

RDEIR Comments  
July 11, 2011  
Cold Canyon Land Fill, Inc.  
Waste Connections, Inc.

ATTACHMENT 1

**Brownstein | Hyatt  
Farber | Schreck**

July 11, 2011

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**Subj: County of San Luis Obispo Water Supply Mitigation Measure for Cold Canyon  
Landfill Expansion**

Dear Mr. Shea:

At your request, Brownstein Hyatt Farber Schreck, LLP has reviewed the legal validity of Mitigation Measure WR/mm-1 proposed by the County of San Luis Obispo (County) on the expansion project for the Cold Canyon Landfill (Landfill), which is owned by Cold Canyon Land Fill, Inc, a wholly-owned subsidiary of Waste Connections, Inc. Mitigation Measure WR/mm-1, which was proposed in the Recirculated Draft Environmental Impact Report (DEIR) for the project, would restrict the Landfill's extraction of groundwater underlying the property to a maximum of 25 acre-feet per year (AFY).

It is our opinion that Mitigation Measure WR/mm-1 is legally deficient and therefore unenforceable because it ignores long-standing water rights laws, is arbitrary and capricious, and is not supported by substantial evidence. In reaching this conclusion, we reviewed the following documents: (1) the DEIR dated May 24, 2011; (2) the Water Resources Assessment prepared by Fugro West dated March 2008; and (3) Technical Memorandum No. 2 prepared by Fugro West dated November 2, 2010.

**The Project**

The project analyzed in the DEIR consists of expansion of the existing Landfill located in San Luis Obispo County to the east of the City of San Luis Obispo on Highway 227. The Landfill overlies water bearing formations that are not within a groundwater basin as defined by the California Department of Water Resources. (Fugro, 2008.) The hydrogeologic study area (Study Area) identified in the DEIR encompasses 1,687 acres, of which the proposed project (including

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existing operations) would cover 209 acres. (DEIR, at V-228.) The County does not currently measure water levels within the Study Area.

In the DEIR, the County proposed Mitigation Measure WR/mm-1, which is titled "Limit Groundwater Extraction" and provides that "[t]hroughout the life of the project, to protect groundwater resources, [the Landfill] shall not extract more than 25 afy from the three Weir wells in any 12-month period."

### **Mitigation Measure WR/mm-1 Contravenes California Water Laws**

The Landfill possesses and exercises overlying rights for the extraction of groundwater from beneath the project site. The County's proposed Mitigation Measure WR/mm-1 contravenes long-standing California case law that defines the rights of landowners who overlie percolating groundwater. Groundwater rights are created by state law, and the definition and allocation of those rights is a function of the courts. *See* Arthur L. Littleworth and Eric L. Garner, *California Water*, at 74 (2nd ed. 2007).

***The Nature of Overlying Groundwater Rights.*** An overlying water right is the right to pump percolating groundwater on an overlying parcel for beneficial use on that parcel. The right is a component of property ownership and is part and parcel of the overlying land. *Tehachapi-Cummings County Water Dist. v. Armstrong*, 49 Cal.App.3d 992, 1001 (1975); *Burr v. Maclay Rancho Water Co.*, 154 Cal. 428, 439 (1908). Overlying water rights are established based solely on ownership of land overlying groundwater. *City of Barstow v. Mojave Water Agency*, 23 Cal.4th 1224, 1251 (2000); *City of Pasadena v. City of Alhambra*, 33 Cal.2d 908, 925 (1949). An overlying owner is entitled to as much of the basin's safe annual yield<sup>1</sup> as he may put to a reasonable and beneficial use on the overlying portions of his property. *Mojave*, 23 Cal.4th at 1241-42; *Pasadena*, 33 Cal.2d at 925-26.

Overlying rights are commonly recognized as being analogous to riparian rights – those rights based upon ownership of lands bordering a watercourse. As a result, the common law rules applicable to the exercise of riparian rights are also applied to the exercise of overlying rights and have been used to resolve controversies between overlying owners and appropriators. *Mojave*, 23 Cal.4th at 1240.

Like riparian rights, overlying rights are correlative in nature, meaning they are of equal priority with one another. *Mojave*, 23 Cal.4th at 1241; *Pasadena*, 33 Cal.2d at 926; *Katz v. Walkinshaw*,

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<sup>1</sup> Safe annual yield is generally defined as the amount of water that may be taken from a groundwater basin each year without causing undesirable effects associated with dropping water tables and eventual depletion of the groundwater supply. *City of Los Angeles v. City of San Fernando*, 14 Cal.3d 199, 278 (1975).

141 Cal. 116 (1903). Thus, all may share in use of the safe annual yield, and all are equally susceptible to diminishment in times of shortage. *Mojave*, 23 Cal.4th at 1241; *Pasadena*, 33 Cal.2d at 926. Moreover, unexercised or dormant overlying rights are generally correlative with presently exercised rights; in other words, overlying rights are not dependent on use. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 3 Cal.2d 489 (1935); *Wright v. Goleta Water Dist.*, 174 Cal.App.3d 74, 84 (1985). An overlying owner is free to institute a new use or expand an existing one, regardless of current uses. *Wright*, 174 Cal.App.3d at 84. If the new use causes the total production of all correlative rights in a basin to exceed the basin's safe annual yield, all present uses may be reduced to accommodate the equal rights of the newly exercised overlying use. *Mojave*, 23 Cal.4th at 1241; *Pasadena*, 33 Cal.2d at 926.

***The Landfill's Rights as an Overlying Owner.*** Under California law, the Landfill is entitled to exercise its overlying rights to the extent that it will put the water extracted to beneficial use on its overlying land. The Landfill is also free to expand its existing uses on the parcel. If its increased extractions for the expansion were to cause the total correlative rights of all landowners in the Study Area to exceed the safe annual yield of the water-bearing formations, all present uses would need to be proportionately reduced to accommodate the equal rights of expanded use by the Landfill. The County's proposed 25 AFY restriction would limit the Landfill's exercise of its right to extract groundwater as an overlying owner, without any legal justification.

***Overlying Owners Are Not Entitled to Maintenance of Water Levels.*** The County's imposition of the 25 AFY restriction on the basis of potential drawdown in neighboring wells disregards existing California water law, under which an overlying owner is not generally entitled to maintenance of a particular water level.

The basis for imposition of the 25 AFY restriction on the Landfill, as set forth in the DEIR, is the prevention of drawdown in the nearby Gomez well. (DEIR, at V-245 – V-246.) The DEIR's interference effects analysis for simultaneous pumping, taken from Fugro's Technical Memorandum No. 2, indicates that at the assumed pumping rate and frequency, drawdown at the Gomez well is predicted to be 3 feet after one year. This is the only evidence offered to support imposition of the 25 AFY restriction. However, under California water resources law, an overlying user is not entitled to maintenance of water at a certain level so that his well, as drilled, will be able to access that water.

California courts have routinely held that it is unreasonable to require the entire flow of a watercourse or waters of a subterranean body of water in order to maintain water levels or surface flow. See *Peabody v. Vallejo*, 2 Cal.2d 351 (1935); *Rancho Santa Margarita v. Vail*, 11 Cal.2d 501, 556 (1938); *Hillside Water Co. v. City of Los Angeles*, 10 Cal.2d 677 (1938) [an overlying owner does not have an absolute right to stable and level groundwater supplies]. See

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also Scott S. Slater, *California Water Law and Policy*, at 3-51 to 3-53 (2010) (“The overlying owner cannot compel the maintenance of wasteful water levels.”); Wells A. Hutchins, *The California Law of Water Rights*, at 484-85 (1956).

California case law does not permit an overlying owner to prevent another overlying owner from pumping groundwater, on the basis that such pumping interferes with the water levels at which the first overlying owner’s pump operates. In Mitigation Measure WR/mm-1, the County is attempting to enforce a private right on behalf of the Gomez well owner that the owner itself does not possess under the law. The Gomez well is merely entitled to access groundwater, not to access groundwater at the level of his pump. In fact, the owner of the Gomez well may not actually experience any loss of access to groundwater based on pumping of the Weir wells at levels higher than 25 AFY; the only impact may be slightly higher pumping costs or reduced water pressure. The County’s proposed 25 AFY groundwater pumping restriction represents an effort to thwart the water rights of the Landfill as an overlying owner and substitute its judgment for that of the California courts, which have clearly defined the boundaries of overlying owners’ respective rights to pump groundwater.

***The Proposed Mitigation Measure Violates Article X, Section 2 of the California Constitution.***

The County’s proposed restriction on the Landfill’s extraction of groundwater, if ultimately implemented, would violate the mandate of the California Constitution, article X, section 2, that the water resources of the state be put to beneficial use to the fullest extent possible and that waste of water be avoided. See *Peabody v. City of Vallejo*, 2 Cal.2d 351, 370-72 (1935). This is because maintenance of water levels for the benefit of an existing well will effectively prevent any other overlying owner or appropriator from pumping water in the vicinity of that well. Pumping water naturally creates a cone of depression in the area, which may influence water patterns and levels in nearby wells. A rule that prevents water from being pumped where any well owner experiences a drop in water level wastes a quantity of water equal to the amount of water that could be sustainably withdrawn below that level. Such a rule violates the article X, section 2 prohibition against unreasonable use and waste of water.

**The Proposed Mitigation Measure is Arbitrary and Capricious**

We also believe that the County’s imposition of the 25 AFY restriction would be deemed by a court to be arbitrary and capricious for several reasons.

***Failure to Allocate Fair Share of Recharge to Landfill.*** In reaching the 25 AFY restriction, the County does not apply a legally recognized allocation method. In allocating water rights among overlying users where the water supply is insufficient to meet the needs of all users, courts must award each user its fair and just proportion of the supply. *Katz v. Walkinshaw*, 141 Cal. 116, 134-36 (1903). The legal basis for determining an overlying landowner’s fair and just proportion

of water is the rule of reasonableness under the circumstances. Factors may include the acreage of land owned by each user over the groundwater source, purpose of the use of groundwater, suitability of the use, economic and social value of the use, practicality of avoiding harm by the method of extraction or use, and the justice of requiring each user to bear the loss. *See, e.g., Tehachapi-Cummings County Water Dist. v. Armstrong*, 49 Cal.App.3d 992 (1975); Restatement (Second) of Torts, §§ 850 *et seq.* (1978) (factors applicable to competing claims between riparian and overlying right holders). *See also Slater, supra*, at 3-58 to 3-61. The County's approach does not evaluate these factors, but has simply sought to impose restrictions on the Landfill without regard to its fair and just proportion of groundwater supplies in the Study Area.

***Lack of Evidence to Support 25 AFY Restriction.*** The DEIR notes that some well interference will occur with the Gomez well under simultaneous pumping conditions of the Landfill's Weir Wells. (DEIR, at V-245.) The level of well interference is predicted to increase with the pump rate. The 2010 Fugro study estimates that for total pumping of 25 AFY, the Gomez well will experience drawdown of less than five feet after one year. At an average pump rate of 22 gpm (roughly 40 AFY), the Gomez well will experience drawdown of eight feet after one year. The DEIR does not contain any evidence, however, that such drawdown will cause any injury to the owner of the Gomez well or any other person.

The DEIR goes on to note that "the Weir wells could be pumped at a rate that provides 25 afy with insignificant impacts to neighboring wells." (DEIR, at V-246.) The DEIR adds that "[t]here is no well pumping data in the 2010 Report to suggest the Weir Wells can sustainably produce more than 25 afy" and speculates that "pumping at a higher rate would potentially increase drawdown" and "[w]ater levels in on-site and proximate off-site wells may drop to a level where they can no longer serve the existing surrounding or off-site uses."

The DEIR does not include substantial evidence that the projected drawdown from pumping levels greater than 25 AFY would result in denial of access to groundwater or other injury to any person. Thus, the County has not demonstrated the validity of the threshold of significance used in the DEIR, and Mitigation Measure WR/mm-1 is arbitrary and capricious. Ultimately, as explained above, the Gomez well owner is simply not entitled to have water levels remain constant, since that would violate the Landfill's overlying rights and constitute a waste of water.

***Mitigation Measure Represents Effort to Restrict Water Use by One User in Favor of Future Preferred Water Users.*** In its Cumulative Impacts discussion of the Water Resources section, the DEIR discusses "build out" within the groundwater basin based on assumptions that: (1) currently undeveloped parcels within the agricultural land use category will be developed with vineyards; and (2) secondary dwellings will be built on parcels classified in the Rural Residential land use category. (DEIR, at V-255.) Water demand for residential and agricultural uses are expected to increase 38 percent and 186 percent, respectively, under this build out

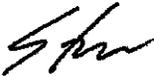
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scenario. (DEIR, at V-257.) The DEIR concludes that despite the relatively limited increase in groundwater extractions attributable to the Landfill's expansion, the cumulative development scenario demand would exceed the estimated recharge of the Study Area, resulting in overdraft of supply. In essence, because the DEIR indicates a preference for future water uses (e.g., vineyard and domestic uses), water must be reserved for those uses to the detriment of water users today, arbitrarily denying the Landfill exercise of its overlying rights. However, under the existing overlying rights doctrine, the Landfill is entitled at any time to initiate its expanded use and exercise its overlying rights, which would then be subject to reduction in the future if other overlying uses (e.g. agriculture or additional homes) are initiated such that basin supply is insufficient to meet the needs of all overlying users. In the absence of the consideration of all overlying rights and the fair and just proportion of each, as discussed above, the County may not impose restrictions on one right holder such as the Landfill.

#### Conclusion

We believe that Cold Canyon Land Fill, Inc. would have a legal basis to challenge the County's proposed 25 AFY restriction in Mitigation Measure WR/mm-1, because that measure would unduly restrict the Landfill's overlying groundwater rights as established pursuant to California law. It appears to be an attempt to artificially cap water use now to save water for future preferred water uses. The 25 AFY does not represent the Landfill's fair and just proportion of use, and the DEIR fails to provide a rational basis for the figure.

