Document: Addendum No. 12 to Final EIR 575 and Addendum No. 3 to Final Supplemental EIR 597

Project Name: **Addendum No. 12 to Final EIR 575 for the Prima Deshecha General Development Plan (SCH #199041035) and Addendum No. 3 to Final Supplemental EIR 597 for the Second Amendment to the Prima Deshecha Landfill General Development Plan (SCH #199904135) – Update to Anticipated Emissions for Landfill Gas Collection System**

OC Waste & Recycling Log #: 703

Subject and Purpose of Addendum

The Prima Deshecha Landfill is a Class III municipal solid waste landfill owned by the County of Orange and operated by OC Waste & Recycling (OCWR). The landfill site is located in the City of San Juan Capistrano, City of San Clemente and unincorporated Orange County. The street address for the landfill is 32250 Avenida La Pata, San Juan Capistrano, 92675. On November 6, 2001, the Orange County Board of Supervisors approved Final EIR No. 575 (State Clearinghouse #199041035) for the implementation of the Prima Deshecha General Development Plan. On June 19, 2007, the Orange County Board of Supervisors approved Final Supplemental EIR No. 597 (State Clearinghouse #199904135) for the Second Amendment to the 2001 Prima Deshecha General Development Plan.

The project analyzed in Final EIR No. 575 included the following elements:

- Final EIR No. 575 (FEIR 575) analyzed the General Development Plan (GDP) for the Prima Deshecha site which includes a landfill element, circulation element and a recreation element. In order to provide for all three elements, the Prima property is divided into five zones. Zone 1 and Zone 4 are reserved for landfill development, Zone 2 uses are reserved for recreational trails, Zone 3 is reserved for habitat mitigation and Zone 5 is reserved for the La Pata Avenue Gap Closure project. The La Pata Avenue Gap Closure project was completed in 2016.

- For the landfill element of the Prima Deshecha GDP, FEIR 575 analyzed a total design capacity of approximately 53.1 million cubic yards for the Zone 1 landfill development area on 271 acres at a maximum design elevation of 600 feet above mean sea level (AMSL). In addition, for the Zone 4 landfill development area, FEIR 575 analyzed a total design capacity of approximately 118.5 million cubic yards on 409 acres at a maximum design elevation of 1,010 feet AMSL. The Solid Waste Facility Permit for the landfill operation allows for a maximum daily permitted tonnage of 4,000 tons per day.

In addition, on June 19, 2007, the Orange County Board of Supervisors approved Final EIR No. 597 for the Second Amendment to the Prima Deshecha General Development Plan. The project

analyzed in Prima Final Supplemental EIR No. 597 included the following project description elements:

- Increased the grading disturbance and landfill excavation limits for both the Zone 1 and Zone 4 landfills to allow for future landslide remediation projects; no change to the landfill development plan, landfill depth of waste, or landfill final elevations that were analyzed in Final EIR No. 575.

- Re-design of future desilting basins for the Zone 4 landfilling area.

- The significance conclusion of the air quality section included in Final EIR No. 575 was changed from less than significant with mitigation to unavoidable significant adverse impact, to reflect that both the worst-case daily construction and operational emissions from a 4,000 TPD landfill that were analyzed in Final EIR No. 575 would exceed both the daily construction and operational emissions thresholds of significance included in SCAQMD's CEQA Air Quality Handbook.

- More clearly defined biological mitigation to provide compensatory mitigation for the biological impacts associated with the future Zone 4 landfill development.

The purpose of Addendum No. 12 to Final EIR No. 575 and Addendum No. 3 to Final Supplemental EIR No. 597 is to allow the following and analyze whether further environmental review is necessary for this project revision:

- OCWR plans to modify the landfill gas (LFG) collection system at the Prima Deshecha Landfill by adding an additional flare to manage landfill gas when the existing landfill gas to energy (GTE) facility at the site ceases to operate in 2022. The new flare will be a Low NO_x flare, and eventually the existing flare will also be replaced with this technology, resulting in two new low NO_x flares. FEIR 575 indicated the GTE facility was operated by a 3rd party operator under a lease with the County and anticipated that this operator would own the rights to the LGF from the landfill for at least 20 years. The current GTE facility will cease to operate in 2022 when the term of this lease with the with the current operator ends. OCWR plans to develop a new renewable energy option at the site in the future, which will manage a portion of the LFG. When the new GTE facility is brought into operation, the flares and the GTE will not operate at full capacity simultaneously and there will be a proportional reduction in emissions from the flare operation at that time which is not anticipated to exceed the updated emissions provided in this addendum. Additional CEQA analysis will be conducted for the new GTE operation as needed.

