

April 3, 2019

Steven E. Lederer Director Upper Valley Waste Management Agency 1195 3rd Street, Suite 101 Napa, CA 94559

Re: Upper Valley Waste Management Agency Special Meeting – April 1, 2019 – Agenda Item No. 6A – Part B – Options for Franchise Waste – Clover Flat Landfill temporary closure scenario

Dear Mr. Lederer,

On behalf of the Upper Valley Disposal Service, Edgar & Associates hereby submits this letter and attachments to the Upper Valley Waste Management Authority (UVWMA) to provide options for discussion should the Clover Flat Landfill (CFL) be temporarily closed to franchise waste collected by Upper Valley Disposal Service (UVDS). At the April 1, 2019 Special Meeting of UVWMA, Agenda Item 6A – Part B – the Board, staff, and the contractor discussed possible collection options. The purpose of this letter is to continue this dialogue at the April 5, 2019 Special meeting of UVWMA.

Over the last 14 years, UVDS has investigated alternative disposal options on two occasions: in 2005 and 2016. In April 2016, NBS consulting firm prepared a Draft Report, **Analysis of Alternative Disposal Fees,** for UVDS that analyzed what would be the relative cost impacts on UVDS customers if UVDS had to deliver waste to disposal facilities other than CFL. The Draft Report included the potential impact on both direct-haul (collection vehicles delivering waste directly to an alternate disposal facility) and transfer-haul operations (which would require constructing a new transfer station at CFL).

A copy of the First Draft Report is attached and will be paraphrased in this letter. This Report is only draft and was never finalized and would need to be updated to reflect current conditions regarding traffic trip times, tip fees, and other associated costs.

Collection Options:

This letter only reviews municipal solid waste (MSW) collected by UVDS, where commercial MSW and residential MSW may have separate options being **Direct-Haul** or **Transfer-Haul**. UVDS recyclables will continue to tip at the Upper Valley Recycling Facility and green waste will be processed at the UVDS composting facility.

- UVDS Commercial MSW Vehicles are rear-end loaders and have higher tonnage payloads where Direct-Haul is being pursued. The Delvin Road Transfer Station (DRTS) has permitted tonnage and traffic capacity to handle additional volume, however the traffic patterns and queue time have operational limitations, especially when adding the self-haul waste that had been going to CFL.
- UVDS **Residential MSW Vehicles** are side-loaders where tonnage payload is not as significant and where **Transfer-Haul** operations could be a better option.
- Self-Haul waste has the option to go to several permitted transfer stations or landfills in the areas including the Devlin Road Transfer Station or Potrero Hills Landfill in Solano County.

Transportation Time Increases:

The transportation time was recently analyzed by Edgar & Associates for each jurisdiction with the UVWMA from the baseline conditions of going to CFL, then Scenario 1 of **Direct-Haul** and Scenario 2 of **Transfer-Haul** at UVDS, not at CFL, as NBS analyzed in 2016. A copy of the Maps and haul routes are attached. Being in the Valley has more to do with time of day travel than distance, and the additional haul miles will significant impact the travel time and collection route management.

Summary						
	Baseline Scer CFL Direct-Ha		Scenario 2 Transfer-Haul at UVDS			
Saint Helena	7.1	25.6	26.4			
Calistoga	3.6	34	34.9			
Yountville	18.1	16.4	29.9			
Unincorporated UVWMA	10.2	24.3	27			

Direct-Haul Logistics – Commercial MSW:

Commercial MSW would be directly hauled to the Delvin Road Transfer Station where UVDS would have to prepare for the following:

 Delvin Road Transfer Station operators have been notified of this option where they are concerned that the increase in traffic will have impacts on the queue time and lane stacking at their facility, but the facility does have permitted capacity in their Solid Waste Facility Permit for the incremental increase in tons and traffic.

