



November 13, 2015

David Brockbank, Senior Planner  
Contra Costa County Department of Conservation and Development  
30 Muir Road  
Martinez, California 94553

**RE: Comments on the Notice of Preparation – Keller Canyon Landfill**

Dear Mr. Brockbank:

Edgar & Associates, Inc. represents the compost and recycling industry throughout California and has been meeting with County Planning staff regarding certain aspects of the Keller Canyon Landfill's operation and Land Use Permit over the last few years. It is a huge surprise to see the Notice of Preparation (NOP) be issued for the third time to analyze the environmental impacts of a project that has already been permitted by the County Environmental Health Department in 2009 to allow 300 tons per day (TPD) of green waste be used for beneficial reuse. Even though the first NOP issued in 2008 required an environmental analysis of global warming impacts and air emissions to use 300 TPD of green waste at the Keller Canyon Landfill, the County Environmental Health Department and the state relied upon an outdated 1990 EIR to modify the Solid Waste Facility Permit in 2009 after the first NOP was issued.

Our clients are comprised of private independent composters that seek green waste and wood waste that can be processed into a valuable organic soil amendment. Edgar & Associates is an environmental engineering firm based in Sacramento that has 20 years of experience in permitting solid waste facilities and has extensive knowledge of environmental analysis and CEQA documentation regarding both composting and the use of green waste as alternative daily cover (ADC) as well as landfill permitting.

We have the following overarching comments:

- 1. The green waste used as ADC needs to be analyzed in the Greenhouse Gas section** of the EIR. Using green waste instead of soil as daily cover creates methane which is a short-term climate pollutant with a global warming potential of over 21 times carbon dioxide.

2. Beneficial reuse materials, such as green waste, wood waste, and inert materials, need to be mechanically processed to meet specifications for the intended use. **The mechanical processing of those materials need to be analyzed.**
  
3. The Keller Canyon Landfill Solid Waste Facility Permit was modified by what was then the California Integrated Waste Management Board (CIWMB) in October 14, 2009 to allow an increase of 1,300 TPD of beneficial reuse tonnage (500 TPD of green waste, 300 TPD of wood waste, and 500 TPD of inert material) without a local or state public hearing and with the use of a 1990 EIR that did not include beneficial reuse operations. **How can the state modify a Solid Waste Facility Permit in 2009 with use of an outdated 1990 EIR document, when the NOP for that same activity is being circulated for the third time in 2015, and without any certified CEQA analysis resulting from the previous NOP circulation for the same project?**

Our detailed comments for each overarching issues is presented below:

**1. The green waste used as ADC needs to be analyzed in the Greenhouse Gas section** of the EIR. Using green waste instead of soil as daily cover creates methane which is a short-term climate pollutant with a global warming potential of over 21 times carbon dioxide.

The NOP for the EIR was dated October 15, 2015 and August 6, 2009 would add an additional 1,300 tons per day (TPD) of material be used on-site as beneficial reuse above the permitted 3,500 TPD of disposal, as follows:

- Green Waste: 500 TPD
- Wood Waste: 300 TPD
- Inert Materials: 500 TPD

However, this activity was added to the SWFP by an unprecedented modification process in 2009 and was never analyzed by a CEQA document. CIWMB provided comments dated January 14, 2009 for the first NOP (copy attached) that defined the increase for non-landfilled material as part of the 2008 Project Description that needed to be analyzed. CIWMB was clear that the previous EIR for the facility was prepared more than 17 years ago at the time, and that the project could not use **Outdated Environmental Documents** (page 3 of 6 of the CIWMB letter).

CIWMB specifically identified that the **Air Quality/Global Warming** (page 4 of 6 of the CIWMB letter) impact be evaluated. Green waste at 300 TPD being use as beneficial reuse within the landfill mass will create methane and have global warming impacts. This environmental analysis has not been performed, but is currently operational, and is now part of the current Project Description and NOP.

