

California Energy Commission
DOCKETED
12-AFC-03

TN # 69414

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Kristen T. Castaños *Direct (916) 319-4674* ktcastanos@stoel.com

February 6, 2013

#### VIA HAND DELIVERY

Ms. Patricia Kelly, Siting Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814

Re: Redondo Beach Energy Project (12-AFC-03)

**Biological Resources** 

KO Casto

Dear Ms. Kelly:

On behalf of AES Southland Development, LLC ("AES-SD"), enclosed herewith for docketing please find the jurisdictional determination request submitted to the U.S. Army Corps of Engineers, Los Angeles District as such relates to the Redondo Beach Energy Project ("RBEP").

Should you have any questions concerning this submittal, please do not hesitate to contact Sarah Madams at (916) 286-0249 or me at (916) 319-4674.

Very truly yours,

Kristen T. Castaños

KTC:jmw Enclosures

From: Langis, Rene/BOS

**Sent:** Thursday, January 31, 2013 4:02 PM **To:** Daniel.P.Swenson@usace.army.mil

**Cc:** Salamy, Jerry/SAC; Madams, Sarah/SAC; <u>tluster@coastal.ca.gov</u> **Subject:** Request for JD on the Redondo Beach Energy Project

Mr. Swenson,

Please find attached a formal request for a Jurisdictional Determination for the Redondo Beach Energy Project.

Please let me know if you have any questions,

René Langis, Ph.D. Senior Scientist Environmental Services CH2M HILL

Mobile 510 409 8194 www.ch2mhill.com



2485 Natomas Park Drive, Suite 600

Sacramento, CA 95833

Tel 916.920.0300 Fax 916.920.8463



January 31, 2013

U.S. Army Corps of Engineers Los Angeles District Regulatory Division 915 Wilshire Blvd. Los Angeles, CA 90017

Attention: Mr. Daniel Swenson

Subject: Redondo Beach Energy Project - Jurisdictional Determination Request

Dear Mr. Swenson:

CH2M HILL is assisting AES-Southland with assessing water features that could be affected by the proposed Redondo Beach Energy Project (RBEP) and is requesting a Jurisdictional Determination for two locations that would be filled as part of the Project. RBEP is a natural-gas-fired, combined-cycle, air-cooled electrical generating facility with a gross generating capacity of 511 MW, which will replace and be constructed on the site of the AES Redondo Beach Generating Station, an existing and operating power plant in Redondo Beach, California.

There are no natural rivers, streams, ponds, or wetlands within the immediate vicinity of the RBEP site. Nonetheless, some locations at the RBEP site required further investigation, including: (1) three constructed retention basins, which were identified by the USFWS National Wetland Inventory as excavated palustrine systems, (2) one constructed pit and (3) five specific areas within five former fuel storage secondary containment areas (Figure 1). Wetland determination data forms and an aerial photo showing the location of sampling points (Figure 2) are enclosed herewith.

#### **Constructed Retention Basins**

Only one of the three constructed retention basins, a lined 1-milion gallon retention basin near the center of the site, is currently used to collect onsite runoff from storm drains, boilers, and sumps. The other two retention basins located in the northeast corner of the site are also lined, but are no longer in use and are proposed to be part of the construction laydown and parking area for the RBEP. Any water that collects in the three basins is pumped out to the operational pond near the center of the site. The three retention basins were designed and constructed to meet the requirements of the Clean Water Act and thereby would not be waters of the United States. Furthermore, wetland determination data forms were completed for all three retention ponds and concluded that none of these sites are wetlands.

Mr. Daniel Swenson Page 2 January 31, 2013

#### Constructed Pit

There is shallow ponded water in the constructed pit immediately west of the former fuel oil storage tank #1 containment area. The sides of the pit are made of concrete and the bottom appears to be gravel. The wetland determination data form completed for sampling point SP06 within this pit confirmed that positive wetland indicators of hydrology, soil and vegetation are found in this pit. However, the pit is not hydrologically connected to a navigable water of the US, and therefore should not be considered a water of the U.S.

#### Former Fuel Tank Areas

Wetland determination data forms were also completed for the five former fuel storage tank secondary containment areas. The tanks were removed in 2006 but the containment areas surrounded by asphalt covered soil berms remain. Ponded water was observed in the two northernmost former containment areas Tank #1 and Tank #2, but positive wetland indicators of hydrology, soil and vegetation were only found at data point SP03 at the former Tank #1 location. As with the constructed pit, the Tank #1 location is not hydrologically connected to a navigable water of the US, and therefore should not be considered a water of the U.S.

#### Conclusion

Because the two identified locations with wetland conditions (SP03 and SP06) have no hydrological connection to a navigable water of the US, we request your concurrence that they are not jurisdictional under the Clean Water Act.

Thank you again for your cooperation and assistance. I look forward to your earliest possible reply.

Sincerely,

CH2M HILL

Rene Langis, Ph.D.

Senior Biologist

Tom Luster, California Coastal Commission

Encl.