Sincerely,



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ATTACHMENT 2

**Cold Canyon Landfill Expansion  
Recirculated Draft Environmental Impact Report**

**Comments by Tom Vercoutere, PG  
Golder Associates, Inc.**

Page #	Section	Paragraph
V-227 and 228	K. 1. c.	Detailed estimates of percolation of precipitation require surface area, soil type, daily measurements of precipitation, and ETo and runoff data. Based on studies completed by the Department of Water Resources (DWR) for the Arroyo Grande Plain and the Santa Maria Valley, between nine and 16 percent of average annual precipitation percolates to groundwater (Fugro, 2008). For this EIR, the lower, more conservative rate of nine percent is used. Average annual precipitation in the area is approximately 22.1 inches per year. Nine percent of 22.1 is approximately 2.0 inches, which when applied over a basin of approximately 1,687 acres would lead to percolation, or “recharge,” of approximately 281 acre feet into the basin. This number would be reduced somewhat due to the impermeability of the Landfill area, but would potentially increase when the potential of irrigation water to percolate is considered. The potential recharge capacity of the basin is considered an approximate number based on general assumptions of hydrogeologic conditions in the vicinity of the Landfill, and is provided as context for subsequent discussion of cumulative impacts (refer to Section K.6).
	<b>Comment 1</b>	<i>Text says that groundwater recharge from precipitation is approximately 2 inches per year and when applied to the basin would lead to approximately 281 acre-feet. The conservative infiltration assumptions used to derive this volume may be appropriate for the greater hydrogeologic region but they are inappropriately applied for evaluating water resources in the aquifer at the project site. Historical groundwater elevations for several monitoring wells installed in the Pismo Formation portion of the aquifer and some of the wells installed in the Monterey Formation portion of the aquifer have seasonal groundwater elevation fluctuation of several feet. This seasonal fluctuation is acknowledged in the next subsection of the text on page V-228. Applying a recharge factor of 9 percent of annual rainfall (2 inches) ignores relevant local groundwater elevation data, which is directly affected by recharge, and significantly underestimates the amount of local recharge to the aquifer and thus the amount of sustainable groundwater available from the aquifer. Using the assumed 2 inches of recharge and an aquifer porosity of 25% would result in only 8 inches of water-level fluctuations, not the several feet that has been observed. A higher value for recharge therefore is appropriate. The conservative assumptions used to estimate recharge significantly underestimates the groundwater resource in the aquifer.</i>
V-242	K. 5. a. 1.	Although the water level data from the Gomez well, located approximately 212

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		<p>feet south the pumping well, indicated that it was pumped regularly during the pumping test, it may be inferred that the pumping level of the Gomez well was drawdown a maximum of three to four feet during the pumping test.</p>
	<p><b>Comment 2</b></p>	<p><i>As stated in the paragraph, the Gomez well was pumped regularly during the Weir Well No. 1 pumping test. According to the Fugro report, the Gomez well pump is set at 100 feet below the top of the well (approximately 19 to 20 feet below the static water level) and 20 feet above the bottom of the well, and the regular pumping from this configuration produced the confounding water-level artifacts that are clearly visible on Fugro, 2010 Plate 7. The graphical data of groundwater drawdown on Plate 7 however, shows no change in water levels from the start to the finish of the 72 hour pumping test at Weir well No. 1 other than the effects of periodic pumping, which produced approximately 19 feet of drawdown in several cycles, and the regular cyclic pumping, which produced approximately 3 feet of drawdown in the Gomez well. This regular cyclic pumping produced a rapid 3-foot drawdown that was followed by a gradually recovery, and this cycle was repeated at regular intervals throughout the 72 hour pumping period. It is this drawdown/recovery cycling that has been interpreted as "Possible Weir Well #1 Interference" on Fugro, 2010 Plate 7. Golder Associates' opinion is that this pump cycling likely occurred to maintain water pressure in the Gomez water supply system. The 3-foot magnitude of this drawdown/recovery cycle began about 2 hours into the test, is consistent throughout the 72 hour period, and shows no change that could be inferred to be interference effects attributed to the pumping test at Weir well No. 1. The drawdown of approximately 19 feet that occurred several times during the 72-hour pumping test indicates that the Gomez pump removed water from the well faster than the well recharged causing the pump to shut off and groundwater to drop below the depth of the transducer used by Fugro to measure water level changes in the Gomez well. As expected, the recovered water level after each of these 19-foot drawdown cycles is slightly lower than the water level before the cycle because the well did not have sufficient time to return to static conditions.</i></p> <p><i>Golder Associates' opinion of the water-level data presented on Fugro's Plate 7 is that the water-level changes measured within the Gomez well during the 72-hour pumping test at Weir well No. 1 were caused by pumping in the Gomez well and not by pumping from Weir well No. 1.</i></p>
<p>V-245</p>	<p>K. 5. a. 4.</p>	<p><b>During the simultaneous pumping of the Weir wells operated by Landfill staff following the end of the pumping program, water levels within all of the wells were measured and recorded. During this time, the water meters for the individual Weir wells were not recorded, but several water meter readings at the pond outfall meter were recorded. Based on the infrequent cumulative pond water meter readings and the continuous water level data from each of the wells, it was surmised that all of the Weir wells were pumping in repeated on/off cycles throughout the seven day period between November 30 and December 7, 2009.</b></p>

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		<p><b>The pumping rate was approximately 31,000 gpd, or 25 afy. Of the off-site and monitoring wells, only the Gomez well appeared to be affected by the pumping (refer to 2010 Report Plates 5 through 11, Appendix G). The Gomez well is affected by some pumping stresses, on the order of several feet (Fugro, 2010).</b></p>
	<p><b>Comment 3</b></p>	<p><i>The above paragraph states that the Gomez well was affected by pumping stress during the simultaneous pumping test of the three Weir wells and the assumed interference (drawdown) is listed in Table V.K.-6. Golder Associates reviewed the graphical data of groundwater drawdown on Fugro, 2010 Plate 5 and the Gomez well hydrograph in Appendix D, and concluded that the starting water level in the Gomez well on November 30 (the beginning of the 7-day simultaneous pumping) was the same as the ending water level on December 7, 2009 and beyond. The same water levels at the start and end of the 7-day test means there was no pumping stress on the Gomez well, and the listed drawdown in Table V.K.-6 should be changed to 0 feet. In fact, the water level in the Gomez well increased from the beginning of the testing program in early November to the end of the testing program in mid December 2009. The only changes in the depth to water in the Gomez well during the 7-day test are the 3-foot drawdown/recovery cycles, which were also observed before, during, and after the individual and simultaneous pumping at Weir well Nos. 1, 2, and 3, and the drops of approximately 19 feet (to the depth of the Gomez well pump), which were also routinely observed during periods of pumping and non-pumping of the three Weir wells. As shown on Plate 5, the last of these 19-foot drops occurred after the conclusion of the simultaneous pumping test and therefore, these drops cannot be attributed to the aquifer testing. Fugro also draws this conclusion where they state on Plate 9 that this 19-foot drawdown was not coincident with Weir well No. 2 pumping. The regular 3-foot drawdown/recovery cycling during the first 4 ½ days of the simultaneous pumping test was likely caused of the pump in the Gomez well switching on for short periods to bring the supply system back up to the desired pressure. Based on well dimensions and pump capacity provided by Fugro, 3 feet represents approximately 17 gallons of water in the casing and could be pumped out in approximately 1 minute by the Gomez pump.</i></p> <p><i>It is Golder Associates' opinion that the potential production rate from Weir well No.3 was significantly underestimated by Fugro. The "average" pumping rate of 8.5 gpm during the 72-hour pumping test reported by Fugro and used in the RDEIR in Tables V.K.-1 and V.K.-2, was likely an artifact of a poorly operating or malfunctioning pump controller or an undersized pump and not the limitation of the well and the aquifer to supply water. The hand-measured water levels collected by Fugro (see Plate 4) indicate that more than 100 feet of water was above the pump at the end of the first day and increased to more than 170 feet of water above the pump at the end of the second day and end of the third day of the 72-hour test. Golder's opinion is that the pumping test, as performed, did not stress the aquifer at Weir well No. 3, and using 8.5 gpm as the well capacity is inappropriate because significantly more water was available in the well.</i></p>
<p><b>V-246</b></p>	<p><b>K. 5. a. 4.</b></p>	<p><b>There is no well pumping data in the 2010 Report to suggest the Weir wells can</b></p>

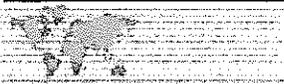
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		<p>sustainably produce more than 25 afy. However, based on the discussions below, the Landfill may need the wells to produce at a level greater than 25 afy. Pumping at a higher rate would potentially increase drawdown at both on and off-site wells and change the quantity or movement of groundwater in the basin. Water levels in on-site and proximate off-site wells may drop to a level where they can no longer serve the existing surrounding or off-site uses (i.e., residential, agriculture).</p>
	<p><b>Comment 4</b></p>	<p><i>Summary and Conclusions Bullet 2, page 18 of the Fugro 2010 reports says “Based on the pumping tests, landfill-operated pumping before and after our tests, and documents used between March and July of 2010, the wells can likely supply between 31,000 and 56,000 gpd to the landfill.” On page 12, Fugro says “Given the range of daily water usage documented in this study from 31,000 gpd to as high as 74,000 gpd, we conclude that on-site water demand is presently on the order of about 50,000 gpd and that this demand can be met by the three Weir wells.” On page 13, Fugro also says that “Again, based on the above we conclude that the existing Weir wells are capable of providing at about 50,000 gpd for 5 of the 7 days per week.”, and on page 18, Fugro says the landfill well yield simply cannot sufficiently stress the aquifer to create large distance interference effects. The 25 afy is based on a pumping rate of 31,000 gpd, which was the estimated “average” pumping rate during the 7-day simultaneous pumping test that was based on infrequent readings at the pond discharge and not on meter readings at the wells. We do not find any statements in the Fugro 2010 report that says 25 afy is the maximum sustainable yield. Rather, it is the low end of the range, and as described above in Comment 3, there was no measurable effect on offsite private wells and therefore no impact on nearby wells at this lower rate. If the upper end of the likely supply range of 56,000 gpd is used, approximately 62 afy are available.</i></p> <p><i>Fugro 2010 (pages 9 and 10) predicted that if the three Weir wells were continuously pumped at a combined rate of 31,000 gpd for 1 year (which does not match groundwater usage), with Weir well No.1 producing 14 gpm, the predicted drawdown in the Gomez well would be less than 5 feet of the approximately 40 feet of available drawdown. If the pumping rate were increased to 50,000 gpd, with Weir well No. 1 producing 22 gpm (31,700 gpd), the Gomez well drawdown would be approximately 8 feet. Because Fugro did not include their Theis distance-drawdown calculations or input parameters, it is not possible to objectively evaluate what they did or the validity of their findings.</i></p> <p><i>The Gomez well is 120 feet deep and had groundwater at 80 feet when it was installed in 1989 when the Weir wells were not being used for water supply at the Cold Canyon Landfill. The Gomez well also had groundwater at 80 feet before, during, and after the recent pumping tests. This consistency in water levels suggests that historical pumping from the Weir wells, on the order of about 50,000 gpd as stated by Fugro on page 12, has not resulted in the 8 feet of predicted drawdown and has had no long-term effect on neighboring wells.</i></p>

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		<p><i>We find no data or statements in the Fugro report to support the RDEIR statement that pumping would potentially increase drawdown in onsite wells. As Fugro shows on Plate 6, water levels rose in onsite wells Weir 3, B-1, P-4, P-10, and P-12 during the 72-hour pumping test in Weir 1, while the water level dropped in Weir 2 during the first 10 hours of the test and remained stable after that. Similarly, Fugro's Plate 8 shows that water levels rose in onsite wells Weir 1, Weir 3, and P-6, or were stable in onsite wells B-1, P-10, and P-12 during the 72-hour pumping test in Weir 2. Fugro did not provide an explanation as to why water levels rose during the pumping tests even though this is a significant deviation from the anticipated results of a pumping test.</i></p>
V-246	K. 5. a. 4. WR Impact 1	<p><b>Pumping the Weir wells at a rate greater than 25 afy has the potential to deplete groundwater supplies or interfere substantially with groundwater such that the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses.</b></p>
	Comment 5	<p><i>It is Golder's opinion that WR Impact 1 is not supported by the hydrogeologic data presented in the Fugro 2010 report and should be removed. See comments 2, 3, and 4 for details.</i></p>
V-246	K. 5. a. 4. WR/mm-1	<p><b>Limit Groundwater Extraction. Throughout the life of the project, to protect groundwater resources, the applicant shall not extract more than 25 afy from the three Weir wells in any 12-month period.</b></p>
	Comment 6	<p><i>It is Golder's opinion that selection of 25 afy as the maximum allowable combined withdrawal is not supported by data presented in the Fugro 2010 report. See comments 2, 3, and 4 for details.</i></p>
V-246 and 247	K. 5. a. 4. WR/mm-1	<p><b>Weir Well Water Use and Monitoring Program. Prior to issuance of the Notice to Proceed for any component of the proposed project, in order to monitor ongoing groundwater use at the Landfill, the applicant shall prepare and submit to the Department of Planning and Building, a Weir well monitoring program prepared by a qualified hydrogeologist. The program shall:</b></p> <ul style="list-style-type: none"> <li>• <b>Document how use of the Weir wells shall be monitored to ensure accurate long-term recording of use in a consistent manner.</b></li> <li>• <b>Include an easily implementable water use conservation strategy which would be implemented as these wells approach the 25 afy rate, and more substantial water reduction measures required to insure that the 25 afy rate is not exceeded.</b></li> <li>• <b>Be coordinated with the other long-term monitoring efforts, such as those described in HAZ/mm-10 to address odors.</b></li> <li>• <b>Include a provision that requires monthly reports be provided to the County Department of Planning and Building that include extraction rates and measures applied to avoid exceeding the 25 afy threshold. The Applicant shall notify the County immediately should the 25 afy threshold</b></li> </ul>