- Collection Route scheduling with commercial customers will be disrupted where each commercial customer would need to be contacted on any change in collection days or frequency. UVDS would need to quickly assess their routes and resources and possibly add drivers, add equipment, and extending working hours.
- Napa Recycling & Waste Services may have trucks available for rent, lease, or purchase but have limited labor to drive the trucks.
- Greater cost impacts and logistics to upper valley areas (Calistoga, St. Helena and unincorporated County areas) than to Yountville.

Transfer-Haul Logistics – Residential MSW:

Residential MSW would be transfer-hauled from CFL or UVDS to the Delvin Road Transfer Station where UVDS would have to prepare for the following:

- Delvin Road Transfer Station operators have been notified of this option facility and does have permitted capacity in their Solid Waste Facility Permit for the incremental increase in tons and traffic. Instead of direct hauling of the lighter residential MSW loads, it would be preferable for DRTS to have residential MSW be transferred in trailers from a transfer station to lessen the traffic impact burden on their facility.
- Collection Route scheduling with residential customers will be disrupted where each residential customer would need to be contacted on any change in collection days with possible weekend. UVDS would need to quickly assess their routes and resources and possibly add drivers, add equipment, and extending working hours.
- Napa Recycling & Waste Services may have trucks available for rent, lease, or purchase to assist but have limited labor to drive the trucks.
- Greater cost impacts and logistics to upper valley areas (Calistoga, St. Helena and unincorporated County areas) than to Yountville.
- CFL Transfer Station option:
 - The current operations allows transfer off-site of food waste, compost, and other commodities.
 - The Report of Facility Information would have to be amended to add a MSW transfer operations.
 - This process could take up the LEA up to 30 days to approve.

- UVDS Transfer Station option:
 - Under the metal canopy on a concrete slab adjacent to the recycling facility.
 - Up to 15 tons per days with a 5-day filing with the LEA to obtain an Enforcement Agency Notification permit for a limited-volume transfer station. CEQA is not required by CalRecycle and is a local Planning Department decision.
 - Up to 100 tons per day with a 30-day filing with the LEA to obtain a Registration Solid Waste Facility Permit for a medium-volume transfer station. CEQA is not required by CalRecycle, and is a local Planning Department decision.

NBS Draft Report Results of 2016 – In this analysis, NBS used a range of potential costs (such as fuel costs, travel time, and equipment costs) to estimate the cost impacts in 2016 dollars. In summary, the draft results show the following:

- Transfer-Haul (47% to 220% cost increase) The costs for the best case scenario (which is lower-cost range for transfer-haul from CFL to Potrero Hills) was 47 percent higher than the base-case (CFL's current system), while the worst case scenario (higher cost range for transfer-haul from CFL to Kiefer Road) was over 220 percent higher than the base-case.
- Direct-Haul (23% less to 90% higher) The costs for the best case scenario (which is lower cost range for direct-haul from St. Helena to Potrero Hills) was 23 percent lower than the base-case (CFL's current system), while the worst case scenario (direct-haul from CFL to Potrero Hills) was over 90 percent higher than the base-case.
- Self-Haul From the larger customer bases in UVDS's service area (such as Calistoga, Yountville, and St. Helena), travel times to the nearest disposal facility (Devlin Road Transfer Station) are more than four times longer than the travel time to CFL. Although tipping fees at alternative disposal facilities are lower, the value of the additional time and cost for longer travel distance do not outweigh the tipping fee savings.

The results of the 2016 NBS Draft Report indicate the following:

- Constructing a transfer station at the CFL site and transfer-hauling waste to another disposal facility is not cost effective.
- The direct-haul alternative would also be costlier, although it may be cheaper for some specific south County areas; unfortunately, UVDS must either use a direct-haul system for its operations, a transfer station, or continue current operations. This means UVDS must serve all areas; selectively picking the few areas where direct-haul is cheaper is not an option.