CC:

Project/Site: Redondo Beach Energy Project	City/Co	unty:Redondo	Beach/Los Angeles	Sampling Date:	9 Jan. 20	013
Applicant/Owner: AES Southland Development			State:CA	Sampling Point	:SP-01	
Investigator(s): M. Fowler	Section	ı, Township, Ra	nge:T4S, R15W, S01;	T4S, R14W, S	06; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	 Local r	elief (concave,	convex, none): Concave	S S	lope (%):~	-30
Subregion (LRR):C - Mediterranean California Lat	nt: 33° 51' 09	0.67" N	Long: -118° 23' 40.6	9" W Da	tum: WG	S84
Soil Map Unit Name: Chino silt loam			NWI classific	cation: Freshwa	ter pond	(PUBK
Are climatic / hydrologic conditions on the site typical for this time	of year? Ye	s ( No (	(If no, explain in F	Remarks.)		`
	cantly disturbe		Normal Circumstances"	present? Yes (	No	
	ally problemati		eded, explain any answe		2	
SUMMARY OF FINDINGS - Attach site map show					eatures	, etc.
Hydrophytic Vegetation Present? Yes No (•						
Hydric Soil Present? Yes No		ls the Sampled	Area			
Wetland Hydrology Present? Yes   No	,	within a Wetlar	nd? Yes 🔘	No 💿		
Remarks: Lined retention basin (location - 01)						
VECETATION						
VEGETATION						
Absolution Tree Stratum (Use scientific names.) % Columbia	olute Domina Cover Specie	ant Indicator es? Status	Dominance Test work			
1. N/A			Number of Dominant S That Are OBL, FACW,		0	(A)
2.						` '
3.			Total Number of Domir Species Across All Stra		0	(B)
4.			Percent of Dominant S	nacias		
Total Cover:	%		That Are OBL, FACW,		0 %	(A/B)
Sapling/Shrub Stratum			Prevalence Index wor	rkahaati		
1. <i>N/A</i> 2.			Total % Cover of:		ply by:	
3.			OBL species	x 1 =	0	
4.			FACW species	x 2 =	0	
5.			FAC species	x 3 =	0	
Total Cover:	%		FACU species	x 4 =	0	
Herb Stratum			UPL species	x 5 =	0	
1. N/A			Column Totals:	(A)	0	(B)
2.			Prevalence Index	, - R/Δ -		
3.			Hydrophytic Vegetati			
5.			Dominance Test is			
6.			Prevalence Index			
7.			Morphological Ada	aptations¹ (Provid	le supporti	ing
8.				s or on a separa		
Total Cover:	%		Problematic Hydro	phytic Vegetation	n¹ (Explair	ר)
Woody Vine Stratum	/0		1			
1. <u>N/A</u>			Indicators of hydric so be present.	and wetland h	iydrology	must
2			,			
Total Cover:	%		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum % Cover of Bi	iotic Crust	%		s No (	$\odot$	
Remarks: No vegetation is present.			I.			

