CASE STUDY: FOLLOW-UP ON KEENE, NH LANDFILL GAS-TO-ENERGY PROJECT

January 17 – 19, 2012

15TH ANNUAL LMOP CONFERENCE AND PROJECT EXPO

DAVID E. ADAMS, P.E.
Public-Private Partnership
Keene Recycling & Solid Waste Transfer Facility
Proximity to Landfill
Landfill Gas-to-Energy
Innovative Approach - LFGMS
2009 GCCS Improvements
2010 GCCS Improvements

Limit air intrusion:

- Replace quick-connect fittings at each gas well (GW-1 through GW-17)
- Replace Kanaflex hoses and/or hose clamps
- Repair boot seals
LFG Collection Rate Projections

Keene Municipal Landfill

Five Sets of Landfill Gas Collection Rate Modeling Results
Assumed Collection Efficiency of 75 Percent
2011 Landfill Gas Pump Test
2011 Landfill Gas Pump Test
2011 Landfill Gas Pump Test

Landfill Mapping

Keene Municipal Landfill: Energy Extraction (MMBtu/Day)

Mapping: Energy Extraction (MMBtu/Day) on Keene Municipal Landfill
Period: from Nov 20, 2011 to Nov 26, 2011
Where Energy Extraction (MMBtu/Day) is greater than 5
2011 Landfill Gas Pump Test
2011 Landfill Gas Pump Test
2011 Landfill Gas Pump Test

FLARE000 - Nov 16, 2011 - Jan 03, 2012

- Energy Extraction (MMBtu/Day)
- Current Flow (SCFM)

SANBORN HEAD