  As a result of the addition of a new flare, updated modeling of anticipated criteria pollutant emissions for the LFG collection system has been prepared. The updated anticipated emissions assume full time operation of the flares until a new renewable energy facility is implemented. As a result, SO_x emissions are anticipated to be greater than was originally anticipated in EIR 575, but will nonetheless remain below the SCAQMD significance threshold and therefore do not result in any change to the

significance conclusions in EIR 575 or SEIR 597 or any new or worsened environmental impacts.

This Addendum documents the updates to the anticipated emissions for the LFG collection system at the Prima Deshecha Landfill and confirms that these changes will not result in a new significant environmental impact under CEQA.

Standards for Preparing an Addendum

California Code of Regulations Title 14 ("CEQA Guidelines"), Section 15164 "Addendum to an EIR or Negative Declaration", states the following:

(a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

(d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) A brief explanation of the of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

CEQA Guidelines Section 15162(a) "Subsequent EIRs and Negative Declarations", states the following:

(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative."

Changes to Final EIR No. 575 and Final Supplemental EIR No. 597

Changes to Prima FEIR 575, Section 4.9.3.1 Potential Impacts – Landfill Component – Combined Mobile and Non-Mobile Source Emissions, Table 4.9-13 Combined Daily Air Pollution Emissions (in pounds), page 4.9-27 are required, as shown in redline/strikeout text below:

Table 4.9-13
Combined Daily Air Pollution Emissions
(in pounds)

Scenario/Source	CO	ROG	NO_x	SO_x	PM_{10}
1999 Existing Conditions					
Mobile Sources	251	42	408	31	27
LGF Combustion (ERF)	526	93	183	10	175
Fugitive LFG	---	889	---	---	---
Total	777	1,024	591	41	202
Short-Range (2005)					
Mobile Sources	336	50	545	39	34
LFG Combustion (ERF)	860	152	300	15	286
Fugitive LFG	---	1,456	---	---	---
Total	1,196	1,658	845	54	320
Long-Range (2020) [2]					
Mobile Sources	310	37	404	39	34
LFG Combustion (ERF)	979	173	341	~~17~~ 98.09	325
LFG Combustion (Flare)	82	13	99	~~14~~	22
Fugitive LFG	---	2,803	---	---	---
Total	1,371	3,026	844	~~70~~ 137.09	381

Increase from Existing Conditions Short-Range Long-Range	 419[1] 594[1]	 634[1] 2,002[1]	 254[1] 253[1]	 13[1] 29[1]	 118[1] 179[1]
SCAQMD Significant Threshold	**550**	**55**	**55**	**150**	**150**

[1]Potentially significant by SCAQMD standards (CEQA Air Quality Handbook, 1993).
[2]Assume 3,750 CFM combusted in ERF (permitted level); remainder is burned in a new permitted flare.
SOURCE: Giroux & Associates, 1999.

Changes to Final Supplemental EIR No. 597, Section 5.4.1 Existing Conditions - Existing Air Quality, Table 5.4-4 Forecast (2020) Daily Pollutant Emissions Inventory At Prima Deshecha Landfill (4,000 TPD), page 5-26 are required, as shown in redline/strikeout text below:

Table 5.4-4
FORECAST (2020) DAILY POLLUTANT EMISSIONS INVENTORY AT PRIMA DESHECHA LANDFILL (4,000 TPD)

	Pollutant Emissions (lbs/day)				
	CO	**ROG**	**NOx**	**PM10**	**SOx**
Mobile Source Emissions	310	37	404	34	39
Energy Recovery Facility	979	173	341	325	~~17~~ 98.09
LFG Combustion	82	13	99	22	~~14~~
Uncaptured LFG Surface Emissions	--	2,803	--	--	--
TOTAL	**1,371**	**3,026**	**844**	**381**	**~~70~~ 137.09**
SCAQMD Significance Threshold	550	55	55	150	150
Significant?	**YES**	**YES**	**YES**	**YES**	**NO**