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		be exceeded to determine the appropriate course of additional action to avoid significant impacts to surrounding wells.
	Comment 7	<i>It is Golder's opinion that these mitigation measures are unnecessary because 25 afy as a limit is not supported by the hydrogeologic data presented in the Fugro 2010 report and should be removed. See comments 2, 3, and 4 for details.</i>
V-247	K. 5. a. 4. <i>Residual Impact</i>	<b>These measures would limit groundwater production on-site to a level that that can be sustained without interfering with other on-site or off-site wells. Impacts would be less than significant with mitigation (Class II). No additional mitigation is required.</b>
		<i>It is Golder's opinion that there is no technical information presented in the Fugro 2010 report that limit or state that 25 afy is the highest sustainable groundwater production rate that will not interfere with on-site or off-site wells. See comments 2, 3, and 4 for details.</i>
V-249	K. 5. b. 7.	<b>Based on Tables V.K-8 and 9, daily maximum demands (34.5 afy) could potentially be met with existing supplies (34.1 afy). However, during drier years (a reasonable worst-case scenario), less surface water and leachate, which currently provide as much as 9 afy, would be available for use. In addition, future modules may not include a pond capable of supplying surface water in the amounts currently supplied by the Module 8 pond. During dry years, the Landfill may need to rely almost entirely on groundwater to meet demand, and there is no data available to indicate that the Weir wells can sustainably produce more the 25 afy. Therefore, the water demand would potentially exceed supply by approximately 9 afy.</b>
	Comment 8	<i>It is Golder's opinion that there is no technical information presented in the Fugro 2010 report that limit or state that 25 afy is the highest sustainable groundwater production rate that will not interfere with on-site or off-site wells. See comments 2, 3, and 4 for details.</i>
V-250	K.5.b.7. WR/mm-4	<b>Use of Stormwater. Upon submittal of final drainage plans/grading permit, the proposed detention basins and other drainage improvements shall be designed to retain stormwater for use on-site as dust control or as irrigation water for the Compost Operation, to the extent allowed by other regulations. To minimize the percolation of surface water from sediment ponds and detention basins, they shall be lined.</b>
	Comment 9	<i>This mitigation measure appears to be intended to increase water supply that has been deemed necessary to supplement an assumed maximum available groundwater supply of 25 afy. As stated in previous comments, Golder Associates' opinion is that there is no technical basis for assuming 25 afy is the maximum sustainable groundwater supply, and implementing a mitigation measure that may marginally increase surface water supply is inappropriate. Lining basins to minimize the percolation of surface water from sediment ponds and detention basins will negatively affect the groundwater resource through reduced infiltration rather than allowing infiltration to replenish the aquifer during periods when overall water demand is low.</i>
V-250 and	K. 5. b. 7. <i>Residual</i>	<b>Therefore, it is concluded that because (1) the only proven long-term water supply at the Landfill is groundwater, (2) the sustainable groundwater</b>

Page #	Section	Paragraph
251	<i>Impact</i>	production rate is 25 afy, (3) the effects of the recommended mitigation measures are not quantifiable and could vary widely over time, and (4) the maximum water demand would be as high as 34.5 afy, even after implementation recommended mitigation measures, the existing water supply would not meet the estimated demands. The impact would be significant and unavoidable (Class I).
	Comment 10	<i>It is Golder's opinion that there is no technical information presented in the Fugro 2010 report that limit or state that 25 afy is the highest sustainable groundwater production rate that will not interfere with on-site or off-site wells. See comments 2, 3, and 4 for details.</i>
V-252	K. 5. c. WR/mm-6	<p><b>Module Construction – Water Use.</b> Prior to issuance of the Notice to Proceed for construction of each module, the applicant shall provide verification to the Department of Planning and Building of the source of the water to be used for construction purposes. Water used for construction shall only come from any combination of the following sources:</p> <ol style="list-style-type: none"> <li>1. On-site ground or surface water supplies (as long as it will not require on-site groundwater production of greater than 25 afy);</li> <li>2. Reclaimed or recycled water (i.e., Price Canyon Oilfield, vineyard wastewater, City of San Luis Obispo “purple pipe”); and,</li> <li>3. An alternative source shown to be a sustainable supply.</li> </ol>
	Comment 11	<i>It is Golder's opinion that there is no technical information presented in the Fugro 2010 report that limit or state that 25 afy is the highest sustainable groundwater production rate that will not interfere with on-site or off-site wells. See comments 2, 3, and 4 for details.</i>
V-252	K. 5. c. Residual Impact	Because water resources in the basin (and County in general) are limited, this measure encourages use of reclaimed water to the extent feasible during construction. In the event that on-site groundwater is used, this measure also requires the applicant to confirm that construction use of groundwater would not require a total annual production of greater than 25 afy. As an alternative, the applicant could also use another source, if it can be shown to be a sustainable source. Use of reclaimed water, or ground or surface water from on-site would reduce the impact to less than significant (Class II).
	Comment 12	<i>It is Golder's opinion that there is no technical information presented in the Fugro 2010 report that limit or state that 25 afy is the highest sustainable groundwater production rate that will not interfere with on-site or off-site wells. See comments 2, 3, and 4 for details.</i>

Page #	Section	Paragraph
V-252	K. 5. e.	<p>Per State law, before the expansion of the disposal area can begin, the applicant must obtain eight quarters of background water quality data from the monitoring well network. Data obtained from these data would be used to develop the future WDRs and MRPs (Fugro, 2008). The intent of the MRP would be to obtain water quality data from the recently installed monitoring wells (P-10 through P-14) and the existing monitoring well network. Compliance with the WDRs and MRPs would require quarterly review of water quality data for identification of any statistically-significant releases from the facility.</p>
	<p><b>Comment 13</b></p>	<p><i>CCR Title 27 Section 20415(e)(6) requires quarterly sampling for a minimum of 1 year, including the times of expected highest and lowest annual elevations of the groundwater surface. Eight quarters of background data is not required.</i></p>



**Education**

M.S. Geology, San Jose State University, 1984

B.A. Earth Sciences, University of California Santa Cruz, 1978

B.A. Economics, University of California Santa Cruz, 1978

**Certifications**

Professional Geologist, State of California

Certified Environmental Manager, State of Nevada

OSHA 10-hr construction training, 2007

OSHA 40-hr HAZWOPER, 1990

**Golder Associates Inc. – Sunnyvale**

**Employment History**

**Golder Associates – Sunnyvale, California**  
*Senior Consultant (2005 to Present)*

Tom Vercoutere is a senior consultant in Golder's Sunnyvale office. He brings more than 25 years of experience as an environmental consulting geologist in the solid waste sector and 9 years of experience as a research geologist with the US Geological Survey.

**Conor Pacific – Mountain View, California**  
*Senior Consultant (2000 to 2005)*

Managed and implemented technical services, schedules, and budgets for a full range of environmental projects including the implementation of state and federal water quality regulations at solid and hazardous waste facilities. He provided expertise in environmental monitoring program design and implementation, evaluation and characterization of site groundwater, soil, and landfill gas, financial/budget planning, and acted as liaison for public and private sector clients with regulatory agencies. Project responsibilities included ongoing water-quality evaluation, design, and implementation of fault activity and subgrade suitability investigations for landfill siting and expansion, geologic and hydrogeologic investigations at solid waste disposal facilities, preparation of permitting documents, and development and negotiation of appropriate remedial solutions.

**EMCON Associates – San Jose, CA**

*Northern California Solid Waste Geoservices Group Manager (1987 to 2000)*

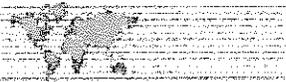
Managed a wide range of geologic and hydrogeologic projects for municipal and hazardous waste landfill sites. He supervised a team of staff- and project-level geologists and environmental scientists devoted to solid waste projects, and a group of field-services technicians devoted to groundwater, soil, surface water, and landfill gas sampling. While at EMCON, he designed and supervised several Subtitle D detection, assessment, and corrective action monitoring programs including the development of water-quality monitoring networks and selection of indicator parameters and statistical evaluation procedures for determining the effectiveness of each program. He published papers and gave presentations at national conferences on topics related to groundwater evaluation at municipal landfills. Additionally, he conducted environmental impact studies, as well as RCRA/CERCLA and Superfund remedial investigation and feasibility studies. He has designed and supervised exploration and testing programs for hydrogeological site characterization for groundwater flow and groundwater extraction at industrial and landfill sites, designed and installed groundwater, leachate, and landfill gas monitoring and extraction wells, and vadose-zone monitoring stations, performed and evaluated hydrologic aquifer tests, and conducted geologic mapping, geophysical investigations, and aerial photograph studies.



***U. S. Geological Survey – Menlo Park, California***

***Geologist (1978 to 1987)***

Served as a sedimentologist and exploration geologist during his tenure with the USGS. While at the USGS, he published maps, articles, reports, and reviews describing his research on modern and ancient sedimentary environments, and on continental and island-arc volcanism and their associated mineral resource occurrences including work in Micronesia. He gained extensive experience in geologic mapping, trench logging, aerial photointerpretation, and conducting and applying geochemical surveying to mineral exploration.

**PROJECT EXPERIENCE – SOLID WASTE****Landfill Expansion**  
San Luis Obispo,  
California

Project manager for evaluation of geologic and hydrogeologic conditions as part of a siting study for a future landfill expansion. Detailed logging and mapping of soil and bedrock was used to determine the age and location of an identified fault. A drilling program was designed and implemented to clarify the pre-Holocene fault's effect on groundwater flow. Downhole geophysical surveys were run to characterize water producing zones and packer tests were performed on discrete zones above, within, and below the fault. Groundwater wells were installed to determine piezometric elevations, and pumping tests were performed to provide hydraulic properties of the major water bearing zones for future use in flow and velocity calculations and for water resource availability.

**Landfill Expansion**  
Solano County,  
California

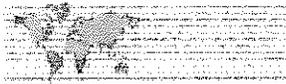
Project manager for characterization of geologic and hydrogeologic conditions over a 200-acre parcel for a future landfill expansion. The information obtained was presented in a landfill siting study and in hydrogeologic characterization reports for use by landfill engineers to prepare final construction drawings and details and for technical support for an Environmental Impact Report. Detailed engineering geologic maps of landfill module subgrades were prepared to evaluate foundation suitability and slope stability, locate faults, and identify groundwater seeps and flow rates. Wells were installed for use in determining depth to groundwater, groundwater gradient and flow direction, seasonal water table fluctuations and aquifer recharge, background water-quality conditions, and water-quality monitoring. Downhole geophysical logging was used to identify water-bearing zones, and obtain lithologic and stratigraphic information for enhancing the site's overall groundwater flow model. Hydrogeologic properties of the aquifer were characterized by groundwater pumping tests, and static and transient groundwater models were prepared to evaluate the effectiveness and feasibility of operating water supply wells as well as groundwater seepage from cut slopes as the landfill was developed. This information was used to design water storage and conveyance systems to meet seasonal and long-term water demands and to design subgrade groundwater drainage systems.

**Landfill Expansion**  
San Mateo County,  
California

Managed and evaluated hydrogeologic conditions and developed a groundwater flow model to support liner and subgrade drainage system design for a bedrock landfill expansion where portions of the subgrade were below the groundwater table. The scope of work included continuous air-rotary coring to as much as 360 feet below ground surface, packer testing to characterize aquifer hydraulic properties and groundwater flow through the fractured bedrock, and downhole geophysical logging to determine fracture orientation. The groundwater flow model was used to evaluate potential changes to flow directions caused by changing recharge zones and to estimate groundwater discharge rates for use in designing a dewatering system.

**Environmental Site  
Assessment**  
Santa Clara County,  
California

Designed and implemented an environmental site assessment to determine baseline conditions and suitability of an inactive landfill for use as a site for an anaerobic digestion (AD) facility. Assessment included chemical and physical characterization of landfill cover, waste, groundwater, landfill gas, soil gas, and fugitive gas emissions. Work products use for technical support for CEQA/EIR, land-use permitting, design of the AD facility, and for design and construction of environmental monitoring systems and programs.



**Water-Quality  
Monitoring Program  
Design**  
California, Nevada, and  
Oregon

Designed water-quality monitoring program upgrades for compliance with Subtitle D requirements for twelve municipal solid waste and one hazardous waste landfills in California, Nevada, and Oregon. Site geologic and hydrogeologic characterizations were performed, water-quality data were evaluated for spatial variations, and site-specific indicator parameters and statistical evaluation procedures were selected.

**Surrogate  
Groundwater  
Monitoring Program  
Design**  
Whittier, California,

Developed surrogate groundwater monitoring program for a landfill in the Los Angeles area that relies on the use of unsaturated-zone volatile organic compound composition and concentrations. The site has an extensive multilevel unsaturated-zone monitoring network in place and groundwater is more than 300 feet deep. The regulatory agency approved the program for compliance with state and federal regulatory requirements.

**Assessment  
Monitoring Programs**  
San Benito County,  
California

Managed and evaluated water quality and hydrogeologic conditions for a site under the regulatory oversight of the U.S. EPA, the California DTSC, and the Central Coast RWQCB. Contaminant capture by the existing groundwater extraction system was evaluated and recommendations were made to enhance the system's effectiveness. Leachate and landfill gas were evaluated as potential sources of groundwater contamination. The results were used to improve site operations and upgrade the site's landfill gas extraction system. The groundwater monitoring network recommendations were negotiated with the regulatory agencies to improve the efficiency and cost-effectiveness of the monitoring programs.

**Assessment  
Monitoring Programs**  
California

Implemented assessment monitoring programs at landfills in San Bernardino, Santa Clara, San Luis Obispo, Santa Cruz, and Solano Counties. Nature and extent of impacted groundwater zones were determined, source and contaminant transport mechanisms were characterized, and remediation/control strategies were developed. These control strategies were developed in the context of beneficial uses of the water and included pumping and treating groundwater, landfill-gas extraction, cut-off walls, air sparging, and vapor extraction systems.