Profile Des Depth	Matrix			x Features		_	
(inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
N/A							See remarks below.
							_
							_
Type: C=C	Concentration, D=Depl	etion, RM=	Reduced Matrix.	<sup>2</sup> Location: PL=Pore	Lining, RC=	Root Channel	, M=Matrix.
Soil Textur	es: Clay, Silty Clay, S	andy Clay	, Loam, Sandy Clay	Loam, Sandy Loam,	Clay Loam,	Silty Clay Loa	m, Silt Loam, Silt, Loamy Sand, Sar
	ndicators: (Applicabl	e to all LRF	Rs, unless otherwise	e noted.)			Problematic Hydric Soils:
Histoso	• •		Sandy Redo	` '			ck (A9) (LRR C)
	pipedon (A2)		Stripped M	, ,			ck (A10) ( <b>LRR B</b> )
	listic (A3) en Sulfide (A4)			cky Mineral (F1) yed Matrix (F2)			l Vertic (F18) ent Material (TF2)
	ed Layers (A5) ( <b>LRR C</b>	:)	Depleted M				xplain in Remarks)
	uck (A9) ( <b>LRR D</b> )	')		k Surface (F6)			in the market
Deplete	ed Below Dark Surface	e (A11)	Depleted D	ark Surface (F7)			
Thick D	ark Surface (A12)		Redox Dep	ressions (F8)			
	Mucky Mineral (S1)		Vernal Poo	ls (F9)			hydrophytic vegetation and
	Gleyed Matrix (S4)					wetland h	ydrology must be present.
	Layer (if present):						
Type:							
Depth (ir						Hydric Soil P	resent? Yes No   No
	ches):he retention basin i	s lined an	nd soil samples ca	nnot be obtained.		Hydric Soil P	resent? Yes No   No
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YDROLO Wetland Hy Primary Indi X Surface High W Saturat Water M Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F includes ca	he retention basin in the retention (A3)  Marks (B1) (Nonrivering the retention (B2) (Norrivering the retention (B3) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B4))  Marks (B4) (Nonrivering the re	ne) nriverine) ine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Other (Ex	t (B11) st (B12) evertebrates (B13) Sulfide Odor (C1) Rhizospheres along I of Reduced Iron (C4 on Reduction in Plow plain in Remarks)  eches):  N/A eches):  N/A photos, previous inspections	Living Roots ) ed Soils (C6  Wetlan pections), if a	Seconda  War Seconda  Drif Drif Drif Dra Dry (C3) Thir Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) in Muck Surface (C7) yfish Burrows (C8) uration Visible on Aerial Imagery (CS tillow Aquitard (D3) C-Neutral Test (D5)
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YDROLO Vetland Hy Primary Indi Surface High W Saturat Water M Sedime Drift De Surface Unundat Water-S Cield Obser Surface Wa Vater Table Saturation F Includes ca	he retention basin in the retention (A3)  Marks (B1) (Nonrivering the retention (B2) (Norrivering the retention (B3) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B2) (Nonrivering the retention (B4))  Marks (B1) (Nonrivering the retention (B4))  Marks (B4) (Nonrivering the re	ne) nriverine) ine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Irc Other (Ex	t (B11) st (B12) evertebrates (B13) Sulfide Odor (C1) Rhizospheres along I of Reduced Iron (C4 on Reduction in Plow plain in Remarks)  eches):  N/A eches):  N/A photos, previous inspections	Living Roots ) ed Soils (C6  Wetlan pections), if a	Seconda  War Seconda  Drif Drif Drif Dra Dry (C3) Thir Cra Sat Sha FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) in Muck Surface (C7) yfish Burrows (C8) uration Visible on Aerial Imagery (CS tillow Aquitard (D3) C-Neutral Test (D5)
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Project/Site: Redondo Beach Energy Project	City/Co	unty:Redondo	Beach/Los Angeles	Sampling Date:	9 Jan. 20	13
Applicant/Owner: AES Southland Development			State:CA	Sampling Point:	SP-02	
Investigator(s):M. Fowler	Section	n, Township, Rai	nge:T4S, R15W, S01;	T4S, R14W, S	06; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	 Local r	elief (concave, o	convex, none): Concave	SI	ope (%):~(	30
Subregion (LRR):C - Mediterranean California La	—— at: 33° 51' 11	1.37" N	Long: -118° 23' 36.1	 4" W Dat	tum: WGS	<del></del>
Soil Map Unit Name: Chino silt loam			NWI classific	cation: Freshwat	er pond (	PUBK
Are climatic / hydrologic conditions on the site typical for this time	e of year? Ye	s ( No (		-		
	icantly disturb		'Normal Circumstances"	,	No No	$\circ$
	ally problemat		eeded, explain any answe			
SUMMARY OF FINDINGS - Attach site map show					eatures,	etc.
Hydrophytic Vegetation Present? Yes No (						
Hydric Soil Present? Yes No		Is the Sampled	Area			
Wetland Hydrology Present? Yes   No		within a Wetlan	nd? Yes 🔘	No 💿		
Remarks: Lined retention basin (location - 02).						
VEGETATION						
	olute Domin	ant Indicator	Dominance Test work	rehoot:		
	Cover Specie		Number of Dominant S			
1. N/A			That Are OBL, FACW,		0	(A)
2.			Total Number of Domir	nant		
3.			Species Across All Stra		0	(B)
4			Percent of Dominant S	pecies		
Total Cover: Sapling/Shrub Stratum	%		That Are OBL, FACW,		0 %	(A/B)
1. N/A			Prevalence Index wor	ksheet:		
2.			Total % Cover of:	Multip	oly by:	
3.			OBL species	x 1 =	0	
4.			FACW species	x 2 =	0	
5.			FAC species	x 3 =	0	
Total Cover:	%		FACU species	x 4 =	0	
Herb Stratum			UPL species	x 5 =	0	
1. N/A 2.			Column Totals:	(A)	0	(B)
3.			Prevalence Index	x = B/A =		
4.	<del></del>		Hydrophytic Vegetati	on Indicators:		
5.			Dominance Test is	; >50%		
6.			Prevalence Index	is ≤3.0 <sup>1</sup>		
7.			Morphological Ada			ng
8.	,		data in Remark	s or on a separat	,	.
Total Cover:	%		Troblematic riyare	phytic vegetation	1 (Explain	'
Woody Vine Stratum  1. N/A			<sup>1</sup> Indicators of hydric so	oil and wetland h	vdrology r	must
2.			be present.		,	
Total Cover:	%		Hydrophytic			$\neg \neg$
		0/	Vegetation	no O No (	2	
		<u>%</u>	Present? Ye	es No (	<u> </u>	
Remarks: No vegetation is present within the lined reter	ntion basin.					

