



**1. *Why is Granger seeking these additional counties be added?***

The waste and recycling industry has changed dramatically in the last several years. As a significant job and service provider for the community, it is our responsibility to be aware and adapt to these changes. This allows us to maintain our level of service and seek opportunities to sustain our business for our employees and our customers. Part of our response to changing industry conditions is to expand our service territory to create new market areas. This allows growth of our hauling division and maintains volume at the Granger Wood Street Facility. Such growth allows us to maintain our current standards and provides for efficient and cost effective operations.

This is why we have asked for an amendment to the Clinton County Solid Waste Management Plan to authorize import/export reciprocity with Clare, Hillsdale, Lenawee and Mecosta Counties.

**2. *Are Clare, Hillsdale, Lenawee and Mecosta the only counties Granger has requested as part of the amendment?***

Yes, these are the only counties to be included in the amendment. The proposed language is specific to this request. The current Clinton County Solid Waste Management Plan allows waste import/export with twenty counties. The amendment would expand that to twenty four. (See #13 for a list of current reciprocally authorized counties.)

**3. *Does the draft amendment allow for waste importation from all four proposed counties, whether they have a landfill within their borders or not?***

Yes, the draft amendment allows for waste importation to Clinton County from all four proposed counties whether they have a landfill within their borders or not. Each of these counties will have to approve the export of waste to Clinton County. This is done through a plan amendment process in each county. This is the system for waste flow provided for in Michigan's solid waste planning program authorized by Part 115 of Act 451.

**4. *Are my tax dollars being used to pay for this amendment request and process?***

No, the Clinton County Department of Waste Management administers the amendment process and bills Granger directly for any associated costs. The organization that seeks an amendment is responsible for the costs associated with the process.

**5. *Will adding additional counties to Granger's market area add costs for existing customers?***

The management of trash and recyclables is a competitive business. Pricing is influenced by market conditions and regulatory requirements. Expansion of our hauling division maintains volume to the landfill resulting in efficient and cost effective operations, which is a benefit to all.

**6. *Please define the term “tipping fee.”***

The gate fee (or tipping fee) is the charge for a given quantity and type of waste received at a landfill. It is applied to cover the costs of the service; permitting and licensing, construction, operating, maintaining, closing and post-closure for the site. It may also include applicable regulatory surcharges or fees.

**7. *What are the compaction expectations for waste transferred from the additional counties?***

Granger, typical to the industry, utilizes 15 to 40-yard compaction trucks for the collection of waste and recyclables from residential and commercial customers. Granger recently added assets for waste transfer to our operational structure. Specifically, we now own and operate transfer facilities in Gratiot and Jackson Counties. At transfer facilities municipal solid waste is unloaded from collection vehicles and then reloaded onto larger, long-distance transport vehicles for shipment to the landfill.

Currently, Granger uses a roll-off truck with a trailer with both truck and trailer hauling 40-yard, open-top containers. In the next several weeks to months, we will be converting to compaction equipment to load larger hauling trailers. The trash at both transfer stations will be loaded into 120-yard trailers for transport to the landfill.

**8. *If Granger invests in compacting trash, it may create more room for trash in transporting or disposing of trash in their landfills, but it will take many more years for the trash to decompose. Is this a future problem?***

Compaction is not a future problem, but a benefit. Compaction of trash for transport provides the obvious benefit of more volume transported at a time. The compaction of trash at the landfill is a benefit as well. Maximum compaction is a best management practice for the landfill industry. Compaction results in effective use of the space, stability of the waste pile and aids in the management of liquids and landfill gas (hydraulic conductivity).

The stages of compaction of trash before arriving at the landfill are followed by further compaction at the landfill. Compacting operations at the landfill are aimed at achieving proper cell density, height, slope and width throughout the day.

The factors which affect the rate and extent of decomposition in the landfill are moisture, temperature, soil cover permeability to water, rainfall, the degree of resistance of the wastes to bacterial attack and solid waste processing before landfilling.

**9. *What is the standard, if any, for compacted trash within the Solid Waste Management Program?***

Industry best management practices include maximum compaction of trash in a landfill.



**10. Can you provide background on waste transport, specifically out of state waste?**

Per Host Community Agreement with DeWitt Township conditions apply restricting out-of-state and out-of-country solid waste disposal at the Granger Wood Road facility.