**Corrective Action  
Evaluations**  
Santa Clara County,  
California

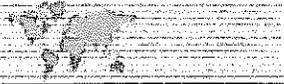
Evaluation of corrective action and effectiveness of leachate extraction at a landfill in the San Francisco Bay Area. Developed program and procedures to evaluate leachate extraction capacity and determine area of extraction influence and optimum extraction rates. Provided alternative strategies to meet regulatory goals.

**Groundwater  
Remediation**  
California

Project manager for groundwater remediation programs at several landfills in California. Remedial actions used included source and impacted media controls. Source controls were implemented to minimize landfill gas and leachate transport of contaminants to groundwater. Impacted media controls included groundwater extraction system design, siting, and installation, and siting and installation of permeable reactive barrier walls.

**Due Diligence  
Evaluation**  
San Diego, California

Evaluated environmental liability for a corporate buyout of San Diego County's solid waste transfer and disposal facilities. Included assessment of regulatory compliance and estimate of potential future expenditures for achieve compliance and mitigate know contaminant conditions. Potential environmental liability estimates exceeded \$15M.



**Landfill Gas Migration  
Monitoring Programs  
California**

Designed and prepared perimeter landfill gas migration monitoring programs for eight public and private sector landfills constructed on soil and bedrock. Developed strategies for differentiate between landfill and natural sources of methane in the subsurface. Negotiated special compliance conditions with State regulators for a site with naturally occurring methane in the subgrade.

**Financial Assurance  
Cost Estimation  
California**

Managed and developed strategies for estimating future financial costs for private and public sector landfill owners to perform corrective action for known or reasonably foreseeable releases from their landfills. Corrective action scenarios dealt with nature and extent of release characterization, remediation of organic solvent and/or inorganic constituent releases, calculation of number of years to complete remediation, and estimating the present worth of such systems, which ranged from \$200K to more than \$1,000K.

**Unsaturated Zone  
Detection Monitoring  
California**

Prepared unsaturated zone detection monitoring program feasibility investigations including design, installation, and QC testing requirements of the monitoring system in soil and bedrock environments.

**NPDES Special  
Monitoring  
Half Moon Bay,  
California**

Managed and prepared a NPDES special monitoring program to characterize the effluent and receiving water for the site's groundwater treatment system. The project involved developing a sampling and analytical plan for several organic and inorganic constituents including ultra low-level mercury. Project involved 18 months of sampling, building a site-specific data base, evaluating the water quality data, and developed achievable site-specific discharge limits.

**Storm-Water Pollution  
Prevention Plans  
California**

Prepared storm-water pollution prevention plans and monitoring programs in compliance with NPDES regulations for more than 15 active and inactive landfills.

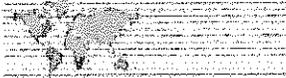
**Fault Activity  
Investigations  
California**

Supervised and conducted investigations at waste management facilities in California to determine activity of the Hillside fault in San Mateo County, the Canada de la Brea fault in Ventura County, the Indian Knob fault in San Luis Obispo County, and the Calaveras fault zone, in Santa Clara County, California. The work included detailed aerial photograph evaluation, soil and bedrock trench logging, soil age dating, geologic mapping, and evaluating historical seismicity. Several of the faults were confirmed as inactive and allowed landfill expansion to proceed.

Supervised and conducted an investigation to evaluate the effects of a range-front fault on groundwater flow at a closed Superfund landfill in southern Nevada. The program combined surficial geologic mapping with exploratory drilling and surface and subsurface geophysical investigations, and groundwater geochemical profiling.

**Leachate Extraction  
Systems  
San Mateo County,  
California**

Developed, designed, and managed construction of leachate extraction system to lower fluid levels inside the landfill and stop surface seepage at the closed Marsh Road Landfill in Menlo Park, California. The system consisted of several hundred feet of extraction trenches, automated sump pumps, and several thousand feet of conveyance piping to a discharge point in the sanitary sewer system. The project value was in excess of \$300K.

**Solid Waste  
Assessment Test  
Investigations  
California**

Managed and prepared SWAT proposals for four California landfills, and prepared SWAT reports for nine California landfills. The regulatory-driven program objective was to perform a first-time assessment site hydrogeologic and water quality conditions (the SWAT Proposal) and determine whether releases had occurred for the landfill in the state.

**PROJECT EXPERIENCE – INDUSTRIAL****Industrial Site  
Characterization  
San Carlos, California**

Project manager for site characterization and groundwater monitoring services for a former oil-recycling site. Designed, permitted, and implemented a phased hydrogeologic investigation to characterize the hydrogeology and extent of contamination per an existing closure plan for this RCRA site. This site has a complex mixture of chemicals, primarily petroleum hydrocarbons, chlorinated solvents, metals, and PCBs. The plume at this site extends to depths of approximately 70 feet and is monitored off site by continuous-multichannel tubing (CMT), which allows several discrete zones of the subsurface to be monitored via one borehole. Also successfully negotiated with the CalEPA/DTSC to use innovative investigative and groundwater-sampling techniques as well as negotiating reduced monitoring requirements to save the client more than \$30K in monitoring and analytical costs each year.

**Plume Delineation and  
Groundwater  
Extraction  
Santa Clara County,  
California**

Performed hydrogeologic investigations and designed and installed ground-water monitoring and extraction wells for remediation of contaminated ground water at industrial sites including GTE Government Systems, Signetics Corp., Quantic Industries, Westinghouse Electric Corp., Synertek, and VSL Corporation.

**TRAINING**

***OSHA/SARA 29CFR1910.12 Certificate of Training (40 hour)***

***OSHA/SARA 29CFR1910120(e)3 Certificate (8 hour supervisor)***

***Princeton Groundwater Pollution and Hydrology Course (40 Hours)***

**RDEIR Comments**  
**July 11, 2011**  
**Cold Canyon Land Fill, Inc.**  
**Waste Connections, Inc.**

**ATTACHMENT 3**

**Cold Canyon Landfill Expansion  
Recirculated Draft Environmental Impact Report  
Comments Provided by Douglas Environmental**

**July 11, 2011**

<b>Page #</b>	<b>Section</b>	<b>Paragraph</b>
		<b>III. PROJECT DESCRIPTION</b>
III-24	D.2	The proposed project would increase the Landfill permitted daily tonnage limits from 1,620 tons per day (tpd) to 2,500 tpd. This increase of 880 tpd would accommodate anticipated increases in compostable and recyclable materials and maintain existing disposal limits (refer to Table III-3).
	Comment 1	<i>This paragraph incorrectly identifies the proposed project's increased tonnage limit as 2,500. As correctly identified in Table III-3 on page III-25, the permit limit would increase from 1,620 tpd to 2,350 tpd.</i>
		<b>H. HAZARDS AND HAZARDOUS MATERIALS</b>
V-173	V.H.1	The Landfill is a Class III landfill, which means that it accepts materials that are not required to be disposed of in a Class I or II landfill. This material is collectively referred to as "trash." Typical items include furniture, construction debris, roofing material, wood, carpet, and vegetative debris. There are a variety of items that are prohibited from disposal in the Class III landfill, such as whole tires, automotive batteries, and appliances containing refrigerant or combustible gas, such as propane. Liquid and solid hazardous wastes, such as petroleum or chemically contaminated soils, nuclear waste, and medical wastes, are not accepted at the Landfill either. The Landfill currently ensures that prohibited materials are not disposed of in the permanent disposal area through:
	Comment 2	<i>Petroleum contaminated soil if demonstrated to be non hazardous can be accepted at the landfill with RWQCB approval. Non-hazardous petroleum-contaminated soil is a state-approved type of alternative daily cover. Treated medical waste can also be accepted at the landfill.</i>
V-188	H.5.e	The project would not necessarily result in larger or additional exposed working faces within the Landfill modules. Consistent with CalRecycle regulations, preventative measures are currently applied to decrease or eliminate accessibility of disposal area materials to birds, including covering the active working face and frequent compaction of trash. Currently, falcons are used as a method to discourage birds from roosting and feeding at the Landfill. These practices have been active during multiple site visits by the EIR consultant. These measures reduce the potential number of birds at the Landfill and subsequently reduce the potential that the birds would spread disease away from the Landfill. It also reduces the risk that birds would affect aircraft.
	Comment 3	<i>The paragraph states that the project would not result in larger or additional exposed working faces and that preventive measures are currently applied to decrease or eliminate accessibility of disposal area materials to birds. The paragraph further states that these measures reduce the potential number of birds at the Landfill and the risks posed by birds.</i>

Page #	Section	Paragraph
		<i>Therefore, it is unclear why the Additional Bird Deterrent Program identified in HAZ/mm-3 and the Birdstrike Monitoring identified in HAZ/mm-4 on page V-188 is necessary. CEQA does not require mitigation for less-than-significant impacts and there is no evidence that the landfill's operations have adversely affected aircraft operations. The landfill is beyond the distance where special measures or an exemption to address potential bird hazards are required. Also, the proposed project will generally move operations further away from the airport.</i>
V-189	H.5.f.2	<b>Composted material can present a fire hazard if moisture content of the vegetation becomes too low. The proposed project would potentially increase the amount of compost material accepted from 100 tpd (typical rate in recent years) to 300 tpd.</b>
	Comment 4	<i>This paragraph incorrectly states that the proposed project would increase the amount of compost material accepted at the compost operation from 100 tpd (typical rate in recent years) to 300 tpd. As stated in Table III-3 on page III-25 of the Recirculated Draft EIR, the compost operation is currently permitted to accept 300 tpd of compost material and no changes in this permit limit are being proposed.</i>
V-196	H.5.h	<b>HAZ/mm-10 - Compost Operation – Best Management Practices. To reduce odors from the Compost Operation and disposal areas, the applicant shall incorporate all applicable BMPs as developed by CalRecycle into the OIMP updates in perpetuity. These BMPs may include, but are not limited to:</b>
	Comment 5	<i>Consistent with the other mitigation measures associated with the Compost Operations, the first paragraph of Mitigation Measure HAZ/mm-10 should commence with the following words, " Upon re-establishment of the Compost Operation."</i>
		<b>I. NOISE</b>
V-195	I.1.b.2.b	<b>Table V.I.-3</b>
	Comment 6	<i>The table identifies <math>L_{max}</math> levels that are lower than the <math>L_{eq}</math> levels for Sites B and C, which is not possible. The maximum noise levels are always higher than the average noise levels. The table also includes comments for these two sites that do not reflect the conclusions of the updated Brown-Buntin Associates Noise Study included as an appendix to the Recirculated Draft EIR. For example, the Noise Study states that bird whistles produce maximum noise levels in the range of 47 to 51 dBA but identifies maximum noise levels measured at Site B as 80 dBA <math>L_{max}</math>. Table V.I.-3 in the Recirculated Draft EIR comments that the <math>L_{max}</math> levels at Site B are associated with bird whistles even though the maximum noise levels associated with bird whistles are substantially below the recorded <math>L_{max}</math> at Site B. The table should be corrected to ensure consistency with the updated Noise Study.</i>
V-196	I.2.a	<b>New or Modified Stationary Noise Sources - Noise created by new stationary sources, or by existing stationary sources which undergo modifications that may increase noise levels, shall be mitigated to not exceed the noise level standards for lands designated for noise-sensitive uses.</b>
	Comment 7	<i>The Recirculated Draft EIR summarizes the Noise Element requirements for new or modified stationary noise source standards. However, it should be noted that the Noise Element further states that when the noise level standard is exceeded at the property line of vacant land (i.e., land that does not contain a habitable structure), such exceedance shall be waived</i>

Page #	Section	Paragraph
		<i>when the Director of Planning and Building determines that such vacant land is not likely to be developed with a noise sensitive land use.</i>
V-197	I.3.a	<b>The threshold of significance for noise related impacts is the exceedance of a standard as established in the County's <i>Noise Element</i> by any proposed development project. Where the established standard is already exceeded, a significant increase in a noise level is taken as one decibel (1 dB).</b>
	<b>Comment 8</b>	<i>This threshold is inconsistent with industry standards and conflicts with the threshold of 3 to 5 dBA included in the original Environmental Noise Assessment prepared by Brown-Buntin Associates, Inc. and included in Appendix E of the Draft EIR. As stated on page 3 of Appendix E, "For non-transportation noise sources, it is common to assume that a 3-5 dB increase in noise levels represents a substantial increase in ambient noise levels. This is based on laboratory tests that indicate that a 3 dB increase is the minimum change 'perceptible' to most people, and a 5 db increase is perceived as a 'definitely noticeable change.'" Therefore, a 3-to-5 dBA threshold should be applied.</i>
V-198	I.3.c	<b>The County <i>Noise Element</i> states that new development of noise-sensitive land uses shall not be permitted where the noise level due to existing stationary noise sources will exceed noise level standards unless effective noise mitigation measures have been incorporated into the design of the development to reduce noise exposure to or below the allowable threshold (refer to Table V.I.-4). These noise thresholds are applied at the property line.</b>
	<b>Comment 9</b>	<i>The stationary noise source threshold referenced applies to the new development of noise-sensitive land uses (e.g., residences, churches, hospitals). The project does not include the new development of a noise-sensitive land use. The expanded landfill operations will be considered a noise generator, they will not be a use that is sensitive to noise. Therefore, the appropriate threshold for "new proposed stationary noise sources" or "existing stationary noise sources which undergo modifications" (i.e., the landfill expansion) is identified in Policy 3.3.5 of the County General Plan Noise Element. The text of the Recirculated Draft EIR should be modified to identify the correct stationary source noise threshold for the proposed project.</i>
V-198	I.3.c	<p><b>Construction activities include demolition of the existing and construction of the new RRP, CO, and MRF, relocation of the scalehouse and entrance road, excavation of modules, and stockpiling. Generally, other than limiting exceptionally noisy activities to certain times of the day and days of the week, the County currently has no noise threshold for temporary construction-related impacts. When considering noise impacts, the County of San Luis Obispo defines temporary as less than one year.</b></p> <p><b>For many projects, stockpiling would be considered a temporary construction activity, as it generally would last less than one year. However for the proposed project the use of stockpiles during module development and disposal activities would occur almost daily and over the long-term. Stockpiles would be created during module construction, and "removed" as the soil is needed as short- and/or long-term cover for the modules; therefore potential impacts associated with stockpiles have been evaluated using the stationary noise source thresholds.</b></p>