N/A  Type: C=Concentrat  Soil Textures: Clay,  Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (AB)  Hydrogen Sulfide  Stratified Layers (AB)  Tom Muck (AB) (AB)  Depleted Below D  Thick Dark Surfact  Sandy Mucky Mir  Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) ark Surface (A11) e (A12)	Reduced Matrix. Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Gle Loamy Gle Depleted M Redox Dar	e noted.) ox (S5)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
1Type: C=Concentrat 3Soil Textures: Clay, Hydric Soil Indicators: Histosol (A1) Histic Epipedon (AB) Hydrogen Sulfide Stratified Layers (AB) Tom Muck (AB) (AB) Depleted Below E Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	M=Matrix. m, Silt Loam, Silt, Loamy Sand, Sand Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below Extra Communication Sandy Mucky Mir	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
**Soil Textures: Clay, **  Hydric Soil Indicators: Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below D  Thick Dark Surfact  Sandy Mucky Mir  Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A1) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A2) 1 cm Muck (A9) (A2) Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
**Soil Textures: Clay, **  Hydric Soil Indicators: Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below D  Thick Dark Surfact  Sandy Mucky Mir  Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A1) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A2) 1 cm Muck (A9) (A2) Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A1) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A2) 1 cm Muck (A9) (A2) Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below Extra Communication Sandy Mucky Mir	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below Extra Communication Sandy Mucky Mir	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (A2)  Depleted Below Extra Communication Sandy Mucky Mir	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
3 Soil Textures: Clay, 3 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A1) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A2) 1 cm Muck (A9) (A2) Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) (ark Surface (A11) (e (A12)	Loam, Sandy Clay s, unless otherwise Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	Loam, Sandy Loam e noted.) ox (S5) atrix (S6) cky Mineral (F1)	-	Silty Clay Loar Indicators for 1 cm Muc	m, Silt Loam, Silt, Loamy Sand, Sand  Problematic Hydric Soils: ck (A9) (LRR C)
Hydric Soil Indicators  Histosol (A1)  Histic Epipedon (A1)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (A2)  1 cm Muck (A9) (IN)  Depleted Below IN  Thick Dark Surfact  Sandy Mucky Mir  Sandy Gleyed Ma	(Applicable to all LRRs (A2) (A4) (A5) (LRR C) LRR D) ark Surface (A11) e (A12)	s, unless otherwise Sandy Redo Stripped M Loamy Muc Loamy Gle Depleted M Redox Dar	e noted.) ox (S5) atrix (S6) cky Mineral (F1)	, e.a.,	Indicators for	Problematic Hydric Soils: ck (A9) (LRR C)
Histosol (A1) Histic Epipedon (A1) Black Histic (A3) Hydrogen Sulfide Stratified Layers (A2) 1 cm Muck (A9) (A2) Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(A4) A5) (LRR C) LRR D) ark Surface (A11) e (A12)	Sandy Redo Stripped M Loamy Mu Loamy Gle Depleted M Redox Dar	ox (S5) atrix (S6) cky Mineral (F1)		1 cm Mud	ck (A9) ( <b>LRR C</b> )
Black Histic (A3) Hydrogen Sulfide Stratified Layers ( 1 cm Muck (A9) ( Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	(A4) A5) (LRR C) LRR D) ark Surface (A11) e (A12)	Stripped M Loamy Muc Loamy Gle Depleted M Redox Dar	atrix (S6) cky Mineral (F1)			
Hydrogen Sulfide Stratified Layers ( 1 cm Muck (A9) ( Depleted Below D Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	A5) (LRR C) LRR D) ark Surface (A11) e (A12)	Loamy Gle Depleted M Redox Dar	• , ,			ck (A10) ( <b>LRR B</b> )
Stratified Layers ( 1 cm Muck (A9) ( Depleted Below E Thick Dark Surfact Sandy Mucky Mir Sandy Gleyed Ma	A5) (LRR C) LRR D) ark Surface (A11) e (A12)	Depleted M	yed Matrix (F2)		Reduced	Vertic (F18)
1 cm Muck (A9) (IDepleted Below Depleted Below Depleted Below Depleted Below Depleted Bandy Mucky Mir Sandy Gleyed Ma	LRR D) eark Surface (A11) e (A12)	Redox Dar				ent Material (TF2)
Depleted Below I Thick Dark Surface Sandy Mucky Mir Sandy Gleyed Ma	e (A12)		` '		Other (Ex	xplain in Remarks)
Thick Dark Surface Sandy Mucky Mir Sandy Gleyed Ma	e (A12)		k Surface (F6)			
Sandy Mucky Mir Sandy Gleyed Ma	` '		eark Surface (F7) Pressions (F8)			
Sandy Gleyed Ma		Vernal Poo	, ,		<sup>4</sup> Indicators of	hydrophytic vegetation and
		Vernai i oc	13 (1 <i>3)</i>			/drology must be present.
Restrictive Layer (if						
Type:	,					
Depth (inches):					Hydric Soil Pr	resent? Yes No 💿
· ` `	present because the r	estantion basin is	linad			
140 3011 13	present because the r	ctention oasin is	illica.			
IYDROLOGY						
Wetland Hydrology I	ndicators:				Seconda	ary Indicators (2 or more required)
Primary Indicators (an	y one indicator is suffici	ent)			_ Wat	er Marks (B1) (Riverine)
X Surface Water (A	1)	Salt Crust	(B11)		Sed	iment Deposits (B2) (Riverine)
High Water Table	(A2)	Biotic Cru	st (B12)		Drift	Deposits (B3) (Riverine)
Saturation (A3)		Aquatic Ir	vertebrates (B13)		Drai	inage Patterns (B10)
Water Marks (B1)	(Nonriverine)	Hydrogen	Sulfide Odor (C1)		Dry-	-Season Water Table (C2)
Sediment Deposit	s (B2) (Nonriverine)	Oxidized	Rhizospheres along	Living Roots	(C3) Thin	n Muck Surface (C7)
Drift Deposits (B3	) (Nonriverine)	Presence	of Reduced Iron (C4	<b>l</b> )	Cray	yfish Burrows (C8)
Surface Soil Crac	ks (B6)	Recent Iro	on Reduction in Plow	ed Soils (C6)	) Satı	uration Visible on Aerial Imagery (C9)
Inundation Visible	on Aerial Imagery (B7)	Other (Ex	plain in Remarks)		Sha	llow Aquitard (D3)
Water-Stained Le	aves (B9)				FAC	C-Neutral Test (D5)
Field Observations:						
Surface Water Preser	t? Yes 💿 N	o O Depth (ir	nches):~2-4"			
Water Table Present?	Yes N	o O Depth (ir	iches): N/A			
Saturation Present?	Yes N	o Depth (ir	iches): N/A	<b>—</b>		
(includes capillary frin	ge)		-			Present? Yes   No
Describe Recorded Da	ata (stream gauge, mon	litoring well, aerial	pnotos, previous ins	pections), if a	avallable:	
		tormwater. The	retention basin is l	ined so the	water table a	and saturation cannot be observed
Remarks: Surface w	nter is present from s					
Remarks: Surface w	nter is present from s					
Remarks: Surface w	ater is present from s					
Remarks: Surface w	ater is present from s					