Even though CIWMB staff identified that adding 500 TPD of green waste needed to be further evaluated under CEQA for global warming in January 2009 and the use of outdated

environmental documents is not appropriate, CIWMB issued a SWFP Modification in November 2009 for 500 TPD of green waste without any additional CEQA analysis, that will finally be performed after the fact as part of this NOP.

Keller Canyon Landfill has used over 885,000 tons of green waste ADC since 1998 from many sources. The impact of using 885,000 tons of green waste as ADC is landfill fugitive emissions plus the loss of the compost use benefits results in increased greenhouse gas emissions by 540,000 metric tons. The EIR needs to provide a GHG Analysis on the use of green waste as ADC. Contra Costa County and its cities alone used 71,402 tons of green waste in 2013 at the Keller Canyon Landfill as ADC. Instead, the County could have, for example, required that these green materials be composted and hauled to the Contra Costa Transfer & Recovery Station in Martinez and then transferred to a permitted compost facility with capacity owned by Republic Services, Forward Compost Facility near Stockton.<sup>1</sup>

As summarized in the graphic below between 38,600 to 48,900 metric tons of greenhouse gas could be reduced by composting in Stockton as compared to landfilling green waste as ADC at Keller Canyon, even when factoring in the increased transportation distances to a compost facility.

Green waste ADC in a landfill creates and releases to the atmosphere fugitive methane, which is 21 times stronger than carbon dioxide<sup>2</sup> according to CARB. The 71,402 tons of ADC would emit between 9,823 to 18,358 metric tons of carbon dioxide (CO<sub>2</sub>) depending on landfill performance. In contrast, compost is sequestered in the soil and would avoid 38,557 metric tons of CO<sub>2</sub>. The availability and use of compost significantly reduces water use and the need for chemical fertilizers, which are largely petroleum –based.

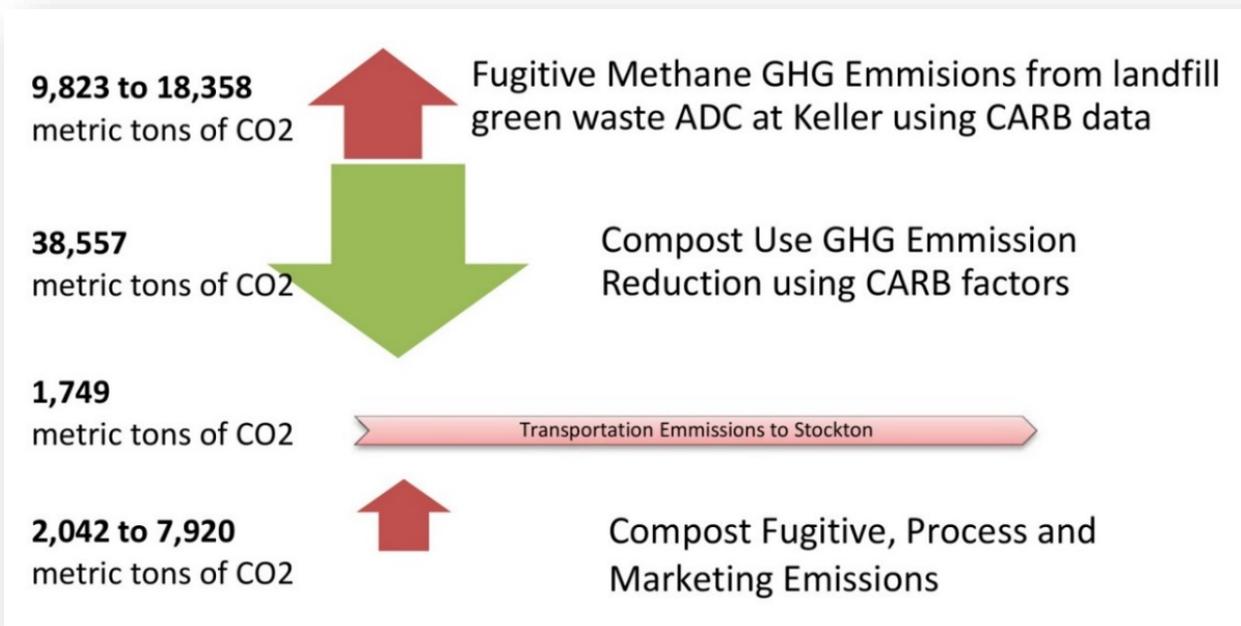
The emissions from composting including fugitive gases, process equipment, and transportation would emit between 2,042 to 7,920 metric tons of CO<sub>2</sub> based on composting method. **Between 38,600 to 48,900 metric tons of greenhouse gas could be reduced by composting in Stockton as compared to landfilling green waste as ADC at Keller Canyon, even when factoring in the increased transportation distances to a compost facility.** This information was provided to the County Board of Supervisors during their deliberations on the LUP at Keller Canyon Landfill in 2015.