Page #	Section	Paragraph
	<b>Comment 10</b>	<p><i>In defining the significance threshold for construction activities, the text of the Recirculated Draft EIR states that the County defines temporary as less than one year in reference to construction activities. However, there is no reference to this one-year threshold in the County's Noise Element and it is inappropriate to use the Stationary Source Noise Threshold when the module construction and soil stockpile access activities are clearly construction related and they occur intermittently.</i></p> <p><i>The use of the soil stockpiles for module development would only occur when a new module is being excavated or when the intermediate or final cover is applied to a filled module. For daily cover requirements, alternative daily cover would typically be used rather than soil. However, when used, the source is usually the soil excavated during the construction of the next module to be filled with waste materials rather than accessing longer-term soil stockpiles. Also, when access to the soil stockpiles is necessary, they would typically be accessed from the side located away from the property boundary. This way, the soil stockpile would act as a noise berm until it is nearly depleted. For these reasons, the use of the soil stockpiles should be treated as construction projects in the Recirculated Draft EIR and the discussion of the project's construction noise impacts should be modified to reflect this change.</i></p>
<b>V-204</b>	<b>I.5.b.1</b>	<p><b>Noise Mitigation Plan - Preparation. Prior to issuance of the Notice to Proceed, the applicant shall submit for review and approval, a Noise Mitigation Plan addressing identified potential noise impacts on the southeastern property line through construction of earthen berms. The plan shall be prepared by a qualified acoustical consultant.</b></p> <p><b>The berms shall be located either at the property line and/or near the active working face, based on recommendations from a qualified noise consultant, to effectively reduce impacts. Any berms located at the property line shall be landscaped in accordance with the proposed landscape plan and Aesthetic Resources mitigation measures.</b></p>
	<b>Comment 11</b>	<p><i>The construction of a berm adjacent to the active working face would much more effectively reduce offsite noise levels associated with disposal activities than the construction of a berm along the property line because the working face berm would continue to block the line of site between the noise source and the noise receiver as the landfill increases in elevation. An effective approach to installing a berm within the landfill disposal area adjacent to the working face is to modify the landfill's fill sequence and build the berm using garbage as the base covered with a layer of soil. Waste disposal activities at the working face then occur behind this garbage-filled berm. The berm would be located such that it blocks the line of site between the working face and the noise receptors. Although there would be a temporary construction noise impact associated with the installation of this berm each time a new lift is constructed within the waste disposal module, over the long-term, the offsite noise impacts would be substantially reduced when compared to constructing a berm along the site's southeastern property line because the noise generating activities would not rise above the elevation of the berm.</i></p> <p><i>This approach is a common practice at landfills in California because it effectively attenuates noise levels generated at the working face while ensuring the efficient use of landfill disposal capacity. In order to ensure this approach is effectively implemented at the project site, it is recommended that the first sentence of Mitigation Measure NS/mm-1 be modified as</i></p>

Page #	Section	Paragraph
		<p><i>follows: "Prior to issuance of the Notice to Proceed, the applicant shall submit for review and approval, a Noise Mitigation Plan addressing identified potential noise impacts on the southeastern property line through construction of earthen <u>or garbage-filled (within the landfill disposal area)</u> berms.</i></p>
V-205	I.5.b.1	<p><b>NS/mm-3 - Noise Barrier Contingency Plan.</b> Prior to issuance of the Notice to Proceed, a Residential Noise Barrier Contingency Plan shall be prepared by the Applicant and reviewed and approved by the County. The intent of this plan would be to provide relief to surrounding residences (within 1,800 feet from the landfill operation's outer property perimeter) that can demonstrate noise levels of 50 decibels or more from ongoing landfill operation activities. The point of measurement would be from the edge of the 'outdoor activity area.' An 'outdoor activity area' is considered an active and maintained area (e.g., backyard with maintained vegetation) existing at the time of approval of a proposed project. Once identified, the Applicant would complete one of the following options within 90 days of identification: 1) install approved on-site measure that is intended to substantially reduce noise at the residence to acceptable levels, and then re-measure after installation to verify adequate reduction, or 2) install well constructed noise barrier (as designed by qualified noise expert) at edge of active outdoor area of affected residence (and verifying noise measurement taken after installation for effectiveness), or 3) if such a noise barrier would be ineffective or undesirable for the property owner, make a one-time payment to property owner of affected residence for estimated cost of the noise barrier identified in option 2 above. If either option 2 or 3 are selected and successfully executed, the Applicant has no further financial obligation to that property relating to noise.</p>
	Comment 12	<p><i>This mitigation states that a Residential Noise Barrier Contingency Plan shall be prepared for surrounding residences that can demonstrate noise levels of 50 decibels or more from ongoing landfill operations. The text of this mitigation measure should be revised to clarify that the demonstrated noise levels for surrounding residences must be 50 decibels <math>L_{eq}</math> not just 50 decibels in order to ensure consistency with the Noise Element standards. Also, the text on page V-213 of the Recirculated Draft EIR states that residences within 1,000 feet of the property line could experience noise levels greater than 50 decibels. Therefore, the reference to 1,800 feet included in NS/mm-3 above should be revised to 1,000 feet.</i></p> <p><i>CEQA requires that feasible mitigation measures be identified for significant environmental impacts associated with project implementation. Mitigation measures are intended to substantially lessen any significant effects that the project would have on the environment. The requirement to pay residents a fee equivalent to the estimated cost of a noise barrier, as identified under item 3 above, does not constitute mitigation, as it does not include any requirement that the resident spend the money on noise reducing measures. Also, it doesn't address what happens when a resident sells the property and a new owner moves in to the home. Would the prior owner be responsible for transferring mitigation funds to the new owner? Because it cannot be shown that this measure would have any measurable beneficial effect on the environment, it is inappropriate to include it in the Recirculated Draft EIR and it should be deleted.</i></p> <p><i>The feasibility of constructing a noise barrier on private property, as identified under item 2 above, also raises operational questions that make this mitigation measure unworkable. For example, the adjacent residences are located at differing elevations in relation to the landfill</i></p>

Page #	Section	Paragraph
		<p><i>and the elevation of the landfill will change over time. Therefore, noise barriers that may be effective in the short-term could be completely ineffective in the future. Continually increasing noise barrier heights adjacent to residences at some point becomes infeasible due to site constraints and the undesirability of the barriers for property owners. Also, it is unclear who would be responsible for the long-term noise wall maintenance and upkeep, who would be responsible for repairs if the wall is somehow damaged in the future, whether an easement would be necessary for the landfill operator to access the property in order to ensure the noise wall is appropriately maintained, and whether a noise barrier would preclude a homeowner from expanding their outdoor activity area in the future. Because these and other legal questions have not been addressed, the feasibility of implementing item 2 is speculative and it should be removed from the Recirculated Draft EIR.</i></p>
V-208	I.5.b.3	<p><b>NS/mm-6 - 2. Transition to an Aerated Static Pile (ASP) or Anaerobic Digestion (AD) process for the CO. The transition shall be complete within an additional six months (or one year from when excessive noise level confirmed, and as quickly as any necessary permitting allows). The applicant shall provide verification that the proposed process (ASP or AD) would reduce noise levels from the CO such that the 50 dBA threshold can be achieved.</b></p>
	Comment 13	<p><i>As acknowledged in the Recirculated Draft EIR, the implementation of ASP or AD would likely require additional CEQA review and approval by San Luis Obispo County. The project applicant has little ability to control the timing of this permitting and approval process. Therefore, the mitigation language should be revised to account for unforeseen delays in the permitting process that are not directly caused by the project applicant. Specifically, the language included in brackets is suggested to be changed as follows: (or one year from when excessive noise level confirmed, or <del>and</del> as quickly as any necessary permitting allows). It is inappropriate to establish a timeline that may be too short to prevent the proper review of alternatives and the development of a sound development program.</i></p>
V-209	I.5.b.3	<p><b>Residual Impact - The 2010 Study indicates that a properly designed noise barrier for the tub grinder could reduce noise by 5-10 dB. AES/mm-4 and 5 require an earthen berm be constructed around the "top deck" of the Landfill to mitigate visual impacts associated with the engineered look of the Landfill. The berm would range in height from ten to 25 feet, and effectively act as a noise attenuation berm for the relocated CO. Neither ASP nor AD requires intensive turning of compost, and therefore the scarab would not be necessary. Implementation of these measures would reduce impacts to less than significant levels (Class II).</b></p>
	Comment 14	<p><i>Installing a 10 to 25-foot tall berm on the top deck is infeasible. A berm just around the compost area of the top deck would use approximately 4.3 acres, which would eliminate close to 20% of the useable area. Also, breaks would be needed in the berm to allow vehicle access to the compost area and to allow storm water drainage of the top deck surface area. The remaining top deck area would not be of sufficient size to accommodate the proposed composting operations and the breaks in the berm would reduce its ability to effectively attenuate noise. Thus, this mitigation is not feasible. However, feasible mitigation measure could be implemented at the composting operations to minimize noise generation on the top deck, such as enclosing the grinder, which tends to be the loudest component of the composting operations. These types of feasible mitigation measures are more appropriate</i></p>

Page #	Section	Paragraph
V-210	I.5.b.4	<p><i>for the relocated composting operations.</i></p> <p><b>Noise generated by the RRP at the southeastern property line, which would be as close as 275 feet from the RRP would be reduced due to the location of the MRF and the existing noise berm. It is estimated that the berm and MRF together would provide a 15 dBA reduction in noise levels, to approximately 62 dBA. This level still exceeds the threshold by 12 dBA.</b></p>
	Comment 15	<p><i>The noise level generated by the RRP at the southeastern property line is miscalculated in the Recirculated Draft EIR. The analysis states that the RRP will generate noise levels of 77 dBA at the northeastern property boundary, which is located 50 feet from the RRP, which will be reduced by 15 dbA to a level of 62 dBA at the property line due to the proposed cut slope adjacent to the RRP acting as a noise berm. The analysis then states that the noise levels at the southeastern property line would be reduced by 15 dbA to a level of 62 dbA due to the intervening MRF building and an existing noise berm. However, the southeastern property line is 275 feet from the RRP, not the 50 feet of the northeastern property boundary. At this distance, the noise level would be reduced to below the County standard of 50 dbA (based on a 6 decibel noise reduction for every doubling of distance and a 15 dbA reduction associated with the existing MRF building and sound berm). Therefore, the noise reducing measures identified in Mitigation Measure NS/mm-8 are not necessary to achieve the County's noise standards for the southeastern property line and the mitigation measure should be revised to focus specifically on noise reduction measures necessary solely at the northeastern property boundary. The proposed RRP was strategically located behind a substantial cut slope to address noise impacts to the northeast. Based on this location and the lack of residents to the northeast, the requirement to enclose the entire RRP will substantially increase the cost of operations while providing noise mitigation primarily for vacant land to the northeast. As stated in Comment 7 above, the Director of Planning and Building has the authority to waive an exceedance of the noise level standard when development is determine to be unlikely on the vacant land.</i></p> <p><i>The substantially increased cost associated with enclosing the entire RRP would translate into a substantial increase in the waste disposal fees paid by County residents. Increased waste disposal fees have the potential to increase illegal dumping throughout the County because they provide a greater incentive for people who are unable or unwilling to pay the higher landfill disposal fees. The effect of increased illegal dumping on the local community needs to be taken into consideration when developing mitigation strategies for the site operations.</i></p>

**DOUGLAS BROWN – PRINCIPAL – DOUGLAS ENVIRONMENTAL****EDUCATION**

B.A., Environmental Studies, University of California, Santa Barbara, 1987

B.A., Geography, University of California, Santa Barbara, 1987

**AFFILIATIONS**

Member, American Planning Association (APA)

Member, Association of Environmental Professionals (AEP)

Member, Solid Waste Association of North America (SWANA)

Mr. Brown has a diverse background preparing environmental compliance documents throughout California and Nevada. Mr. Brown specializes in CEQA and NEPA compliance projects with a specific focus on solid waste management facilities. He has over 22 years of professional experience. In addition to preparing multiple environmental compliance documents for large-scale landfill expansions and solid waste transfer stations/material recovery facilities, he has conducted CEQA review for such diverse projects as planned communities, resort developments, wind energy facilities, highway commercial developments, landfill gas-to-energy projects, flood control projects, manufacturing facilities, electrical transmission facilities, rail intermodal facilities, freeway interchanges, NASCAR racetracks, prisons, and rock quarries. Mr. Brown has been responsible for client liaison, project design, job costing, budget and subcontract administration, personnel supervision, technical review, and all aspects of quality control and contract fulfillment for Federal, State, and local government agencies, and for private-sector clients. In addition, Mr. Brown has instructed for CalRecycle, formerly the California Integrated Waste Management Board, on CEQA practice and has testified as an expert witness on CEQA compliance requirements.

**PROJECT EXPERIENCE****Regional Solid Waste Facilities Project EIR, Monterey County, CA****Project Manager**

**CLIENT:** Salinas Valley Solid Waste Authority

Managed the preparation of the Regional Solid Waste Facilities Project EIR for the Salinas Valley Solid Waste Authority. This 3,000+ page EIR evaluated the environmental impacts associated with providing the solid waste disposal facilities necessary to meet the Authority's disposal requirements for the next 70 years. The EIR evaluated four scenarios that each included a combination of individual solid waste management elements. The elements in the four scenarios included three individual landfill sites and five potential transfer station/material recovery facility sites in the Salinas area, and two potential transfer station/recycle centers in the King City area. The extensive breadth of issues associated with the number of individual facilities included in this EIR required Mr. Brown to manage a wide range of experts including geologists, hydrogeologists, geomorphologists, wildlife biologists, botanists, agricultural food safety scientists, landfill design engineers, toxic risk assessment specialists, air quality analysts, acoustical engineers, traffic engineers, and land use planners.