Project/Site: Redondo Beach Energy F	Project		City/Co	ounty: <u>Redondo</u>	Beach/Los Angel	les S	ampling Date	:9 Jan. 20	13
Applicant/Owner: AES Southland Deve	elopment				State: CA	s	ampling Point	::SP-03	
Investigator(s): M. Fowler			Sectio	n, Township, Ra	ange:T4S, R15W,	S01; T	4S, R14W, S	06; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrac	ce (coastal)		Local	relief (concave,	convex, none): Cor	ncave	S	lope (%): ()	)
Subregion (LRR):C - Mediterranean Ca	alifornia	Lat: 33°	51' 0	6.31" N	Long: -118° 23'	35.46"	W Da	tum: WGS	384
Soil Map Unit Name: Chino silt loam					NWI cla	assificati	ion: None		
Are climatic / hydrologic conditions on the	site typical for this	time of ye	ear? Ye	es ( No (	(If no, explai	n in Ren	narks.)		
Are Vegetation Soil or Hyd	drology  si	ignificantly	disturb		"Normal Circumstan	ces" pre	sent? Yes	No	$\circ$
	· 🗀	aturally pr			eeded, explain any a	nswers	in Remarks.)		
SUMMARY OF FINDINGS - Atta								eatures,	etc.
Hydrophytic Vegetation Present?	Yes 🕟 No	o ()			·	· · · · · · · · · · · · · · · · · · ·			
Hydric Soil Present?				Is the Sample	d Area				
Wetland Hydrology Present?	~ ~	o ()		within a Wetla		•	No 🔘		
Remarks: Fuel oil tank containment	basin (location -	04W).	ı						
VEGETATION									
		Absolute		nant Indicator	Dominance Test	worksh	eet:		
Tree Stratum (Use scientific names.)  1. N/A		% Cover	Speci	ies? Status	Number of Domin That Are OBL, FA			1	(A)
2.					Total Number of [	Dominar	ıt		
3.					Species Across A			1	(B)
4					Percent of Domin				
   Sapling/Shrub Stratum	Total Cover	: %			That Are OBL, FA	CW, or	FAC: 10	00.0%	(A/B)
1. N/A					Prevalence Index	x works	heet:		
2.					Total % Cove	er of:	Multi	ply by:	_
3.					OBL species	7	x 1 =	7	
4.					FACW species	45	x 2 =	90	
5					FAC species		x 3 =	0	
Herb Stratum	Total Cover	: %			FACU species		x 4 =	0	
1. Agrostis gigantea		45	Yes	FACW	UPL species	5	x 5 =	25	(D)
2.Cyperus difformis		7	No	OBL	_ Column Totals:	57	(A)	122	(B)
3. Sonchus oleraceus		5	No	UPL	Prevalence	Index =	B/A =	2.14	
4.					Hydrophytic Veg				
5.					Dominance T				
6.					× Prevalence Ir				
7					Morphologica data in Re		ations' (Provid er on a separa		ng
8					Problematic I		•		)
Woody Vine Stratum	Total Cover	57 %							
1. N/A					<sup>1</sup> Indicators of hyd	ric soil	and wetland h	nydrology r	nust
2.		-			be present.				
	Total Cover	%			Hydrophytic				
% Bare Ground in Herb Stratum 43	3 % % Cover	of Biotic C	Crust	%	Vegetation Present?	Yes	No (	$\circ$	
Remarks:	<u> </u>			<u> </u>					

