

Hanover

Engineering Associates Inc

August 7, 2014

AUG - 8 2014

Mr. Jack Cahalan, Manager
Lower Saucon Township
3700 Old Philadelphia Pike
Bethlehem, PA 18015-5426

RE: IESI Bethlehem Landfill
HMI Inspection Report
Hanover Project LS90-7

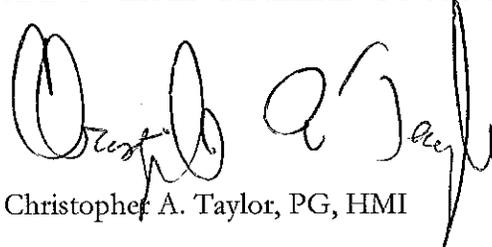
Dear Mr. Cahalan:

Please find enclosed a copy of Hanover Engineering's "Inspection Checklist for Host Municipality Inspectors" for the inspection conducted on August 1, 2014 at the above-referenced facility.

If you have any questions, please do not hesitate to contact the undersigned.

Respectfully,

HANOVER ENGINEERING ASSOCIATES, INC.



Christopher A. Taylor, PG, HMI

cat:cat/dad

S:\Projects\Municipal\LowerSaucon\LS90-07-BethLandfill\Docs\HMI-IESI Landfill Inspection\2014\IESI inspection checklist cvr ltr 08-01-14.doc

Enclosure(s)

ROUTING

- Council
- Manager *ong*
- Asst. Mgr.
- Zoning
- Finance
- Police
- P. Works
- P/C
- P & R
- EAC
- Engineer
- Solicitor
- Planner
- Landfill
- EME
- Other

Web

Sample Inspection Checklist for Host Municipality Inspectors
for
MUNICIPAL WASTE LANDFILLS

Inspector Name: Christopher A. Taylor

Inspection Date: 08-01-14

Start Time: 2:00PM

Finish Time: 4:00PM

Facility Name: IESI PA Bethlehem Landfill #100020

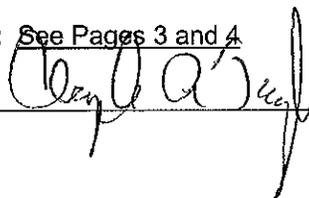
Facility Address: 2335 Applebutter Road, Bethlehem, PA

Facility Contact Person/Title/Phone Number: Mr. Samuel J. Donato, Jr., District Manager (610) 317-3200

DAILY OPERATION REQUIREMENTS	Yes	No	NA	ND	COMMENTS/NOTES
Trucks using designated roads/approved parking areas per permit	X				
Operations conducted during permitted operating hours	X				
Access controlled per plan	X				
Access road(s) maintained (erosion, dust, litter, mud etc.) per plan	X				See Comment 1
Waste measured according to approved plan	X				
Vehicles directed promptly to unloading area	X				
Vehicles promptly unloaded	X				
Inspection procedures implemented for prohibited wastes per plan	X				See Comment 2
No unapproved wastes				X	
Solid waste spread and compacted into layers per plan	X				
Procedures followed within 1 st 8 ft. to protect liner/protective cover			X		See Comment 3
No waste <25 ft. from edge of liner, 4 ft. berm, edge marked, etc.	X				See Comment 4
Procedures followed for special handling and residual wastes	X				See Comment 5
No open burning	X				
Fugitive dust emissions minimized and controlled per plan	X				See Comment 1
Vectors minimized and controlled per plan	X				
Odors minimized and controlled per plan		X			See Comment 6
Other nuisances minimized and controlled per plan	X				
Litter minimized and controlled per plan	X				See Comment 7
Daily waste acceptance < ave. 1375 and max. 1800 daily vol.				X	See Comment 8
Radiation monitoring system operational	X				
Radiation protection action plan followed as appropriate	X				
Approved daily cover used at end of day or within 24 hours	X				See Comment 9
Vegetation established and maintained per plan	X				
Surface and groundwater pollution discharges prevented/controlled	X				
Water treatment facilities operated and maintained			X		
Soil and erosion control BMPs are maintained per plan	X				See Comment 10
Sedimentation and discharge structures operated and maintained	X				
Flow from leachate collection system monitored daily	X				
Leachate treatment facilities operated and maintained			X		
Landfill gas controlled per plan	X				See Comment 11
Daily operational records being made and maintained (i.e. waste received, problems, violations, rejected loads, radioactive mat., overweight trucks, etc.)	X				
Cost effective recyclable materials are being salvaged			X		
Salvaged materials are stored in an approved area			X		
Recyclable materials collection center maintained	X				
No immediate threats to public health and safety	X				