**Sacramento Recycling and Transfer Station – North EIR, City of Sacramento, CA****Project Manager**

**CLIENT:** City of Sacramento

Mr. Brown managed the preparation of an EIR for the Sacramento Recycling and Transfer Station. The EIR included a detailed assessment of three separate project sites that were evaluated at an equal level of detail, including one site owned by the City of Sacramento and two sites that are privately owned. Critical issues evaluated in the EIR include the compatibility of the transfer station with residential uses along the site access routes, noise impacts on adjacent land uses, the potential for odors to affect existing commercial and residential uses, traffic impacts along site access roads, and the loss of sensitive biological resources.

**GreenTeam of San Jose MRF and Transfer Station Negative Declaration, San Jose, CA****Project Manager**

**CLIENT:** GreenTeam of San Jose

Managed the preparation of a Negative Declaration for proposed revisions to the GreenTeam of San Jose's Material Recovery Facility and Transfer Station's Solid Waste Facilities Permit. The project included expanding the Registration Permit to a Full Solid Waste Facilities Permit in order to accommodate changing waste stream characteristics and changes in State

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regulations. The project also included modifications in the site facilities including new scales, overhead feed conveyors, Material Recovery Facility canopy screening, and changes in the site's operational hours and vehicle limits. The Negative Declaration documented the environmental impacts associated with these changes in relation to the site's prior environmental documentation and concluded that no new significant environmental impacts would be anticipated.

**Landfill Siting Study, Monterey County, CA****Project Manager**

**CLIENT:** Salinas Valley Solid Waste Authority

Mr. Brown managed the preparation of a landfill siting study that evaluated the sensitive environmental constraints associated with 35 individual sites in the southern Monterey County area identified as potential locations for a new regional landfill. The intent of the analysis was to identify critical environmental constraints that could affect the feasibility of landfill development on the individual parcels being considered. These environmental constraints included the location of critical habitat for threatened and/or endangered species on the individual sites, the presence of sensitive cultural/historical resources that would require protection or extensive excavation and documentation prior to removal, or the presence of vernal pools and/or wetland/riparian resources that could adversely affect landfill design requirements. The innovative use of Geographic Information System (GIS) data sources allowed the potential constraints of individual sites scattered over an area of more than 100 square miles to be identified. The study also identified the potential costs associated with mitigating landfill development impacts on identified sensitive biological and cultural resources. The analysis was used to refine the 35 potential landfill development sites to a much smaller group for more detailed study.

**Crazy Horse Sanitary Landfill Permit Revision EIR, Monterey County, CA****Project Manager**

**CLIENT:** Salinas Valley Solid Waste Authority

Mr. Brown managed the preparation of the Crazy Horse Sanitary Landfill Permit Revision EIR, which included an increase in the site's permitted traffic volume, the stockpiling of imported soil for daily cover uses, an increase in the daily waste tonnage in order to accommodate increased waste volumes associated with the closure of the Lewis Road Landfill, the processing of curbside collected yard waste, and updates to the remaining site life and capacity estimates. The critical issue requiring the preparation of the EIR was the increased traffic volumes anticipated at the Crazy Horse Road/U.S. Highway 101 interchange that operates at peak periods at LOS F.

**Combined Gonzales Municipal Utility Substation and Landfill Gas-to-Energy Facility Initial Study and Mitigated Negative Declaration, Monterey County, CA****Project Manager**

**CLIENT:** Salinas Valley Solid Waste Authority

Mr. Brown managed the preparation of an Initial Study and Mitigated Negative Declaration for the Combined Gonzales Municipal Utility Substation and Landfill Gas-to-Energy Facility. This project included the installation of a gas compression system at the Johnson Road Landfill, the installation of a power plant at one of several alternative sites, and the extension of a pipeline to the City of Gonzales Corporation Yard or to an adjacent winery to meet existing energy demands.

**Sun Street Transfer Station Initial Study/Mitigated Negative Declaration, Monterey County, CA****Project Manager**

**CLIENT:** Salinas Valley Solid Waste Authority

Mr. Brown managed the preparation of the Sun Street Transfer Station Initial Study/Mitigated Negative Declaration in the City of Salinas. This new transfer station was proposed on an industrial site used previously for food processing operations. Critical issues evaluated in the Initial Study included the compatibility of the new facility with adjacent residential uses, the

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potential odor and health risks associated with facility operations, traffic congestion on local truck routes, and increases in localized noise levels.

**Fink Road Landfill Expansion EIR, Stanislaus County, CA****Project Manager****CLIENT:** County of Stanislaus

Managed preparation of the EIR and provided regulatory compliance services to the Stanislaus County Public Works Department for the proposed expansion of the Fink Road Landfill. Located next to Interstate 5 in western Stanislaus County, the existing Fink Road landfill was proposed to be expanded by over 800 acres to create a capacity for 100 million tons of municipal solid waste. The project included expansion in canyons west of the current landfill, along with expanded leachate and gas control systems, new landfill entrance facilities, and realigned site access roads. Research was also conducted regarding the potential to establish bioreactor cells to accelerate settlement and decomposition of refuse as a means to increase capacity. Key environmental issues included visibility of the expanded landfill from Interstate 5; effects on the federally-listed San Joaquin kit fox; filling of jurisdictional waters of the U. S. and adjacent wetlands; groundwater protection; water supply; dust and litter control; and increased truck haul effects on traffic and air quality. As part of the project, Mr. Brown coordinated with the U. S. Army Corps of Engineers and U. S. Fish and Wildlife Service regarding issuance of a Section 404 permit and required consultation under Section 7 of the Endangered Species Act.

**Elk Grove Transfer Station Project EIR, City of Elk Grove****CLIENT:** City of Elk Grove

Mr. Brown managed the preparation of an EIR for the Elk Grove Transfer Station Project. The EIR included a detailed analysis of two potential project sites located within industrial areas in the southern portion of the City. Critical issues evaluated in the EIR included the compatibility of the transfer station with residential uses in the vicinity of the potential project sites, noise impacts on adjacent land uses including churches located within the industrial area, the potential for odors to affect surrounding land uses, traffic impacts along site access roads, hazardous materials contamination on one site, and the loss of sensitive biological resources.

**EIR on the Proposed Future Options for the Buena Vista Landfill, Amador County, CA****Project Manager****CLIENT:** Amador County

Mr. Brown managed the evaluation of environmental impacts associated with two expansion options identified for the Buena Vista Landfill. These options included either expanding the landfill footprint onto two adjacent parcels or expanding the landfill footprint onto one separate parcel and incorporating ancillary landfill activities (e.g., materials recovery and recycling operations, soil borrow pits) onto the second parcel. This highly controversial landfill expansion included extensive community outreach in order to incorporate the concerns of an adjacent residential community into the EIR analysis. The EIR evaluated the anticipated land use impacts of locating a landfill within approximately 150 feet of existing residential uses. These impacts included increased noise levels, air quality degradation, potential public health concerns including an increase in vectors, changes in localized drainage patterns, and potential changes in slope stability. Other critical issues included the loss of state and federally-listed endangered plant species and increased traffic congestion on local arterials.

**Avenal Landfill Expansion, City of Avenal, CA****Project Manager****CLIENT:** City of Avenal

Mr. Brown managed the preparation of the Avenal Landfill Expansion EIR in the City of Avenal. The landfill expansion included increasing the daily tonnage from 475 tons per day to 6,000 tons per day, increasing the landfill height by 210 feet, and changing the operating hours from a daytime operation six days per week to 24 hours per day, seven days per week. A key component of the expansion included excavating unlined waste that contained burn ash that had been disposed between 1930 and 1970. The relocation of the waste was proposed in order to increase capacity and reduce long-term public health concerns. A detailed health risk

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assessment was conducted to determine the potential long-term public health effects associated with the landfill expansion activities on adjacent residential land uses. Other critical issues included the project's potential adverse effects on sensitive biological resources, the substantial increase on noise levels for local residents associated with 24-hour operations, and the traffic impacts associated with waste imports from outside of the local area.

**Capacity Enhancement Project, Placer County****Project Manager**

**CLIENT:** Western Placer Waste Management Authority

Managed preparation of an EIR that evaluated proposed operational changes at the Western Regional Sanitary Landfill and Materials Recovery Facility. These operational changes included increasing tonnage limits at both the landfill and the MRF by approximately 50 percent, increasing peak vehicle trips at the MRF by approximately 500 daily vehicle trips, substantially expanding the MRF building, expanding existing composting operations, relocating the facility entrances, expanding the on-site storm water detention facilities, introducing additives into the composting feedstock, expanding the existing household hazardous waste storage building, and increasing the operating hours of the MRF. These operational changes were strongly opposed by the adjacent property owner. Mr. Brown's focus in preparing this EIR was on ensuring all issues were thoroughly analyzed and that a detailed administrative record was developed that supported the conclusions of the EIR.

**Humboldt Road Burn Dump Initial Study and EIR, Chico, CA****Project Manager**

**CLIENT:** City of Chico

As project manager, Mr. Brown prepared an EIR for the Humboldt Road Burn Dump in the City of Chico, California. Portions of the 160-acre site were historically used as the City Dump and were known to contain metals, primarily lead, at levels that are regulated by the state. Hazardous wastes occurred on other portions of the site. Approximately 30-acres of the site were covered with glass, tires, cans, wire, rusted metal, concrete, and ash debris. The primary tasks of the impact analysis included identifying the water quality effects of waste consolidation activities on the adjacent Dead Horse Slough; determining the extent of disturbance and providing Endangered Species Act Section 7 consultation for a number of threatened species including the Butte County meadowfoam, valley elderberry longhorn beetle, and vernal pool fairy shrimp; identify potential airborne lead dispersal anticipated with waste disturbance for adjacent residential neighborhoods; and characterizing the changes in the visual environment with construction of a large waste-consolidation mound.

**Potrero Hills Landfill Expansion Project EIR, Solano County, CA****Project Manager**

**CLIENT:** Solano County Department of Environmental Management

Mr. Brown managed the evaluation of the Phase II development of the Potrero Hills Landfill that included extending the landfill horizontally to include an additional 211-acre expansion footprint and expanding it vertically to increase the permitted peak elevation by approximately 125 feet. Other project components included relocating an ephemeral drainage, extending operating hours to 24 hours per day, adding biosolids to composting operations, installing a landfill gas generation facility, and using an all-soil alternative final cover design. The EIR evaluated the adverse environmental impacts associated with these proposed operational changes with a focus on public health hazards, noise level increases, air quality degradation including increased odors, traffic congestion at local intersections, degradation of local water quality, changes in on-site and off-site drainage characteristics, loss of sensitive biological resources, potential for groundwater contamination, alteration of the local visual landscape, slope stability within the canyon fill area, and land use compatibility with adjacent rural residential units. Mr. Brown managed preparation of a detailed health risk assessment that evaluated both the acute and chronic effects of the project components on adjacent residences.

**DOUGLAS BROWN****Western Regional Sanitary Landfill EIR Expansion, Placer County, CA****Project Manager****CLIENT:** Western Placer Waste Management Authority

As project manager, prepared an environmental impact report evaluating permit revisions at the Western Regional Sanitary Landfill in Placer County. The permit revisions include an increase in daily accepted waste, the re-classification of the landfill from Class III to Class II, increasing the permitted final grade elevations, allowing the acceptance of non-friable asbestos, and constructing base liners and final covers using imported soil. The impact analysis focused on how the permit modification would affect groundwater and surface water quality, local noise levels, air quality, truck traffic on local roadways, and the demand of local fire protection services. Because the landfill is located near future residential growth areas and the land use conflicts that could result, the analysis also included a review of human health and aesthetic resource issues.

**Eastern Regional Landfill Closure, Transfer Station, and Materials Recovery Facilities EIR, Placer County, CA****Project Manager****CLIENT:** Placer County Solid Waste Division

Managed the Eastern Regional Landfill Closure, Transfer Station, and Materials Recovery Facilities EIR. The Eastern Regional Landfill EIR evaluated the landfill closure and the construction of a transfer station and material recovery facility to accommodate an increase in permitted disposal from 105 tons per day to 600 tons per day. Potential impacts related to several key issues include an increase in daily truck trips, traffic safety at the landfill entrance, potential changes in water quality, depth to groundwater, and landfill gas. Wood chipping and use of inert material for borrow site reclamation would occur on site. Refuse would be recovered or transferred to Lockwood Landfill in Nevada for disposal. Impacts associated with different phases of the facility operations were evaluated as they related to alternatives to the proposal, cumulative impacts, long-term implications of the project, significant irreversible impacts, and growth-inducing effects.

**Focused EIR for Western El Dorado Recovery Systems Material Recovery Facility (MRF) and Transfer Station, El Dorado County, CA****Project Manager****CLIENT:** County of El Dorado

Completed a court-ordered focused EIR for the Western El Dorado Recovery Systems Material Recovery Facility (MRF) and Transfer Station. Pursuant to an El Dorado County Superior Court order stemming from litigation over a previous initial study (not prepared by Mr. Brown) for this project, the focus of the EIR was limited to traffic issues associated with the MRF as originally proposed. The EIR also included an analysis of environmental impacts associated with the construction of a water supply pipeline to serve the MRF facility.

**Marysville Transfer Station Negative Declaration, Marysville, CA****Project Manager****CLIENT:** Norcal Water Systems

Managing the preparation of an Initial Study/Negative Declaration for the Yuba-Sutter Disposal Transfer Station and Materials Recovery Facility in the City of Marysville. Norcal Waste Systems, the owner of the facility, is proposing to amend the Solid Waste Facility Permit to accommodate increased waste diversion, installation of a construction and demolition waste recovery line, and expansion of permit boundaries. The project also includes modifying on-site traffic flow characteristics to maximize facility efficiency. Impacts being evaluated include increased traffic, changes in drainage characteristics, dust generation, noise, and water quality.