As noted, the transportation emissions in the Forward example are only 1,749 metric tons of GHG per year. This is true even though the materials are being transported out of County. The results show that direct-haul of green waste to Keller Canyon to be used as ADC has huge GHG impacts

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<sup>1</sup> There are several other possible transfer stations and compost facilities in closer range. However, we chose Forward to demonstrate that even when traveling to a more distant facility, the use of transfer stations and compost facilities still results in a substantial reduction in GHG emissions as compared to direct haul of ADC to Keller Canyon Landfill.

<sup>2</sup> [www.arb.ca.gov/cc/landfills/landfills.htm](http://www.arb.ca.gov/cc/landfills/landfills.htm)



for the County as compared to hauling the green waste to a permitted compost facility. The transportation emissions are marginal compared to landfill methane emissions.

Green waste in a landfill creates methane, of which an average of 25% leaks as a fugitive emission into the atmosphere and the leakage continues for years<sup>3</sup>. Methane is a short-lived climate pollutant that the California Air Resources Board (CARB) will be evaluating during 2015 as required by SB 605, Lara. The global warming potential could increase from 21 times CO<sub>2</sub> to 84 times CO<sub>2</sub><sup>4</sup> where the amount of greenhouse gas emissions from the Keller Canyon Landfill could quadrupled.

2. Beneficial reuse materials need to be mechanically processed to meet specifications for the intended use. **The mechanical processing of those materials needs to be analyzed.**

Reading the other comments of prior NOPs, we would concur with the comments submitted by the city of Pittsburg on August 11, 2008 and on January 21, 2009, regarding the need to provide details, tracking, and specification on how these materials would be used, as well as, the environmental impacts from processing beneficial reuse materials. The City of Pittsburg also acts as the local enforcement agent to the state on solid waste permitting and enforcement and are knowledgeable of the subject matter. Plus, beneficial reuse plans are required of Title 27 regulations regarding the operations of landfills as noted below.

CIWMB provided comments dated January 14, 2009 for the first NOP (copy attached) that defined the increase for non-landfilled material as part of the 2008 Project Description that

<sup>3</sup> [www.arb.ca.gov/cc/landfills/docs/guidance0711.pdf](http://www.arb.ca.gov/cc/landfills/docs/guidance0711.pdf)

<sup>4</sup> <http://www.arb.ca.gov/cc/scopingplan/document/updatescopingplan2013.htm>

needed to be analyzed for sorting and processing beneficial reuse materials for noise and emissions. CIWMB was clear that the previous EIR for the facility was prepared more than 17 years ago at the time, and that the project could not use **Outdated Environmental Documents** (page 3 of 6 of the CIWMB letter) to evaluate these impacts.

**21590. CIWMB--Joint Technical Document for Disposal Facilities. (Since 2003)**

**(6) Cover and Beneficial Use**

**(A) Cover Materials--**Provide a plot plan identifying cover material quantities required from on-site sources, excavation sequence of the site and stockpile locations if stockpiled for a significant amount of time. Identify or describe off-site sources or types of cover materials needed for a five year duration if not included on plot plan.