County	Waste Origin	Waste Volume
Clinton	Out-of-State Waste	0
Clinton	Out-of-Country Waste	0

**Michigan Imported Waste by County and Place of Origin FY 2013<sup>1</sup> - TABLE 1**

County	Waste Origin	Waste Volume
Alger	Wisconsin	3,655
Berrien	Illinois	63,483
Berrien	Indiana	692,028
Chippewa	Canada	33,404
Genesee	Canada	1,733,715
Genesee	Illinois	79
Genesee	Ohio	22,951
Jackson	Ohio	67,050
Lenawee	Canada	50
Lenawee	Maryland	560
Lenawee	Ohio	46,679
Macomb	Canada	3,367,522
Menominee	Wisconsin	531,992
Monroe	New York	31
Monroe	Ohio	1,009,885
Monroe	Pennsylvania	13,290
Oakland	Canada	126
Ontonagon	Wisconsin	56,923
St Joseph	Indiana	26,426
Washtenaw	Canada	3,178
Wayne	Canada	2,543,320
Wayne	Florida	33,683
Wayne	Maryland	192
Wayne	Massachusetts	45
Wayne	New York	16,554
Wayne	Ohio	199,646
Wayne	Pennsylvania	541
Wayne	Wisconsin	7

**11. How many and what kind of additional trucks will be traveling on county roads?**

Once we transition to compaction loading at the transfer stations, we will be using 120-yard - trailers pulled by a semi truck for transport. We are targeting two loads from Alma per day, Monday through Friday and four loads from Jackson per day, Monday through Friday.

<sup>1</sup> Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection Solid Waste Section, Report of Solid Waste Landfilled in Michigan, October 1, 2012 - September 30, 2013. [http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013\\_447054\\_7.pdf](http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013_447054_7.pdf)



**12. Will Granger be responsible for damage caused by additional traffic?**

The ability to transport larger volumes with the 120-yard semi-trailers will result in a minimal increase in traffic. Additionally, the routes traveled with these trucks will be on all-weather class A roads that are designed for the type of vehicle and weight.

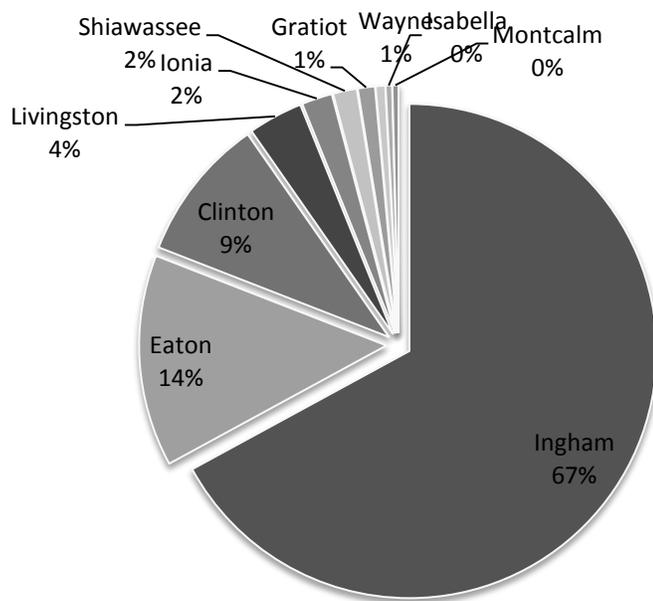
The route includes Wood Road which was upgraded by the Clinton County Road Commission about 10 year years ago. The improvements included the addition of a center turn lane. Recognizing a long-term vision for growth, Granger and other trucking businesses contributed the local share requirement for the infrastructure improvements to Wood Road.

**13. Where does waste imported to Clinton County originate?**

Import Authorizations Currently Included in the Clinton County Solid Waste Plan

- Allegan
- Barry
- Calhoun
- Clinton
- Eaton
- Genesee
- Gratiot
- Ingham
- Ionia
- Isabella
- Jackson
- Kalamazoo
- Kent
- Livingston
- Montcalm
- Oakland
- Ottawa
- Saginaw
- Shiawassee
- Washtenaw
- Wayne