NBS 2016 DRAFT REPORT KEY RESULTS

Figure 1 indicates that (1) a transfer-haul system would result in rates that are roughly 17 to 77 percent higher, and (2) a direct-haul system would result in rates that range from approximately 8 percent lower to 33 percent higher. However, the CFL tipping fee used in calculating these rate impacts is \$73.42/ton, which includes the fee paid to UVWMA; if this fee were not included, the effective CFL tipping would result in larger (more unfavorable) rate changes than those shown. NBS believed in 2016 it is reasonable to assume that the actual rates would be somewhere between the lower and higher end costs shown in Figure 1.

Additional Disposal Costs Due to Re-Directing UVD-Collected Waste to Another Transfer Station or Landfill vs. Disposal at Clover Flat Landfill (CFL)								
Transfer Haul Analysis		CFL Disposal	Transfer	Percent	Effective			
Lower End of Cost Range		Cost ¹	Station Alt. Cost	Change	Rate Change ²			
<u>From</u>	<u>To</u>	(\$/ton)	(\$/ton)	%	%			
Clover Flat TS	Devlin Road TS	\$73.42	\$135.92	85%	30%			
Clover Flat TS	Potrero Hills LF	\$73.42	\$108.08	47%	17%			
Clover Flat TS	Keller Canyon LF	\$73.42	\$134.09	83%	29%			
Clover Flat TS	Kiefer Road LF	\$73.42	\$158.58	116%	41%			
Higher End of Cost Range								
Clover Flat TS	Devlin Road TS	\$73.42	\$172.59	135%	47%			
Clover Flat TS	Potrero Hills LF	\$73.42	\$163.75	123%	43%			
Clover Flat TS	Keller Canyon LF	\$73.42	\$218.69	198%	69%			
Clover Flat TS	Kiefer Road LF	\$73.42	\$237.19	223%	78%			
Direct Haul Analysis		CFL Disposal	Direct-Haul	Percent	Effective			
· ·		Cost ¹	Alternative	Change	Rate Change ²			
Lower End of Cost Range			Cost	<u> </u>				
<u>From</u>	<u>To</u>	(\$/ton)	(\$/ton)	%	%			
Clover Flat LF	Potrero Hills LF	\$73.42	\$90.41	23%	8%			
Calistoga	Potrero Hills LF	\$73.42	\$70.27	-4%	-2%			
St. Helena	Potrero Hills LF	\$73.42	\$56.80	-23%	-8%			
Yountville	Potrero Hills	\$73.42	\$42.33	-42%	-15%			
Clover Flat LF	Devlin Rd. TS	\$73.42	\$110.86	51%	18%			
Calistoga	Devlin Rd. TS	\$73.42	\$106.12	45%	16%			
St. Helena	Devlin Rd. TS	\$73.42	\$66.30	-10%	-3%			
Yountville	Potrero Hills	\$73.42	\$66.30	-10%	-3%			
Higher End of Cost Range								
Clover Flat LF	Potrero Hills LF	\$73.42	\$142.15	94%	33%			
Calistoga	Potrero Hills LF	\$73.42	\$109.43	49%	17%			
St. Helena	Potrero Hills LF	\$73.42	\$86.95	18%	6%			
Yountville	Potrero Hills	\$73.42	\$62.21	-15%	-5%			
Clover Flat LF	Devlin Rd. TS	\$73.42	\$138.84	89%	31%			
Calistoga	Devlin Rd. TS	\$73.42	\$130.88	78%	27%			
St. Helena	Devlin Rd. TS	\$73.42	\$105.94	44%	16%			
Yountville	Potrero Hills	\$73.42	\$64.54	-12%	-4%			

^{1.} Current tipping fee at Clover Flat Landfill, includes the Upper Valley Waste Management Agency fee.

^{2.} Based on UVWMA rate analysis, 35% of UVDS costs are for disposal: this is the effective customer rate impact. Per 2005 study.

I will be available on Friday, April 5, 2019 to discuss UVDS collection options.

Should you have any questions, please phone me at (916) 739-1200.

Sincerely,

Evan W.R. Edgar Principal Civil Engineer

cc: Bob Pestoni, Upper Valley Disposal Service

David Morrison, Director, Napa County Planning Building and Environmental

Services.