



August 30, 2013

Mr. Michael S. Blazer
Jeep & Blazer, LLC
24 North Hillside Avenue Suite A
Hillside, IL 60162

RE: Groot Siting Application for a Waste Transfer Facility in Round Lake Park, Illinois
– Opinion on the Need for a Transfer Station

Dear Mr. Blazer

Per your request Autumnwood ESH Consultants, LLC (Autumnwood) has reviewed the application for the proposed Groot Lake Transfer Station in Round Lake Park, Illinois with respect to Section 39.2 of the Illinois Environmental Protection Act. I specifically focused on the "Needs Criterion", Criterion 1:

"(i) the facility is necessary to accommodate the waste needs of the area it is intended to serve..."

My review of the necessity of this facility is based on Section 1 of the "Application for Local Siting Approval Submitted to the Village of Round Lake Park" submitted by Groot Industries for the proposed Lake Transfer Station entitled "Need".

FINDINGS

Section 1, "Need" states, on page 1-8 in paragraph three, that "With no additional expansion of the in-county landfills proposed, existing capacity is projected to be exhausted by the end of 2027." The Siting Application acknowledges that the ADS Zion landfill was recently granted an expansion.

It appears that the process of developing this application for the Lake Transfer Station began in 2012 and Groot plans to begin operating the proposed transfer station in 2015. Groot Industries appears, therefore, to have a three year planning window from concept to operation. If the need for the transfer station does not arise until 2027 and all the groundwork has been done for the conceptual side of this application, this application should not need to be put forth until 2024 or 2025 for operations to begin in 2027.

Further, using the data presented in Appendix G of the Application regarding the amount of waste projected to be generated in the Service Area from 2015 to 2027 as shown in Table G.3-2B, the projected solid waste generation ranges from 3,422 tpd in 2015 to 3,884 tpd in 2027. Subtracting the waste diverted from the current county landfills by



transfer stations in neighboring counties, the average Service Area need then ranges from 2,692 to 3,193 tpd.

IEPA annual reports entitled "Nonhazardous Solid Waste Management and Landfill Capacity in Illinois" provide the self-reported quantities and volumes of waste received each year. The average quantity of waste received at the two Lake County landfills, ADS Zion and Countryside, for the years 2010 through 2012 was 3,304 tpd.

Table 1, below, is a recreation of, a recalculation of and repurposing of Table G.4-1 from the Groot Lake Transfer Station Application for Local Siting Approval. Looking at Table 1, below, using the Average Need in the Service Area as projected by CBI in Table G.3-2B from 2015 to 2027, subtracting the quantity of waste diverted to other transfer stations outside of Lake County and then subtracting the average tpd accepted by the two Lake County landfills over the past year, Table 1 shows an overcapacity situation with the existing landfills. This shows there is no need for a transfer station at this time to divert Lake County solid waste to other locations.

Table 1 Evaluation of Need Based on Data In Appendix G, Table G.3-2A & IEPA's "Nonhazardous Solid Waste Management and Landfill Capacity in Illinois" Reports, 2010 - 2012							
Year	Need in Service Area (tpd) 2011 Data ¹	Need in Service Area (tpd) Avg Data ²	Other Transfer Station Draw (tpd)	Service Area Need (tpd)	Avg. Service Area Need (tpd)	Avg Disposal in Lake Co. Landfills (2010-2012), tpd	Need in Service Area, tpd
2015	2899	3422	730	2169	2692	3404	-712
2016	2934	3463	730	2204	2733	3404	-671
2017	2963	3499	730	2233	2769	3404	-635
2018	2997	3539	730	2267	2809	3404	-595
2019	3032	3577	730	2302	2847	3404	-557
2020	3063	3616	730	2333	2886	3404	-518
2021	3094	3653	730	2364	2923	3404	-481
2022	3126	3692	730	2396	2962	3404	-442
2023	3161	3731	730	2431	3001	3404	-403
2024	3193	3770	730	2463	3040	3404	-364
2025	3228	3808	730	2498	3078	3404	-326
2026	3257	3844	730	2527	3114	3404	-290
2027	3289	3884	730	2559	3154	3404	-250

¹ Application, Table G.3-2A

² Application, Table G.3-2B



In addition on page 1-1 of Section 1, "Need" states: "As demonstrated in this report, the proposed transfer station is necessary to accommodate the waste needs of its intended service area. This conclusion is supported by the following: ... The proposed transfer station is necessary to ensure that waste is transported to more distant landfills in an economic manner."

The most economic manner appears to be continuing to dispose of Service Area solid waste at the in-county landfills until 2027. In this situation I am relating it to miles driven without being scientific as to exact amount of emissions, but only comparing road miles driven in two scenarios – transporting the 750 tpd of the Service Area's solid waste to the existing landfills in Lake County and transporting 750 tpd of solid waste to the proposed Lake Transfer Station and then to the Winnebago County Landfill.

In the first scenario, transporting the Service Area's waste to the two in-county landfills, it was assumed that half of the waste would be directed to each of the in-county landfills. Using information from the Lake Transfer Station Siting Application (the Application) (Table 1-1, p. 1-10), it is an average of 10.5 miles from the Service Area's centroid (see footnote 2 on p.1-6 of the Application) to the landfills. Using Table 2 of section 6 of the Application (p.6-12), it was estimated that it would take 111 collection trucks to deliver 750 tpd of solid waste to the transfer station.

Using this data the following road miles driven to the landfills would be as shown in Table 2

**Table 2
Road Miles in Scenario 1**

Vehicle	Number of Vehicles	Miles per Vehicle to Landfill and Back to Service Area	Total Road Miles per Day
Collection Truck	111	21	2,331
Transfer Truck	0	0	0
Total Road Miles			2,331



In the in the second scenario proposed by the applicant using the Lake Transfer Station to receive waste from the Service Area and transporting it to a landfill 64 road miles away results in the road miles per day shown in Table 3. In this scenario there would be 111 collection trucks travelling from the Service Area centroid to the Lake Transfer Station and back to the service area, measured at 7.2 miles one way for a total of 14.4 miles. There would also be 32 transfer trucks moving 750 tpd of solid waste (Table 2, p. 6-12 of the Application) 64 miles one way to the Winnebago Landfill for a total of 128 road miles.

**Table 3
Road Miles in Scenario 2**

Vehicle	Number of Vehicles	Miles per Vehicle to Transfer Station and Back to Service Area	Miles per Vehicle to Landfill and Back to Transfer Station	Total Road Miles per Day
Collection Truck	111	14.4	0	1,598
Transfer Truck	32	0	128	4,096
Total Road Miles				5,694

In comparing the two scenarios it is evident that utilizing the Transfer Station scenario, more than twice as many road miles will be driven per day to dispose of 750 tons of solid waste.

Conclusion

In my opinion there is no need to plan for or propose a Lake County transfer station until 2025, at which time, barring any other change in circumstances, there may be a need for a facility such as this.



Building and utilizing the proposed Lake Transfer Station would result in diesel emissions for 3,363 more road miles per day than disposing of the same 750 ton of solid waste in county landfills that will have enough capacity to dispose of the Service Area's solid waste until 2027.

Respectfully submitted,
Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.
Principal

JWT/jt

