Health and Safety Protocols for Investigating Elevated Temperature Landfills – Davis Garrett, Geosyntec Consultants</td>
<td>Approaches to Modeling Landfill Gas at a Multiple Phase Site – Lori Clark, State University of New York-Stony Brook</td>
</tr>
<tr>
<td>A Methodology to Project Hydrogen Sulfide Concentration in Landfill Gas (LFG) Based on Historical Data – Bishow Shaha, Florida Atlantic University</td>
<td>Reducing the Frequency and Severity of Waste Collection Accidents with Video-Based Safety and Analytics – Jason Palmer, SmartDrive Systems</td>
<td>Solar Low-Flow Pumps Boost Iowa Landfill’s Gas Recovery, Address Groundwater, With Cost Savings – Mark Bertane, Blackhawk Technology Company</td>
</tr>
<tr>
<td>9:45 to 10:00 am Coffee Break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**10:00 to 11:15 am**  
**Session Nine**

<table>
<thead>
<tr>
<th>Track A: Landfill Emissions II</th>
<th>Track B: Landfill Planning/Operations</th>
<th>Track C: Landfill Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert Vista AB</td>
<td>Grand Salon ABCD</td>
<td></td>
</tr>
<tr>
<td>Moderator: Jim Lewis, North Carolina State University</td>
<td>Moderator: Bill Soukup, Cornerstone Environmental Group</td>
<td></td>
</tr>
</tbody>
</table>