Source: Giroux & Associates 1999 (FEIRS 575, Table 4.9-13)

Analysis Confirming that an Addendum is the Appropriate CEQA Document for Proposed Project

The project makes only minor changes to the project as originally approved by the County of Orange on November 6, 2001 and on June 19, 2007. No new environmental conditions or circumstances have occurred that would make the analysis included within Final EIR No. 575 (EIR 575) and Final Supplemental EIR No. 597 (SEIR 597) invalid, and all adopted mitigation measures remain enforceable.

Included below is an analysis of why an Addendum is the appropriate CEQA documentation for the update to the anticipated emissions assumptions for the landfill gas collection system at the Prima Deshecha Landfill. The analysis summarizes the conclusions for air quality as analyzed in EIR 575 and SEIR 597 and whether there would be a change in the significance conclusion as a result of the changes. On the basis of substantial evidence in light of the whole record, the update to anticipated emissions for the landfill gas collection system and flare at the Prima Deshecha Landfill does not create any new significant impacts, nor would it result in the substantial worsening of any significant impacts to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, transportation and traffic, utilities and service systems, or

cumulative impacts as already analyzed in EIR 575 and SEIR 597. The update is therefore in compliance with CEQA Guidelines Section 15162 and 15164 and therefore a Subsequent EIR is not required. All feasible mitigation measures previously identified and adopted in EIR 575 and SEIR 597 that are relevant to the effects of updating the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill will be undertaken.

Air Quality/Greenhouse Gas Emissions

EIR 575 found that after the incorporation of mitigation measures, implementation of the General Development Plan for the Prima Deshecha Landfill through buildout of the Zone 1 and Zone 4 landfill development areas, would not result in any significant impacts to air quality. This significance conclusion was changed in SEIR No. 597, which determined that the landfill expansion would result in an unavoidable significant adverse impact to air quality, both for construction and operational emissions, even after the incorporation of mitigation measures, since construction and operation emissions from the landfill operation would exceed the thresholds of significance for daily construction and operational emissions included in the SCAQMD CEQA Air Quality Handbook. EIR 575 and SEIR 597 determined that the landfill operation would result in emissions above the SCAQMD significance thresholds for CO, ROG, PM_{10}, and NO_x. An analysis of greenhouse gas (GHG) emissions was not required when EIR 575 was certified in 2001 or when SEIR 597 was certified in 2007.

Features accommodated by the GDP for continued development of the landfill include modifications to the landfill gas control flare station and EIR 575 and SEIR 597 anticipated that additional flares may be installed as capacity requirements dictate. A LFG collection system is a required Mitigation Measure for the landfill project (MM-4.9-3 in EIR 575 - IWMD shall design, construct and operate new landfill areas in Zones 1 and 4 with LFG systems to maximize the collection of LFG. The LFG systems will include continuous monitoring of the LFG collection system to maximize efficient collection of LFG generated in these areas).

OCWR plans to modify the landfill gas (LFG) collection system at the Prima Deshecha Landfill by adding an additional flare to manage landfill gas when the existing landfill gas to energy (GTE) facility at the site ceases to operate in 2022. The new flare will be a Low NO_x flare, and eventually the existing flare will also be replaced with this technology, resulting in two new low NO_x flares. EIR 575 indicated the GTE facility was operated by a 3rd party operator under a lease with the County and anticipated that this operator would own the rights to the LFG from the landfill for at least 20 years. The current GTE facility will cease to operate in 2022 when the term of this lease with the with the current operator ends. OCWR plans to develop a new renewable energy option at the site in the future, which will manage a portion of the LFG. When the new GTE facility is brought into operation, the flares and the GTE will not operate at full capacity simultaneously and there will be a proportional reduction in emissions from the flare operation at that time which is not anticipated to exceed the updated emissions provided in this addendum. Additional CEQA analysis will be conducted for the new GTE operation as needed.