Profile Des	cription: (Describe	to the depth nee	ded to docum	ent the indicator of	or confirn	n the abs	ence of	indicators.)
Depth	Matrix			Features Type 1	Loc <sup>2</sup>	Textu	3	Damayka
(inches)	Color (moist)		or (moist)	% Type <sup>1</sup>	LOC-		ire	Remarks
0-12	10 YR 3/2					Sand		Saturation present
			·					·
	-		·					-
<sup>1</sup> Type: C=C	Concentration, D=Dep	etion, RM=Redu	ced Matrix.	Location: PL=Pore	Linina. R	C=Root 0	Channel.	M=Matrix.
	•							n, Silt Loam, Silt, Loamy Sand, Sand.
	Indicators: (Applicabl							Problematic Hydric Soils:
Histoso		Ĺ	Sandy Redox	•				k (A9) ( <b>LRR C</b> )
Histic E	pipedon (A2)		Stripped Mat	rix (S6)			cm Muc	k (A10) ( <b>LRR B</b> )
	listic (A3)		Loamy Muck	y Mineral (F1)		F	Reduced	Vertic (F18)
	en Sulfide (A4)		Loamy Gleye					nt Material (TF2)
	ed Layers (A5) (LRR C	;)	Depleted Ma			$\times$	Other (Ex	plain in Remarks)
	uck (A9) (LRR D)		Redox Dark	` '				
	ed Below Dark Surface Park Surface (A12)	(A11)	☐ Depleted Dar ☐ Redox Depre	rk Surface (F7)				
	Mucky Mineral (S1)		J Redox Depre	, ,		<sup>4</sup> Indic	ators of h	nydrophytic vegetation and
	Gleyed Matrix (S4)	L	_ verriai i oois	(1 3)				drology must be present.
	Layer (if present):						,	
Type:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Depth (ir	nches):					Hydrid	Soil Pre	esent? Yes  No
		on artificial fi	1 No organic	content was nres	sent Hox	1 -		saturated and may be considered
	n artificial hydric s		-		SCIIL. 110 V	wever, ti	10 3011 13	saturated and may be considered
u.	ii artificiai ny arie s	on. Dons meets	criteria 5 ioi	nydric son.				
HYDROLO	OGY							
Wetland Hy	/drology Indicators:						Seconda	ry Indicators (2 or more required)
-	icators (any one indica	ator is sufficient)						er Marks (B1) ( <b>Riverine</b> )
	Water (A1)	Γ	Salt Crust (I	B11)				ment Deposits (B2) (Riverine)
	ater Table (A2)	L	Biotic Crust	,				Deposits (B3) (Riverine)
	ion (A3)	L [		ertebrates (B13)				nage Patterns (B10)
	Marks (B1) ( <b>Nonriveri</b>	ne) [		Sulfide Odor (C1)				Season Water Table (C2)
	ent Deposits (B2) (Nor	, L	<b></b>	nizospheres along l	Livina Roc	ots (C3)		Muck Surface (C7)
	eposits (B3) (Nonriver			f Reduced Iron (C4	-	()		fish Burrows (C8)
	Soil Cracks (B6)	[ [		Reduction in Plow		C6)		ration Visible on Aerial Imagery (C9)
	tion Visible on Aerial I	magery (B7)	_	ain in Remarks)	(	,		low Aquitard (D3)
	Stained Leaves (B9)			,				-Neutral Test (D5)
Field Obse	, ,							,
Surface Wa	ter Present? Ye	es 🕟 No 🤇	Depth (inch	nes):				
Water Table		es   No		· ———				
Saturation F				´———				
	pillary fringe)	es 💿 No 🔘	Dopur (mor		Wetl	and Hyd	rology P	resent? Yes 💿 No 🔘
Describe Re	ecorded Data (stream	gauge, monitorir	ıg well, aerial pl	notos, previous insp	pections),	if availab	le:	
Remarks: S	aturation is present	and soil pit im	mediately fill	ed with water aft	ter the so	il sampl	e was re	emoved.
	1	1	•			1		
IIC Army Corn	os of Engineers							

Project/Site: Redondo Beach Energy Project	City/Cou	nty:Redondo	Beach/Los Angeles	Sampling Date:	9 Jan. 2013
Applicant/Owner: AES Southland Development			State:CA	Sampling Point:	SP-04
Investigator(s): M. Fowler	Section,	Township, Ra	nge:T4S, R15W, S01;	T4S, R14W, S0	06; T4S, R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	Local re	lief (concave,	convex, none): None	Slo	ope (%): ()
Subregion (LRR):C - Mediterranean California Lat:	33° 51' 06.	45" N	Long: -118° 23' 36.4	2" W Datı	um: WGS84
Soil Map Unit Name: Chino silt loam			NWI classific	cation: None	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes	<ul><li>No (</li></ul>	(If no, explain in F	Remarks.)	
Are Vegetation Soil or Hydrology signification	antly disturbed	d? Are "	'Normal Circumstances"	present? Yes 🕞	No (
	ly problematic	? (If ne	eeded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map show	ing sampli				eatures, etc.
Hydrophytic Vegetation Present? Yes No (					
Hydric Soil Present? Yes No	Is	the Sampled	Area		
Wetland Hydrology Present? Yes   No   No		ithin a Wetlar	nd? Yes 🔘	No 💿	
Remarks: Fuel oil tank containment basin (location - 04U)					
VEGETATION					
Absol	ute Domina	nt Indicator	Dominance Test work	csheet:	
Tree Stratum (Use scientific names.) % Co			Number of Dominant S		
1. <i>N/A</i>			That Are OBL, FACW,		(A)
2.			Total Number of Domir	nant	
3			Species Across All Stra		0 (B)
4			Percent of Dominant S	pecies	
Total Cover: Sapling/Shrub Stratum	%		That Are OBL, FACW,	or FAC:	0 % (A/B)
1. N/A			Prevalence Index wo	rksheet:	
2.	·		Total % Cover of:	Multip	ly by:
3.			OBL species	x 1 =	0
4.			FACW species	x 2 =	0
5.			FAC species	x 3 =	0
Total Cover:	%		FACU species	x 4 =	0
Herb Stratum			UPL species	x 5 =	0
1. N/A 2.			Column Totals:	(A)	0 (B)
3.			Prevalence Index	c = B/A =	
4.			Hydrophytic Vegetati	on Indicators:	
5.	<del></del>		Dominance Test is		
6.			Prevalence Index	is ≤3.0 <sup>1</sup>	
7.			Morphological Ada		
8.				s or on a separate	. '
Total Cover:	%		Problematic Hydro	pnytic vegetation	(Explain)
Woody Vine Stratum			<sup>1</sup> Indicators of hydric so	ail and watland by	udrology must
1. N/A			be present.	in and welland ny	ydrology must
Z. Total Covers			Hydrophytic		
Total Cover:	%		Vegetation		
% Bare Ground in Herb Stratum % Cover of Bio	otic Crust	%	Present? Ye	es No (	)
Remarks: No vegetation is present in the upland location.	. Vegetation	may not be	able to become establ	ished in the con	npacted fill
and previous industrial use.					