**2013 Waste Import to Granger Facilities (greater than 5,000 CY)<sup>2</sup>**



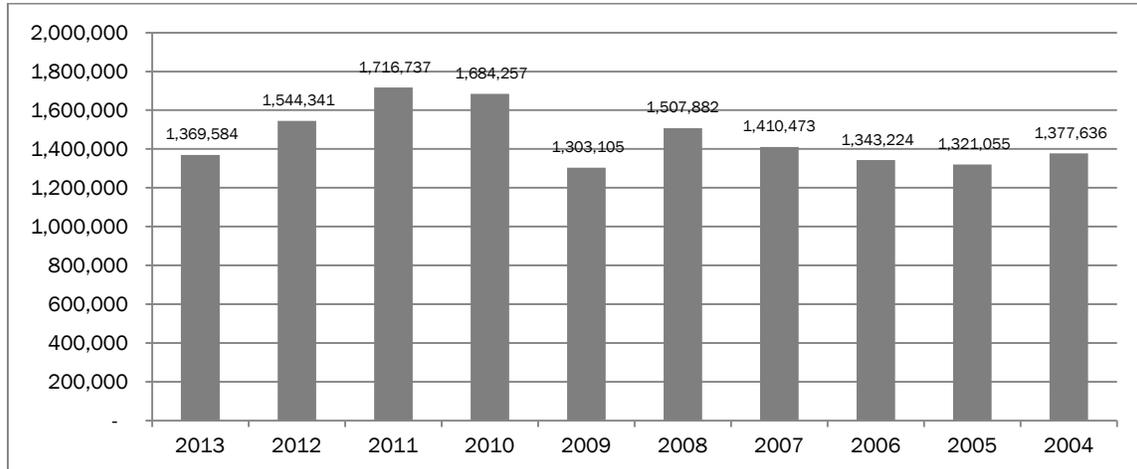
<sup>2</sup> Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection Solid Waste Section, Report of Solid Waste Landfilled in Michigan, October 1, 2012 - September 30, 2013. [http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013\\_447054\\_7.pdf](http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013_447054_7.pdf)



**14. What are past solid waste totals as compared to projected for the Granger facility?**

The historical and projected cumulative total of waste disposal at the Granger facilities is within the annual volume cap in the Clinton County Solid Waste Management Plan. (See questions 21 for information on the annual cap.)

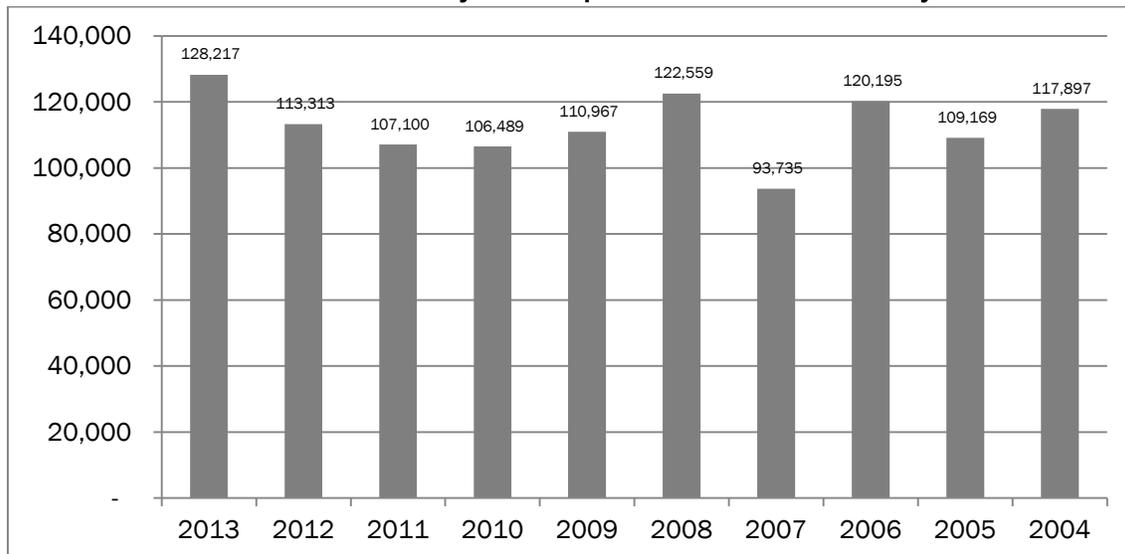
**Granger Annual Waste Receipt Volume (In Cubic Yards)<sup>3</sup>**



Note: Volumes reflect the nearly three year (2011-2013) fly ash project, accumulating to 1,555,017 cubic yards.

**15. What is the volume of waste generated and disposed of in Clinton County?**

**Waste Generated in Clinton County and Disposed of in Clinton County<sup>3</sup>**



<sup>3</sup> Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection Solid Waste Section, Report of Solid Waste Landfilled in Michigan, October 1, 2012 - September 30, 2013. [http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013\\_447054\\_7.pdf](http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013_447054_7.pdf)



***16. What is the capacity of the Granger Wood Street Landfill?***

The Michigan Department of Environmental Quality requires annual capacity reporting for landfills. The Department also provides a formula for calculation of capacity. In 2012-2013, Granger reported the following for the Wood Street Landfill which was established in 1984:

- a. 32,451,288 yards total permitted capacity
- b. 32.09 remaining years of capacity under current waste receipt conditions
- c. 628,942 yards of capacity used during the reporting period
- d. 20,180,629 yards of permitted capacity remaining at the facility

In 2012-2013, Granger reported the following for the Grand River Avenue Landfill which was established in 1973:

- a. 14,497,900 yards total permitted capacity
- b. 97.65 remaining years of capacity under current waste receipt conditions
- c. 55,848 yards of capacity used during the reporting period
- d. 5,453,404 yards of permitted capacity remaining at the facility

***17. What are the market expectations from the additional counties? How much extra trash will be coming into Clinton County if the amendment is passed?***

This is difficult to predict as Granger does not have an established customer base in these counties. The additional volume added to volumes typically received cannot exceed the allotted annual cap.