As a result of the addition of a new flare, updated modeling of anticipated criteria pollutant emissions has been prepared (Appendix A). The updated anticipated emissions assume full time operation of the flares until a new renewable energy facility is implemented. As a result, SO_x

emissions are anticipated to be greater than was originally anticipated in EIR 575, but will nonetheless remain below the SCAQMD significance threshold (Table 1). Per EIR 575 and SEIR 597, an air quality impact was determined to be significant if it exceeded the standards set by SCAQMD. As the updates to the anticipated SO_x emissions will continue to be below the SCAQMD threshold, the impacts will continue not to be significant and a new significant impact will not occur. Based on the updated modeling, other criteria pollutants (CO, ROG, PM_{10}, and NO_x) will be reduced below what was anticipated in EIR 575, though SEIR 597 determined that there would be significant impacts to air quality for these pollutants, and as such, the updates will not result in a change to this significance conclusion.

Units	**Potential Emissions (lbs/day)**				
	NO_x	**CO**	**SO_x**	**PM**	**VOC/ROG**
Proposed Low NOx Flares Emissions (2 New Flares)	144.00	345.60	98.09	90.09	31.07
Mobile Source Emissions per EIR 575 & SEIR 597	404	310	39	34	37
Total for New Flares Scenario	**548**	**655.60**	**137.09**	**124.09**	**68.07**
Emissions Anticipated for LFG & LFGTE in EIR 575 & SEIR 597	440.00	1,061.00	28.00	347.00	186.00
Total Emissions Anticipated in EIR 575 & SEIR 597 (Mobile & All LFG Sources)	844.00	1,371.00	70.00	381.00	3,026.00
SCAQMD Significance Thresholds	**55.00**	**550.00**	**150.00**	**150.00**	**55.00**

Table 1. Comparison of updated anticipated emissions to anticipated emissions in EIR 575 & SEIR 597 and to SCAQMD significance thresholds.

Regarding odors, EIR 575 found that after the incorporation of mitigation measures, implementation of the General Development Plan for the Prima Deshecha Landfill through buildout of the Zone 1 and Zone 4 landfill development areas, would not result in any significant impacts to odors. The update to the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill will not result in any significant odor impacts. On the basis of substantial evidence in light of the whole record, the update to the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill will not result in any changes to this significance conclusion.

All mitigation measures established under EIR 575 and SEIR 597 continue to be implemented at the landfill. However, Final SEIR 597 updated the significance conclusion from EIR 575, to indicate that the development of the landfill as outlined in the 2001 General Development Plan as amended would result in unavoidable significant adverse impacts to air quality. The updates to the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill do not result in a change to this significance conclusion. On the basis of substantial evidence in light of the whole record, the update to the anticipated emissions for the landfill gas collection system

at the Prima Deshecha Landfill will not result in any changes to this significance conclusion. The project is therefore in compliance with CEQA Guidelines Section 15162 and 15164 and therefore a Subsequent EIR is not required.

Basis for Addendum

The addendum will result a minor update to the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill. These changes will not result in any new significant environmental impacts for the Zone 1 and Zone 4 landfill development areas as analyzed in Final EIR No. 575 and Final SEIR No. 597. The project is therefore in compliance with CEQA Guidelines Section 15162 and 15164 and therefore a Subsequent EIR is not required.

On the basis of substantial evidence in light of the whole record, and as discussed in the environmental analysis included above, the update to the anticipated emissions for the landfill gas collection system at the Prima Deshecha Landfill site will not result in any changes to the significance conclusions contained in Final EIR No. 575 and Final SEIR No. 597 or result in a substantial increase in the severity of the significant environmental impacts previously identified in Final EIR No. 575 and Final SEIR No. 597; therefore, in compliance with Section 15162 and 15164 of the CEQA Guidelines, the preparation of a Subsequent EIR is not required.

Appendix A

Conversion Factors:

1 mol CO_2 =	44.01	g
1 m^3 =	35.31	scf
1 m^3 =	1000	L
1 mol gas =	23.689	L at 60^o F and 1 atm (ideal gas law)
1 Mg =	1,000,000	g
1 Mg =	1,000	kg
1 Mg =	1.1023	tons
1 hp =	2,545	Btu/hr