Depth (inches)         Matrix         Redox Features           Color (moist)         %         Color (moist)         %         Type¹         Loc²         Texture³           0-10         10 YR 3/2         100         Sand         Sand	
0-10 10 YR 3/2 100 Sand	Remarks
17 year Carporatestian DaDoulation DM-Dadwood Matrix 21 continue DL Dave Living DC-Dout Channel M-Matrix	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup> Location: PL=Pore Lining, RC=Root Channel, M=Matrix. <sup>3</sup> Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loa	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Indicators for Problemat	
Histosol (A1)  Sandy Redox (S5)  1 cm Muck (A9) (LF	
Histic Epipedon (A2)  Stripped Matrix (S6)  2 cm Muck (A10) (L	,
Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F1	8)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Materia	I (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Re	emarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8)	
Thick Dark Surface (A12)  Redox Depressions (F8)  Sandy Mucky Mineral (S1)  Vernal Pools (F9)  Alndicators of hydrophytic	c vegetation and
Sandy Midcky Milleral (31) Verhal 1 dols (13) Indicators of hydrophysic wetland hydrology m	•
Restrictive Layer (if present):	
Type:	
· -	Yes No 💿
Remarks: The entire site has been covered in artificial fill. No field indicators are present.	
The entire site has been covered in artificial fill. Two field indicators are present.	
HYDROLOGY	
	ors (2 or more required)
Primary Indicators (any one indicator is sufficient)  Water Marks (I	B1) (Riverine)
Surface Water (A1) Salt Crust (B11) Sediment Dep	osits (B2) (Riverine)
☐ High Water Table (A2) ☐ Biotic Crust (B12) ☐ Drift Deposits	(B3) (Riverine)
X   High Water Table (A2)   Biotic Crust (B12)   Drift Deposits	(D 4 0)
Saturation (A3) Aquatic Invertebrates (B13) Drainage Patter	` '
X       Saturation (A3)       Aquatic Invertebrates (B13)       Drainage Patter         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       Dry-Season W	erns (B10) ater Table (C2)
X Saturation (A3) Aquatic Invertebrates (B13) Drainage Patter   Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Dry-Season W   Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Thin Muck Sur	ater Table (C2) face (C7)
X       Saturation (A3)       ☐ Aquatic Invertebrates (B13)       ☐ Drainage Patter         ☐ Water Marks (B1) (Nonriverine)       ☐ Hydrogen Sulfide Odor (C1)       ☐ Dry-Season W         ☐ Sediment Deposits (B2) (Nonriverine)       ☐ Oxidized Rhizospheres along Living Roots (C3)       ☐ Thin Muck Sur         ☐ Drift Deposits (B3) (Nonriverine)       ☐ Presence of Reduced Iron (C4)       ☐ Crayfish Burro	ater Table (C2) face (C7) ws (C8)
Saturation (A3)	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9)
X       Saturation (A3)       ☐ Aquatic Invertebrates (B13)       ☐ Drainage Patter         Water Marks (B1) (Nonriverine)       ☐ Hydrogen Sulfide Odor (C1)       ☐ Dry-Season W         ☐ Sediment Deposits (B2) (Nonriverine)       ☐ Oxidized Rhizospheres along Living Roots (C3)       ☐ Thin Muck Sur         ☐ Drift Deposits (B3) (Nonriverine)       ☐ Presence of Reduced Iron (C4)       ☐ Crayfish Burro         ☐ Surface Soil Cracks (B6)       ☐ Recent Iron Reduction in Plowed Soils (C6)       ☐ Saturation Visi         ☐ Inundation Visible on Aerial Imagery (B7)       ☐ Other (Explain in Remarks)       ☐ Shallow Aquita	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Aquatic Invertebrates (B13)  Drainage Patte  Dry-Season W  Oxidized Rhizospheres along Living Roots (C3)  Thin Muck Surface Reduced Iron (C4)  Recent Iron Reduction in Plowed Soils (C6)  Saturation Visible on Aquitation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Aquatic Invertebrates (B13)  Drainage Patte  Dry-Season W  Oxidized Rhizospheres along Living Roots (C3)  Thin Muck Sur  Presence of Reduced Iron (C4)  Recent Iron Reduction in Plowed Soils (C6)  Saturation Visible  Other (Explain in Remarks)  Shallow Aquita  FAC-Neutral T	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Aquatic Invertebrates (B13)  Drainage Patte  Dry-Season W  Oxidized Rhizospheres along Living Roots (C3)  Thin Muck Surface Reduced Iron (C4)  Recent Iron Reduction in Plowed Soils (C6)  Saturation Visible on Aquitation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Aquatic Invertebrates (B13)  Drainage Patte  Dry-Season W  Oxidized Rhizospheres along Living Roots (C3)  Thin Muck Sur  Presence of Reduced Iron (C4)  Recent Iron Reduction in Plowed Soils (C6)  Saturation Visible  Other (Explain in Remarks)  Shallow Aquita  FAC-Neutral T	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3)
	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
X Saturation (A3) Aquatic Invertebrates (B13) Drainage Patter   Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Dry-Season W   Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Thin Muck Surform Nuck Su	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Bydrology Present?	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
X Saturation (A3) Aquatic Invertebrates (B13) Drainage Patter   Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Dry-Season W   Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Thin Muck Surform Nuck Su	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Bydrology Present?	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches):  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Bydrology Present?	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)
Saturation (A3)	ater Table (C2) face (C7) ws (C8) ble on Aerial Imagery (C9) ard (D3) est (D5)