**Jess Ranch Composting Facility, Alameda County, CA****Project Manager****CLIENT:** Recology Inc.

Mr. Brown managed the preparation of an EIR for the Jess Ranch Composting Facility in the eastern portion of Alameda County. The Jess Ranch project included the receipt of up to 2,000

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tons per day of organic materials including food waste, green waste and wood waste. Both open windrow and in-vessel composting was proposed on the site. Aerated static pile technology would be used on the site once the tonnage limit reached a specific threshold. In addition, the facility includes the installation of an anaerobic digester to accelerate compost processing. Key issues evaluated in the EIR include the health risks for adjacent residences associated with the site's projected emissions, the generation and migration of odors offsite, and the potential disturbance of California tiger salamander habitat.

**RDEIR Comments**  
**July 11, 2011**  
**Cold Canyon Land Fill, Inc.**  
**Waste Connections, Inc.**

**ATTACHMENT 4**

**Cold Canyon Landfill Expansion  
Recirculated Draft Environmental Impact Report**

**Comments by Cold Canyon Landfill and Waste Connections**

<b>Page #</b>	<b>Section</b>	<b>Paragraph</b>
<b>I-1</b>	<b>I.A</b>	<b>Since the closure of the public comment period, two issues, as summarized below, have delayed preparation of the Final EIR for the project...</b>
	<b>Comment 1</b>	<i>The following sections then list three issues (Water Resources, Compost Operation Review, and Other technical reports). The intro paragraph should be changed to reflect three rather than two issues.</i>
<b>III-9</b>	<b>III.C.1.a.2)</b>	<b>State and Federal standards are used in testing the liner system for competence. Heavy equipment use during module lining is limited to avoid damaging the liner system.</b>
	<b>Comment 2</b>	<i>There are no state or federal standards for testing lining system competence. A construction quality assurance monitoring plan is prepared for each construction project for review and approval by the RWQCB. The plan establishes what tests are to be performed, testing frequency, and acceptable results.</i>
	<b>Comment 3</b>	<i>Equipment usage during lining in general is not limited just to equipment usage directly on top of exposed liner. There is a considerable amount of equipment usage going on during the lining process and completion of the modules.</i>
<b>III-9</b>	<b>III.C.1.a.3)</b>	<b>On average the landfill generates approximately 700,000 gallons of leachate annually</b>
	<b>Comment 4</b>	<i>The landfill has averaged 278,000 gallons of leachate production from 2006-2010.</i>
<b>III-10</b>	<b>III.C.1.a.4)</b>	<b>Once the lift reaches fifteen feet, an intermediate soil cover approximately one foot thick is placed over the lift, and another lift is started.</b>
	<b>Comment 5</b>	<i>For clarity, lifts vary in height depending on operating factors. A general range in lift height of 12-20 feet is typical.</i>
<b>III-10 &amp; V-176</b>	<b>III.C.1.a.5) &amp; V.H.1.e.</b>	<b>Currently, LFG is captured throughout the disposal area via a series of 36 wells and 10 horizontal collectors</b>
	<b>Comment 6</b>	<i>In the summer of 2010, 6 additional LFG wells were installed bringing the current total to 42 wells and additional wells are scheduled in 2011.</i>
<b>III-11</b>	<b>III.C.1.a.6)</b>	<b>These benches slow water flow and include earthen or concrete conveyance systems</b>
	<b>Comment 7</b>	<i>For clarity, the conveyance systems on benches vary. A more accurate statement would be that the benches have lined conveyance systems.</i>
<b>III-11</b>	<b>III.C.1.a.6)</b>	<b>Two of the detention basins serve as discharge locations, another is located near the leachate storage facility, and the fourth is the "highway drain", located where the natural drainage channel in the expansion area crosses under Highway 227 (refer to figure III-7)</b>
	<b>Comment 8</b>	<i>This sentence should be modified to read as follows: Two of the detention basins serve as discharge locations, another is located near the Resource Recovery Park,</i>

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		<i>and the fourth is the "highway drain", located where the natural drainage channel in the expansion area crosses under Highway 227 (refer to figure III-7)</i>
III-11	III.C.1.b	<b>Once the material has been composted it is passed through a 3/4-inch screen.</b>
	Comment 9	<i>For clarity, the compost screen is 3/8-inch</i>
III-12	III.C.1.d	<b>The MRF processes up to eighteen tons per hour of glass, plastic, paper, cardboard, aluminum, tin, and other metals. Processing occurs from 7:30 a.m. to 4:30 p.m., seven days a week.</b>
	Comment 10	<i>Currently, the MRF operates 5 days per week.</i>
III-12	III.C.1.e.1(a)	<b>Leachate production is monitored quarterly and leachate composition is monitored annually.</b>
	Comment 11	<i>For clarity, leachate production is monitored monthly and reported semi-annually as part of water quality monitoring program.</i>
III-13	III.C.1.e.1(b)	<b>Results of monitoring are provided to the RWQCB quarterly.</b>
	Comment 12	<i>For clarity, results of ground water monitoring are provided to the RQWCB semi-annually.</i>
III-13	III.C.1.e.2.a	<b>Starting in 1996, the facility began the above described composting operation. An Odor Minimization Plan was prepared in 2003 and updated in 2007.</b>
	Comment 13	<i>The correct name for the required odor plan is Odor Impact Minimization Plan (OIMP).</i>
III-14	III.C.1.e.2(b)	<b>The applicant has suggested that a formal falcon/hawk program will have to remain active in perpetuity to control the gull populations at the landfill.</b>
	Comment 14	<i>For clarity, a gull population program will have to remain active in perpetuity but this does not necessarily have to remain a falcon/hawk based program. Should other methods prove effective they could replace the falcon/hawk program in the future.</i>
III-16	III.C.2	<b>Table III-1</b>
	Comment 15	<i>Add the Compostable Material Handling Permit (40-AA-0017) approved in December 2004. The MRF is not part of either SWFP (Landfill or Compost) but is currently operating as a "Recycling Center" exempted from state permits.</i>
III-23	III.C.2	<b>The conditional use permit for the proposed project would replace all of the existing separate permits for the landfill, CO, and the MRF, so that the landfill would operate under one permit.</b>
	Comment 16	<i>The sentence should be modified to read "The Conditional Use Permit for the proposed project would replace all of the existing separate <u>County</u> permits for the landfill, CO and the MRF, so that the landfill would operate under one <u>County</u> permit."</i>
III-23	III.D	<b>4. Modifying the compost operation by allowing more and different materials to be composted</b>
	Comment 17	<i>The request to increase the tonnage of the current CO has been removed and should not be stated here as part of the proposed project.</i>
III-24	III.D.1	<b>Table III-2</b>
	Comment 18	<i>The facility footprint is proposed to increase from 121 to 209 acres, not the landfill footprint. The landfill footprint is proposed to increase from 88 to 134 acres, a 46-acre increase.</i>
III-24	III.D.1	<b>The disposal area capacity is expected to increase by approximately 13.1 million</b>

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		<b>cubic yards. This increase would extend the expected disposal life of the Landfill by approximately 25 years based on the annual growth in disposal services over the last five years. The applicant has estimated that there is currently approximately eight years of capacity remaining; therefore, the proposed project would potentially accommodate waste disposal needs until approximately the year 2040.</b>
	<b>Comment 19</b>	<i>It should be noted that the life of the landfill is highly dependent on population growth, economic conditions, development activity, and diversion programs within the service area. As a result, it is difficult to project the disposal life of the Landfill.</i>
	<b>Comment 20</b>	<i>The County's requirement to maintain 15 years of disposal capacity should be discussed when referencing the landfill's remaining site life.</i>
<b>III-24</b>	<b>III.D.1.</b>	<b>As currently planned, Module 10, which would be located where the existing Landfill entrance is now, would be constructed first.</b>
	<b>Comment 21</b>	<i>For clarity, the development sequence is not critical and may change before the first module is constructed.</i>
<b>III-24</b>	<b>III.D.2.</b>	<b>The proposed project would increase the landfill permitted daily tonnage limits from 1620 tons per day (tpd) to 2500 tpd.</b>
	<b>Comment 22</b>	<i>For clarity, the term landfill permitted daily tonnage should be replaced with the projects total permitted daily tonnage as the tonnage described is not all related to the landfill. In addition, the 2500 tpd listed should be 2350 tpd as listed in table III-3.</i>
<b>III-24</b>	<b>III.D.3.</b>	<b>c. Adding water treatment plant sludge to the compost mix</b>
	<b>Comment 23</b>	<i>Treatment sludge has been removed from our project description.</i>
<b>III-25</b>	<b>III.D.4</b>	<b>Expansion and Enhancement of Materials Recovery Facility (MRF)</b>
	<b>Comment 24</b>	<i>The expansion of the MRF would include "commercial waste" recycling, that is being mandated by the state as part of the CARB Scoping Plan to reduce GHG. With the commercial waste recycling, a Full Solid Waste Facility Permit will need to be issued for the MRF (unless permitted with the landfill), as the current MRF is exempt from state permitting because of the "Recycling Center" status for primarily processing residential curbside materials.</i>
<b>III-29</b>	<b>III.D.11</b>	<b>Table III-6</b>
	<b>Comment 25</b>	<i>The 428,000 cubic yards of fill shown for Module 8 Daily and Intermediate Cover is included in the 2,742,700 cubic yards of Daily and Intermediate Cover above. The total fill quantity should be 3,572,100 cubic yards.</i>
<b>III-30</b>	<b>III.E</b>	<b>CalRecycle is considered a Responsible Agency under CEQA and would rely on this EIR to issue a revised SWFP.</b>
	<b>Comment 26</b>	<i>We suggest editing this sentence to read: "CalRecycle is considered a Responsible Agency under CEQA and would rely on this EIR either to (a) issue either a revised SWFP for the Landfill, (b) issue a revised SWFP for the CO, and a new SWFP for the MRF and the RRP, or (c) consolidate all of the solid waste handling activity under one revised SWFP."</i>
<b>V-175 &amp; V-185</b>	<b>V.H.1.b. &amp; V.H.5.c.</b>	<b>To prevent fugitive trash from leaving the disposal area, the landfill compacts waste immediately after disposal,</b>
	<b>Comment 27</b>	<i>For clarity, waste is compacted shortly after disposal but the term immediately is</i>

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		<i>inaccurate. The timing of waste compactions is dependent on incoming volumes, equipment maintenance, and other operational factors.</i>
V-176	V.H.1.e.	<b>These 6000, 10,000, and 12,000 gallon tanks each provide fuel for landfill equipment and waste collection trucks</b>
	Comment 28	<i>For clarity, the volumes of the onsite tanks are 250, 8000, and 12,000 gallons. There is also the CNG fueling station that does not have an actual storage tank.</i>
V-186	HAZ/mm-2	<b>Prior to issuance of the Notice to Proceed, the applicant shall submit to the Department of Planning and Building, an updated litter control plan. The plan shall be approved by the Department of Planning and Building and the CIWMB, and be posted on the Landfill website. The plan shall include at a minimum:</b> <b>a. Descriptions of current litter control practices;</b> <b>b. Provisions for bi-monthly trash pick-up on neighboring properties. Residents within one mile of the Landfill shall be contacted annually and provided the dates of scheduled fugitive trash pick-up for the coming year. The phone number of the litter control staff at the Landfill shall be provided to the neighbors, and permanently posted at the project entrance at a location that is easily visible from the closed gate. Neighbors shall be able to contact the Landfill within one week of the scheduled date to request pick-up of fugitive trash on their property.</b>
	Comment 29	<i>A litter control plan is not a plan required by Title 27 of the California Code of Regulations. As such, the CIWMB would have no basis to approve the plan.</i>
	Comment 30	<i>It would be helpful to list the neighboring properties that are to be included in the provision for bi-monthly trash pick-up on neighboring properties.</i>
V-187	HAZ/mm-2	<b>h. The Landfill litter control phone number shall also be available to receive calls relating to Landfill and truck operator-based refuse that is found along the truck haul routes within five miles of the Landfill. Such complaints shall be investigated within one week of receiving the call, including any special pick-up of refuse found, unless Caltrans or County Public Works identifies the need for special measures to address traffic safety issues.</b>
	Comment 31	<i>This measure is not consistent with measures approved by the County on a similar project (Chicago Grade Landfill). Condition 14C of CUP 2003-00026 which was approved in 2006 requires the Chicago Grade Landfill to collect litter within one mile of the facility not five. The landfill currently performs litter removal with one mile of the facility on the main haul route and proposes to maintain this distance.</i>
V-188	HAZ Impact 4	<b>Increasing waste disposal has the potential to attract birds, increasing potential hazard to air traffic using the San Luis Obispo Regional Airport.</b>
	Comment 32	<i>There is no history of bird hazards associated with the landfill. The landfill is beyond the distance where special measures or an exemption to address potential bird hazards are required. The proposed project will generally move operations further away from the airport. There is little basis for this conclusion.</i>
V-188	HAZ/mm-4	<b>Birdstrike Monitoring. Prior to the Notice to Proceed and prior to construction of each subsequent disposal area module, the applicant shall provide verification that birdstrikes for approaching airplanes (those most likely to be affected by birds attracted to the Landfill) at the SLO Airport have not</b>

