

C&D Processing at Keller Canyon Landfill – Preliminary Draft

1) Background and Introduction

- a) In compliance with Land Use Permit 2020-89, Condition 8.1b, construction and demolition (C&D) material has been coming into Keller Canyon Landfill (KCL) for over 20-years.
- b) The material is from a variety of sources including independent haulers using self-dumping trailers or rolloff trucks to contractors with end-dumps or debris boxes.
- c) The understanding is that the majority of this material has already undergone some form of generator or job location source separation and material specific source reduction prior to arriving at Keller. This understanding is supported by information obtained by market area representatives, and involves principally three concepts;
 - i) Construction economics dictate that recoverable materials be removed prior to disposal because they either have monetary value (e.g. metal) or can be processed or managed at a much lower cost than what is associated with disposal (e.g. clean wood)
 - ii) Many communities where generators are located (including the County) have mandatory C&D recycling ordinances or other recycling incentives
 - iii) Visual observations made by trained landfill personnel on existing inbound materials

2) Purpose and Need

- a) As stated, customers have been bringing their C&D to KCL for over 20 years. It is a convenient, cost-effective location to manage this fraction of materials from jobsites/projects they are associated with and an important resource for local businesses.
- b) By adding on-site sorting and processing capabilities, KCL will increase diversion for the County and continue to provide a valuable service to the community.

3) Benefits/Impact on County TS processing Capacity

- a) If much of the material has already been presorted or segregated, there is little benefit to sending it through a transfer station. In fact, it unnecessarily adds costs, traffic, carbon footprint and greenhouse gas impacts.
- b) Since material has been coming to KCL for so long, additional processing and diversion at KCL will have little to no impact on the operation of local transfer stations. This

project will maintain the status quo, except for additional processing and diversion at KCL.

4) Timeframe/Schedule

- a) Once approved, the operation could be implemented fairly quickly; probably within 3 to 6-months, depending on final project parameters and seasonal weather conditions.

5) Processing Hours/Days

- a) Processing would be limited to normal business days (M-F) and hours (8 a.m. – 4 p.m.)
- b) Depending on volumes, processing would likely only be required 3-5 days per week for 4-6 hours per day
- c) Flexibility may be required in the event that additional processing capacity is needed for larger jobs, but in no case will it occur outside of normal business days and hours.

6) Waste Types and Volumes/day

- a) Waste types are expected to be similar to what is received now, which includes pre-processed and unprocessed C&D from a variety of sources including residential, commercial and industrial.
- b) Waste volumes are anticipated to be similar to what is received now; 400-1500 tons per month, depending on seasonality, economic conditions, and other market factors.

7) Operational Changes

- a) Processes
 - i) C&D loads received that the site for processing will be directed to the Processing Area, as shown in Figure 1, where they will be offloaded onto an all-weather sorting pad.
 - ii) The material will be stored until a sufficient quantity of material has been received to warrant sorting and segregation. Material will normally be sorted within 5 business-days of receipt, and in no case more than 15 business-days.
 - iii) Sorting will occur using a ground sort method with both manual and equipment aided processes
 - (1) Once the material has been received and offloaded onto the sorting pad, manual and equipment aided sorting will begin. Larger pieces will be removed and placed in nearby bunkers, bins or piles. Equipment and laborers will spread the material out as needed to facilitate further sorting.
 - iv) Material placed in bunkers, bins or piles will be stored until sufficient quantities are accumulated:

- (1) Materials such as clean wood and metal will be stored in open air piles until sufficient quantities are accumulated for outhaul.
 - (a) Clean wood will be transported out by a third party to a biofuel location, similar to how it is currently handled at other RSG locations.
 - (b) Metal will be sent to Sims or Schnitzer steel (or similar service provider) for further recycling.
 - (2) Other materials such as concrete, asphalt, dirt and related fines will be stockpiled and beneficially used on-site for pad, road construction and cover (daily or intermediate) as needed.
- v) Residual materials not sorted for diversion will be transferred to the working face for disposal.
- vi) All material movements will be tracked and recorded as appropriate.
- b) Equipment
 - i) Much of the sorting will be done manually using on-site labor. Necessary equipment will be used as needed to safely move and manage the material and stockpiles.
 - ii) Existing equipment that may be used includes the following;
 - (1) Excavator/backhoe/wheel loader/skid steer
 - (2) Rolloff bins, trucks and an end-dump
- c) Buildings/Site Improvements
 - i) No additional buildings will be needed.
 - ii) Site improvements include construction of an all-weather tipping and sorting pad as well as bunkers delineated by K-Rails or similar concrete blocks. Stockpiles will also be used to store bulk materials such as concrete and dirt that may be removed from the C&D loads. These piles will be similar to existing onsite piles of these types of materials.
 - iii) The operational area will be graded to optimize drainage. Signs will be placed as needed to direct the sorting, moving, transport and storage of material.

8) Diversion Methods

- a) As described above, diversion will be largely accomplished through a combination of manual and equipment-aided sorting. Experience shows that significant diversion can be accomplished in this manner.

9) Diversion Percentage

- a) A minimum 50% diversion is expected.
- b) Tracking of aggregate amounts diverted during a given month will occur as materials are sorted and sent offsite, beneficially used on site or transported for disposal.

- c) Diversion and disposal reporting will be performed in accordance with the LUP and SWFP conditions

10) Vehicle trips

- a) No significant additional vehicle trips are anticipated, as the intent is to continue to service customers that already bring this material to KCL. Some additional outbound loads will be required to accommodate diverted material. This may amount to 10-40 loads per month (or an increase of less than 1% over existing permitted levels).

11) Personnel/Staffing Requirements

- a) Sorting will be done on a part-time basis and staffed accordingly. Existing onsite workforce will be used and additional temporary recycling workers will be brought in as needed to facilitate the required sorting operations.
- b) An onsite KCL operator and driver will also be used to run equipment and vehicles as needed.

12) Permitting and Compliance

- a) Conditions will need to be addressed, modified or approved as needed in the following permits;
 - i) LUP COA; County DCD
 - ii) SWFP/RDSI; LEA & CalRecycle

13) Maps/Locations

- a) Processing locations are under consideration, but will likely occur either up top on the top deck area or in the area adjacent to the landfill on the east side or south side of the fill placement area.