**(B) Alternative Daily Cover and Beneficial Reuse--**Describe alternative daily cover and beneficial reuse waste types, processing methods, alternative processing or grain size specifications if applicable, operations methods, and applicable engineering, or other standard practices that will be used to ensure compliance with §§20690 and 20695. **Estimate the range in tons of these materials that are anticipated to be used, based on waste types, applicable cover to waste volume ratios, applicable density conversion factors, engineering specifications, methods to minimize contamination, or other pertinent information.** Materials accepted at the landfill to be used as alternative daily cover or for beneficial reuse shall be weighed upon receipt at landfills which have scales but need not be weighed again prior to placement at the landfill. Appropriate conversion factors for specific materials based on industry standards are acceptable for tracking materials received at landfills which do not have scales.

CIWMB specifically identified that **Air Quality** and **Noise** (page 4 and 5 of 6 of the CIWMB letter) impact be evaluated. In order to use green waste and wood waste as beneficial reuse, mechanical processing needs to occur, and those impacts from the processing needs to be identified.

CIWMB staff identified that adding 500 TPD of green waste, 300 TPD of wood waste, and 500 TPD of inert material, which needs to be mechanically processed, required further analysis under CEQA in January 2009 and the use of outdated environmental documents is not appropriate.

Regardless, CIWMB issued a SWFP Modification in November 2009 for adding these 1,300 TPD of beneficial reuse materials without any additional CEQA analysis that will finally be performed after the fact as part of this NOP, 6 years after the fact.

3. The Keller Canyon Landfill Solid Waste Facility Permit was modified by what was then the California Integrated Waste Management Board in October 14, 2009 to allow an increase of 1,300 TPD of beneficial reuse tonnage (500 TPD of green waste, 300 TPD of wood waste, and 500 TPD of inert material) without a local or state public hearing and with the use of an EIR from 1990 that did not include beneficial reuse operations. **How can the state modify a Solid Waste Facility Permit in 2009 with the use of an outdated 1990 EIR document, when the NOP for that activity is being circulated for the third time, and without any certified CEQA analysis resulting from the NOP circulation?**

The SWFP was modified by an unprecedented process in 2009 and was never analyzed by a CEQA document and used an outdated EIR. CIWMB provided comments dated January 14, 2009 for the first NOP (copy attached) that defined the increase for non-landfilled material as part of the 2008 Project Description that needed to be analyzed. CIWMB was clear that the previous EIR for the facility was prepared more than 17 years ago at the time, and that the project could not use **Outdated Environmental Documents** (page 3 of 6 of the CIWMB letter).

It is a huge surprise to see the Notice of Preparation (NOP) be issued for the third time to analyze the environmental impacts of a project that has already been permitted by the County Environmental Health Department in 2009 to allow 300 tons per day (TPD) of green waste be used for beneficial reuse. Even though the first NOP issued in 2008 required an environmental analysis of global warming impacts and air emissions to use 300 TPD of green waste at the Keller Canyon Landfill, the County Environmental Health Department and the state relied upon an outdated 1990 EIR to modify the Solid Waste Facility Permit in 2009 after the first NOP was issued.

The beneficial reuse operations has been active since before 2009, and was increased in 2009 to the greater limit with the SWFP modification, and is now finally receiving the environmental analysis that has been called after the fact. And the operation is still not in compliance with Title 27 – Section 21590 (6)(B) which requires the following in the operations document:

**(B) Alternative Daily Cover and Beneficial Reuse--**Describe alternative daily cover and beneficial reuse waste types, processing methods, alternative processing or grain size specifications if applicable, operations methods, and applicable engineering, or other standard practices that will be used to ensure compliance with §§20690 and 20695. Estimate the range in tons of these materials that are anticipated to be used, based on waste types, applicable cover to waste volume ratios, applicable density conversion factors, engineering specifications, methods to minimize contamination, or other pertinent information. Materials accepted at the landfill to be used as alternative daily cover or for beneficial reuse shall be weighed upon receipt at landfills which have scales but need not be weighed again prior to placement at the landfill. Appropriate conversion factors for specific materials based on industry standards are acceptable for tracking materials received at landfills which do not have scales.

Thank you for your continued interest and attention to this important matter.

Sincerely,



Evan W.R. Edgar  
Principal Civil Engineer