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		increased due to the operations at the Landfill. Verifying evidence shall include available birdstrike information compiled by the San Luis Obispo County Regional Airport, and include the location of strikes and the type of bird involved (if available).
	Comment 33	<i>The baseline airstrike data that is presented does not correlate bird strikes to landfill activity. The assumption that we can track future strikes and determine if an increase was caused by the landfill when the data we have to compare does not in any way state how much if any were caused by the landfill is not feasible.</i>
V-189	H.5.f.2	<b>Composted material can present a fire hazard if moisture content of the vegetation becomes too low.</b>
	Comment 34	<i>This sentence is not strictly true. The fact is that low moisture may or may not be a significant contributing factor in elevated fire risk. One could argue that the absence of moisture hinders biological activity and hence the build up of temperature within the biowaste. Often, a bigger factor is the height/mass of the pile.</i>
V-194	HAZ/mm-8	<b>a. Generation of dust during any movement of compost material or greenwaste shall be kept to a minimum by adding additional moisture via a water spray system and establishing a “high wind” shut-down level for activities that generate dust. Dust clouds shall not be visible more than 5-10 feet away from the source, including windrows, processing equipment, etc.</b>
	Comment 35	<i>The APCD currently regulates dust generation based on opacity. There is not a need to place such a mitigation measure when there is already a local regulator that has standards in place for this activity.</i>
V-194	HAZ/mm-9	<b>d. Workers shall be trained in housekeeping procedures and encouraged to change clothes daily at the facility. A medical surveillance program for workers shall be established to ensure early identification of symptoms related to Organic Dust Toxicity Syndrome. This program should include, among other components, tetanus and Hepatitis A vaccinations, health checks prior to commencing employment to identify predisposing conditions, instructions to report any unusual respiratory symptoms to management, and annual medical exams.</b>
	Comment 36	<i>Consistent with the other mitigation measures associated with the Compost Operations, the first paragraph of Mitigation Measure HAZ/mm-9 should commence with the following words, “ Upon re-establishment of the Compost Operation.” A medical surveillance program is not required by federal or state law or regulation for this application. We suggest that the language be modified to require that the applicant contract with a certified industrial hygienist to evaluate the need for a compost health and safety plan, prepare the plan if recommended and implement the plan as prepared.</i>
V-196	HAZ/mm-9	<b>Compost Operation – Aerated Static Pile. Upon re-establishment of the Compost Operation, to reduce odors from the composting material, the applicant shall implement a covered ASP (aerated static pile) composting system. The ASP shall include an aeration system that includes biofilters to control odors.</b>

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	Comment 37	<i>The mitigation measures should not restrict the applicant to just ASP on re-establishment of the Compost Operation; other methods such as AD, or enclosed composting may be preferred.</i>
V-196	HAZ/mm-10	<b>Compost Operation – Best Management Practices. To reduce odors from the Compost Operation and disposal areas, the applicant shall incorporate all applicable BMPs as developed by CalRecycle into the OIMP updates in perpetuity.</b>
	Comment 38	<b>Requiring updates in perpetuity is not feasible given the capital investment that may be required of any one composting technology. For example, implementation of an AD process would require an investment of millions of dollars with a corresponding capital repayment schedule stretching over decades.</b>
V-198	HAZ/mm-11	<b>Compost Operation – Monitoring. The applicant shall incorporate a ‘compliance-based’ monitoring program during operation of the compost facility and include the following elements:</b>
	Comment 39	<i>It is possible that the continued need for a CO monitor may not exist at some point in the future. There should be a provision added to sunset the monitor based on the frequency of validated complaints received or other performance based measures.</i>
V-199	HAZ/mm-13	<b>Compost Operation – Alternative Approach. If after implementation of mitigation measures HAZ/mm-9 through 12 the Planning Commission finds that odors from the CO remain significant, the applicant shall enclose the facility and/or implement an alternative composting technology, such as Anaerobic Digestion (AD).</b>
	Comment 40	<i>It should be specified that this mitigation measure could be implemented prior to mm9-12 if so desired by the applicant and that mm9-12 would not need to be implemented should the applicant implement mm-13.</i>
V-191	V.I.1.b.2)	<b>Heavy equipment used in the landfill operation includes a Caterpillar D7R bulldozer, Aljon 525 compactor, and Caterpillar 627F earthmover.</b>
	Comment 41	<i>For clarity, the 627F has been removed from service and has been replaced by a John Deere 350 D articulated dump truck.</i>
V-195	Table V.I-3	<b>2010 Noise Study Results (See Table)</b>
	Comment 42	<i>Many of the Leq ranges are less than the listed Lmax ranges. This appears to be an error.</i>
V-197	V.I.2.a.	<b>The County’s Land Use Ordinance Section 22.10.120.A.4 Exceptions to Noise Standards states the following with respect to exempt noise sources: Noise sources associated with construction provided such activities do not take place before 7 a.m. or after 9 p.m. on any day except Saturday and Sunday, or before 8 a.m. or after 5 p.m. on Saturday and Sunday</b>
	Comment 43	<i>Although continued daily activity at the landfill is not classified as a construction activity by the Planning Department, the equipment used and activities performed at the landfill are similar in nature to construction activity. Therefore an exception similar to 22.10.120.A.4 or a specified inclusion into 22.10.120.A.4 may be appropriate for this project which supplies an essential public service.</i>
V-205	NS/mm-1	<b>The Plan shall include a schedule of when these measures would be installed prior to commencement of any related expansion improvements. In addition,</b>

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		<b>the plan shall specify that noise monitoring shall be required after installation by a County-approved expert on noise measurement (and periodically monitored throughout life of project) to determine the effectiveness of the installed measure(s) and if additional measures need to be installed to meet the County's threshold. Any additional measures identified will be installed by the Applicant within 30 days from when they are determined necessary</b>
	<b>Comment 44</b>	<i>30 days for implantation of a "to be determined" noise mitigation is too short of a time frame when you consider potential engineering, permitting, and construction.</i>
<b>V-205</b>	<b>NS/mm-2</b>	<b>Noise Mitigation Plan – Implementation. Prior to initiation of proposed activities, including the relocation of the entrance, module excavation, etc., the applicant shall have completely implemented the Noise Mitigation Plan.</b>
	<b>Comment 45</b>	<i>Requiring the noise mitigation plan to be fully implemented prior to any project activity is not feasible due to the likelihood that specific noise mitigations within the plan such as noise berms will need to be constructed with soil that is part of the project. In addition there is likely to be noise mitigation measures in the plan that would be triggered by location, events, or thresholds that would not allow or necessitate implantation until after project initiation.</i>
	<b>Comment 46</b>	<i>90 days may not be enough time to for the engineering, permitting, and construction of a proper noise barrier.</i>
<b>V-206</b>	<b>V.I.5.b.2)</b>	<b>Stockpiles would be created during module excavation (which would occur over approx. 6 month periods every five years)</b>
	<b>Comment 47</b>	<i>To clarify, five years between module construction is historically accurate but could vary to as frequently as every year based on operational factors.</i>
<b>V-207</b>	<b>NS/mm-4</b>	<b>Noise – Stockpile Management. Prior to issuance of the Notice to Proceed, in order to reduce stockpile activity adjacent to property lines, the applicant shall revise the proposed grading plans and re-allocate the material from the proposed stockpile to existing Stockpiles 1 and 3, to the extent feasible. If these stockpiles cannot accommodate all of the material, the remaining material shall be located in a new location away from the property line, potentially adjacent to existing Module 8 and proposed Module 11.</b>
	<b>Comment 48</b>	<i>Stockpile 4, as shown, is probably larger than it will actually be. Stockpile 4 will be used to stockpile soil from module construction projects. In general, soil to support daily site operations will be obtained from the next module to be constructed in order to reduce future construction costs. Alternatively, soil from module excavation will be placed in small stockpiles near active fill areas, as has been done in the past. The areas identified as alternate stockpile locations are not very practicable and should not be stipulated in this mitigation. Stockpiling soil adjacent to existing Module 8 and proposed Module 11 will likely result in the soil being triple-handled, resulting in increased dust potential and emissions from hauling equipment. The activity at Stockpile 4 will generally be limited to those periods when module construction is occurring or final cover is being placed. Because the soil would be stockpiled for extended periods and its removal would occur over a relatively short period of time, it would not be expected to expose residents to long-term construction noise.</i>
<b>V-207</b>	<b>V.I.5.b.3)</b>	<b>The Lmax associated with the CO (including bird whistles) was estimated to be</b>

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		<b>53-63 dBA –below the 70 dBA threshold.</b>
	<b>Comment 49</b>	<i>The paragraph directly above this sentence states that the Lmax of the CO when the grinder or scarab are running is 90 dBA. Please clarify.</i>
<b>V-208</b>	<b>NS/mm-6</b>	<b>Noise Monitoring – Restart of Compost Operation. Thirty days after restarting the CO and implementation of NS/mm-4</b>
	<b>Comment 50</b>	<i>The reference to NS/mm-4 should be NS/mm-5.</i>
<b>V-210</b>	<b>NS/mm-8</b>	<b>Noise Monitoring – RRP Redesign &amp; Verification. Prior to relocation of the RRP, to reduce noise levels at the property lines resulting from the RRP, the applicant shall re-design the facility so that it is covered and enclosed on all sides, with the exception of the southwestern side.</b>
	<b>Comment 51</b>	<i>The 2008 Environmental Noise Assessment prepared by Brown-Buntin Associates (Appendix E) concludes on page 13 that noise mitigation for the RRP is not required. This conclusion is based on the noise assessment associated with the nearest sensitive receptors. In the 2010 study (also included in Appendix E), the following statement is provided on page 10: “The noise levels measured during the present study are lower than used to assess potential RRP noise impacts in the DEIR noise study. The 2010 study, therefore, supports the early conclusion that noise mitigation for the RRP is not required to reduce noise levels for the nearest sensitive receptors. The proposed RRP project was strategically located behind a substantial cutslope and adjacent to an operating vineyard to address noise impacts to the nearest sensitive receptors. We acknowledge that the noise standard would not be met at the nearest property line to the east (adjacent to the vineyard) for which a variance would need to be provided for this essential public service. This mitigation is not considered feasible due to prohibitive cost which will drive user fees higher resulting in an increase in indiscriminate dumping and a loss of material diversion.</i>
<b>V-213</b>	<b>V.I.5.b.7) f.</b>	<b>Therefore, homes that can demonstrate a direct line of site to the landfill’s noisy operations that are within 1000 feet of the property boundary, and can also demonstrate that an actively managed exterior area near the residence is also subject to a direct line of site to the landfill, the applicant could work with the applicant to construct a noise barrier....</b>
	<b>Comment 52</b>	<i>In NS/mm-3 the distance is described as 1800 feet not 1000 feet; please clarify</i>
<b>V-227</b>	<b>V.K.</b>	<b>The proposed maximum capacity of the CO has been reduced from 450 tons per day to 300 tons per day. This is equal to the currently permitted limit, but more than the approximately 100 tpd actually processed in recent years.</b>
	<b>Comment 53</b>	<i>It is important to note that with 300 TPD permit the average of 300 TPD is impossible to achieve. The permit limit is to allow for peaks and the average is always considerably less. With the current 300 TPD limit there have been several peak days that approach the permit limit but the average is considerably less. Simply increasing the water demand by 300% to go from 100 tpd to 300 tpd is overly conservative due to the impracticality of achieving such an average.</i>
<b>V-231</b>	<b>V.K.1.f.4)</b>	<b>It has been estimated that as much as 2.1 acre feet per year of leachate has been available historically for dust control by the RWQCB.</b>
	<b>Comment 54</b>	<i>The average leachate generation from 2006-2010 is 278,000 gallons per year</i>
<b>V-231</b>	<b>V.K.1.f.5)</b>	<b>The applicant estimates that module construction requires approximately 4000 gallons per day</b>

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	<b>Comment 55</b>	<i>This estimate is too low. Module construction is likely to on average 24,000 gallons per day.</i>
V-235	V.K.1.i.	<b>The WDR's require quarterly monitoring of groundwater quality to determine if a statistical exceedance occurred in any well and constituent.</b>
	<b>Comment 56</b>	<i>To clarify, GW monitoring occurs semi-annually.</i>
V-247	V.K.5.b.1)	<b>For purposes of this EIR, it is assumed that demand would increase proportionately to the increase on CO capacity – in this case three times or 300 percent (i.e., 8.1 afy to 24.3 afy)</b>
	<b>Comment 57</b>	<i>This assumption is overly conservative due to the impracticality of achieving an average of 300 TPD with a 300 TPD permit. The permit limit represents the maximum tonnage on any one given peak day. It is impossible to average your physical maximum tonnage limit.</i>
V-252	K. 5. c. WR/mm-6	<p><b>Module Construction – Water Use. Prior to issuance of the Notice to Proceed for construction of each module, the applicant shall provide verification to the Department of Planning and Building of the source of the water to be used for construction purposes. Water used for construction shall only come from any combination of the following sources:</b></p> <ol style="list-style-type: none"> <li><b>1. On-site ground or surface water supplies (as long as it will not require on-site groundwater production of greater than 25 afy);</b></li> <li><b>2. Reclaimed or recycled water (i.e., Price Canyon Oilfield, vineyard wastewater, City of San Luis Obispo “purple pipe”); and,</b></li> </ol> <p><b>An alternative source shown to be a sustainable supply.</b></p>
	<b>Comment 58</b>	<i>Imposition of an arbitrary water capacity and limiting site's flexibility in water use runs risk of impacting the entire County's solid waste handling system for an extended period. Water availability is critical for construction and delays in construction may result in temporary closure of the site should all available airspace be consumed before new airspace is developed. Alternate sources of water may not be available, or not available at reasonable cost.</i>
V-252	K. 5. c. <i>Residual Impact</i>	<b>Because water resources in the basin (and County in general) are limited, this measure encourages use of reclaimed water to the extent feasible during construction. In the event that on-site groundwater is used, this measure also requires the applicant to confirm that construction use of groundwater would not require a total annual production of greater than 25 afy. As an alternative, the applicant could also use another source, if it can be shown to be a sustainable source. Use of reclaimed water, or ground or surface water from on-site would reduce the impact to less than significant (Class II).</b>
	<b>Comment 59</b>	<i>The issue of limited county-wide water resources should be viewed in a holistic manner and programs/restrictions imposed in an equitable manner across the entire spectrum of consumer groups versus a targeted attack on one utility or business.</i>