**Total Waste Disposed in Michigan Landfills by County– FY 2013<sup>4</sup>**

County	Volume in Cubic Yards
Clare	73,167
Mecosta	101,647
Hillsdale	73,379
Lenawee	168,137

<sup>4</sup> Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection Solid Waste Section, Report of Solid Waste Landfilled in Michigan, October 1, 2012 - September 30, 2013. [http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013\\_447054\\_7.pdf](http://www.michigan.gov/documents/deq/DEQ-OWMRP-SWS-SolidWasteAnnualReportFY2013_447054_7.pdf)

Note:

- Clare County is host to the Waste Management of Michigan, Northern Oaks Recycling and Disposal Facility (landfill).
- Lenawee County is host to the Republic Services, Adrian Landfill, Inc. that was closed (indefinitely) in 2013. Due to the landfill closing, Lenawee County is currently in the process of amending their plan.
- Mecosta and Hillsdale Counties do not host landfill facilities.

***18. How will the extra volume impact the life of the landfill?***

The Granger landfill facilities will remain subject to the annual volume cap. The predictions for life of the landfill are based on the volume allowed by the county plan.

***19. Does the county have the ability to set a volume cap?***

The county, through the county solid waste management plan, already provides for a volume cap.

Provisions of the county waste management system:

1. Page 43, 5.5 IMPORT AUTHORIZATIONS  
ANNUAL CAP: The sum of all waste disposed of in facilities within Clinton County, which were owned by Granger at the time of the writing of this Plan, may not exceed 2,500,000 cubic yards per year.
2. Page 96, 6.8 ENFORCEMENT, LOCAL ORDINANCES AND REGULATION  
The sum of all facilities in the County will not accept waste for end disposal in amounts that exceed a maximum annual cap of 2,500,000 cubic yards per year. However, the facility owner/operators may only accept up to 2,000,000 cubic yards per year unless they petition the Board to increase the 2,000,000 cubic yards cap by an amount of up to 500,000 cubic yards. The Board shall grant such an increase if the landfill facility owner/operators requesting the increase, confirm in writing that the increase will not jeopardize:
  - a) the availability of 10 years disposal capacity from the date of the request for a cap expansion,
  - b) their ability to meet Part 115 requirements,
  - c) their ability to review traffic, mud-tracking or litter nuisances,
  - d) a maximum annual cap of 2,500,000 cubic gate yards

***20. How will the addition of these counties impact the expansion/reduction of recycling opportunities?***

Similar to the answer for #5, the ability to secure market share improves the costs of service, providing an overall benefit.

***21. What recycling opportunities are available in the four requested counties?***

The Michigan Department of Environmental Quality recently conducted a survey to determine access to residential recycling by County. Clare County was identified as having convenient access to recycling. While Hillsdale, Lenawee and Mecosta counties did not meet the Department's definition for convenient access, they do offer recycling opportunities. Below are URL's to find out more about recycling in all four counties.

- a. Clare: [http://clareco.net/waste\\_recycling/docs/recycling\\_guide.pdf](http://clareco.net/waste_recycling/docs/recycling_guide.pdf)
- b. Hillsdale: <http://www.cityofhillsdale.org/departments/public-services.aspx>
- c. Lenawee: <http://www.lenawee.mi.us/departments/solid-waste-department>
- d. <http://www.recyclemecosta.org/>

***22. Respond to the impact of Granger's carbon footprint if more counties are added?***

The addition of two trucks, to our fleet of more than one hundred vehicles, for the transfer of waste to the Wood Road landfill will have a limited impact on the carbon footprint of Granger's hauling operation.

It should also be noted that Granger's aggressive management of landfill gas provides a positive for the environment. The capture and use of landfill gas as an energy source reduces greenhouse gas emissions and offsets the use of non-renewable resources.

***23. Will this amendment to the Solid Waste Plan impact the Village of Westphalia?***

The requested amendment will not have a direct impact on the Village of Westphalia. Similar to the answer for question #5, maintaining volume to the Granger Wood Street Facility allows for efficient and cost effective operations, which is a benefit to all.