Additional Comments: See Pages 3 and 4

Inspector Signature: _____



Date: _____

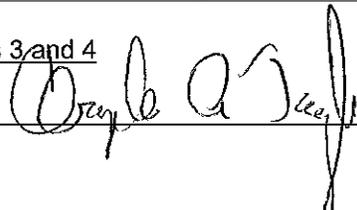
8-7-14

Facility Name: IESI PA Bethlehem Landfill #100020

Facility Address: 2335 Applebutter Road, Bethlehem, PA

DESIGN and CONSTRUCTION REQUIREMENTS	Yes	No	NA	ND	COMMENTS/NOTES
Proper signs posted (Identify facility and recycling drop-off center)	X				
Grid coordinate system and permit areas clearly marked	X				
Site perimeter clearly marked	X				
Perimeter fences and barriers in place and maintained	X				
Access roads properly designed and constructed per plan	X				See Comment 12
Scale conforms with Consolidated Weights and Measures Act	X				See Comment 13
Adequate equipment on-site and stand-by equipment available				X	
Fences or other barriers to control litter are constructed per plan	X				
Radiation monitoring system constructed per plan	X				
Daily and intermediate cover material conforms with plan	X				
Final cover conforms with plan	X				See Comment 14
Soil and erosion control BMPs implemented per plan	X				
Sedimentation ponds constructed per plan	X				
Discharge structures constructed per plan	X				
Subbase constructed according to regulations	X				See Comment 15
Secondary liner constructed per regulations and approved plan	X				"
Leachate detection system installed per regulations	X				"
Primary liner constructed per regulations and approved plans	X				"
Protective cover constructed per regulations	X				"
Leachate collection system installed according to regulations	X				"
Leachate storage impoundments constructed per regulations			X		
Leachate treatment system constructed per plans			X		
Wastewater treatment equipment constructed per <u>discharge</u> permit			X		
Groundwater monitoring wells installed per plan	X				
Landfill gas collection and destruction system constructed per plan	X				See Comment 11
Air pollution control equipment constructed per <u>air</u> permit				X	See Comment 16
Emergency equipment available per regulations and plan	X				See Comment 17
Recyclable materials collection center established per plan	X				
MONITORING and RECORDKEEPING REQUIREMENTS	Yes	No	NA	ND	COMMENTS/NOTES
Flow from leachate <u>detection</u> system monitored weekly	X				
Potential for offsite odors inspected on a regular and frequent basis	X				See Comment 6
Liquid from leachate detection system analyzed quarterly	X				
Liquid from leachate <u>collection</u> system analyzed quarterly	X				
Wastewater discharge analyzed per <u>discharge</u> permit (if applicable)			X		
Wastewater discharge complies with <u>discharge</u> permit limits			X		
Groundwater monitored and analyzed quarterly	X				
Landfill gas levels monitored quarterly	X				
Combustible gas levels not exceeded	X				
Recovered gas and condensate analyzed annually	X				
REPORTING REQUIREMENTS	Yes	No	NA	ND	COMMENTS/NOTES
Plan submitted if <u>detected</u> leachate > 100 gal/acre/day		X			
Remedial plan submitted if <u>detected</u> leachate could degrade GW	X				See Comment 18
Wastewater discharge reported as required by <u>discharge</u> permit			X		
Groundwater monitoring results reported quarterly	X				
Groundwater assessment plan submitted if groundwater degraded			X		See Comment 19
Abatement plan submitted if groundwater exceeds Act 2 standards			X		See Comment 20
Public notice on recyclable materials collection center provided 2/yr.	X				
Quarterly Operation report submitted as required	X				
Annual Operation report submitted as required	X				

Comments: See Pages 3 and 4

Inspector Signature: 

Date: 8-7-14

Facility Name: IESI PA Bethlehem Landfill #100020

Facility Address: 2335 Applebutter Road, Bethlehem, PA

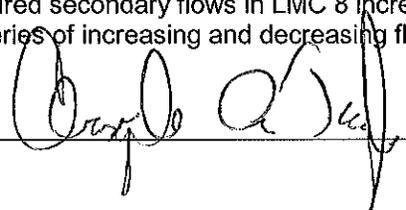
OPTIONAL QUESTIONS on CHANGES	Yes	No	NOTES/IMPACT on CONFORMANCE
Owners/operators			
Employees/personnel			
Contractors/subcontractors			
Customers/waste generators			
Transporters/transfer stations			
Special or residual wastes			
Site volume/capacity			
Average or maximum daily volume			
Permitted acreage			
Access roads			
Cells/construction			
Operating equipment			
Leachate collection and treatment method			
Water pollution control equipment			
Gas monitoring or management plan			
Air pollution control equipment			
>10% increase in leachate/wastewater volume	X		See Comment 21
>10% increase in leachate/wastewater contaminants			
Newly closed cells			
Post closure land use			

Comments:

- Comment 1: Roads are occasionally muddy or dusty. IESI employs a water truck to suppress dust and a street sweeper to remove sediment.
- Comment 2: Radiation monitors check every incoming load; manifests are checked by office personnel; personnel at working face inspect loads for prohibited wastes (drums, tires, etc.).
- Comment 3: Disposal is currently taking place above the first 8 foot "fluff zone" above the protective cover of Cell 4E Stage 2.
- Comment 4: In current Cell 4E Stage 2, waste is being kept a minimum 25 feet from edge of liner.
- Comment 5: For example, for asbestos disposal, a hole in the garbage is excavated out for the asbestos, which is then placed in the hole and covered with garbage so it is not directly run over with equipment.
- Comment 6: Numerous odor complaints have been received during the 2nd quarter. IESI continues to document and investigate complaints, but has been unable to determine the exact cause of odors or to mitigate these odors.
- Comment 7: Windblown litter within the landfill has occurred occasionally during the 2nd Quarter. IESI has employed multiple "pickers" on numerous occasions to remove litter from the landfill surface.
- Comment 8: Compliance Manager states that daily volumes are in compliance; records not checked by this inspector.
- Comment 9: IESI is still importing soil for daily cover. Stockpiles of material for daily cover are routinely observed staged at working face. Excavation work in the north end of Cell 4E to generate cover material ceased during the 1st quarter and has not restarted. Tarps are used for daily cover along with soil.
- Comment 10: Silt fencing and rock filter outlets are inspected and maintained along the northern property line. IESI experienced 2 washout events (06-13-14 and 07-14-14) during which stormwater systems on the south side were overwhelmed by accelerated runoff from area of final capping under construction. IESI is currently working to eliminate the causes of these incidents.

- Comment 11: BRE Plant was in operation during the 2nd Quarter as the primary gas control system. The landfill flare has been operating in conjunction with the BRE plant and serves as a backup to the BRE plant.
- Comment 12: PADEP has inspected and accepted the conditions of all access roads on site.
- Comment 13: Scale is currently inspected every six (6) months by private company (Mettler Toledo) at IESI's expense. PA DEP conducted an inspection of the scale in the 4th quarter of 2012 at the request of the Landfill Committee, and has stated their acceptance of the inspection results from Mettler Toledo.
- Comment 14: IESI is currently placing final capping on approximately 2 acres on the southern face.
- Comment 15: Cell 4E Stage 2 was activated during the 1st quarter. Construction of this cell was conducted in the 3rd and 4th quarter of 2013. Work was inspected and certified by landfill's consulting engineer.
- Comment 16: Facility has received a renewal of their Title V air permit.
- Comment 17: This inspector confirmed the presence of all emergency equipment listed in the landfill's PPC Plan during the 4th quarter of 2012.
- Comment 18: Compliance Manager states that landfill has a pump and treat system in place (the Abatement Well system).
- Comment 19: The Groundwater Trend Analysis addresses and monitors groundwater quality.
- Comment 20: Compliance Manager states that test results show that groundwater quality is well below Act 2 thresholds.
- Comment 21: Measured secondary flows in LMC 8 increased >10% for several weeks versus the previous weeks in a series of increasing and decreasing flow readings.

Inspector Signature: _____



Date: _____

8.7.14