Project/Site: Redondo Beach Energy Project	City/County:Redo	ondo Beach/Los Angeles	Sampling Date:9	Jan. 2013
Applicant/Owner: AES Southland Development		State:CA	Sampling Point:	SP-05
Investigator(s): M. Fowler	Section, Township	p, Range:T4S, R15W, S01;	T4S, R14W, S0	6; T4S, R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	Local relief (conc	cave, convex, none): Concave	Slo	pe (%):~30
Subregion (LRR):C - Mediterranean California Lat: 3	- 3° 51' 06.31" N	Long: -118° 23' 35.4	6" W Datu	m: WGS84
Soil Map Unit Name: Chino silt loam		NWI classific	cation: None	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes	No (If no, explain in F	 Remarks.)	
		Are "Normal Circumstances"		No 🔘
	oroblematic?	(If needed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showin				atures, etc.
Hydrophytic Vegetation Present? Yes No (				
Hydric Soil Present? Yes No	Is the San	npled Area		
Wetland Hydrology Present? Yes   No   No	within a W	Vetland? Yes	No 💿	
Remarks: Fuel oil tank containment basin (location - 06).				
VEGETATION				
Absolute	e Dominant Indica	tor Dominance Test work	csheet:	
Tree Stratum (Use scientific names.) % Cove		I		
1. <u>N/A</u>		That Are OBL, FACW,		(A)
2		Total Number of Domir	nant	
3.		Species Across All Stra	ata: 0	(B)
4		Percent of Dominant S		
Sapling/Shrub Stratum	%	That Are OBL, FACW,	or FAC: 0	) % (A/B)
1. N/A		Prevalence Index wor	ksheet:	
2.		Total % Cover of:	Multipl	y by:
3.		OBL species	x 1 =	0
4		FACW species	x 2 =	0
5		FAC species FACU species	x 3 =	0
Total Cover:	%	UPL species	x 4 = x 5 =	0
1. N/A		Column Totals:	(A)	0 0 (B)
2.		Column Totals.	(A)	0 (B)
3.		Prevalence Index		
4.		Hydrophytic Vegetation		
5.		Dominance Test is		
6.		Prevalence Index i  Morphological Ada		oupporting
7			s or on a separate	
8. Total Cover:		Problematic Hydro	phytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum	%			
1. N/A		<sup>1</sup> Indicators of hydric so	oil and wetland hy	drology must
2.		be present.		
Total Cover:	%	Hydrophytic Vegetation		
% Bare Ground in Herb Stratum % % Cover of Biotic	Crust %		s No 📵	)
Remarks: No vegetation is present.				

US Army Corps of Engineers

Depth	 Matrix		oth needed to docu Red	ox Feature			α		,	
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	e <sup>3</sup>	Rema	rks
N/A										
11/11										
	-									
Type: C=C	oncentration, D=Dep	letion, RM	I=Reduced Matrix.	<sup>2</sup> Locatio	n: PL=Pore	Lining, RO	C=Root Ch	nannel, M=M	latrix.	
• .	es: Clay, Silty Clay, S					-				ny Sand, Sand
lydric Soil I	ndicators: (Applicab	le to all LR	RRs, unless otherwis	se noted.)			Indicat	ors for Prob	lematic Hydric So	ils:
Histosol			Sandy Red	-				cm Muck (A9	-	
Histic E	pipedon (A2)		Stripped N	//atrix (S6)			20	cm Muck (A1	10) ( <b>LRR B</b> )	
Black H	istic (A3)		Loamy Mu	ucky Minera	al (F1)		Re	educed Verti	c (F18)	
Hydroge	en Sulfide (A4)		Loamy Gl	eyed Matrix	(F2)			ed Parent Ma	` '	
Stratifie	d Layers (A5) (LRR (	<b>C</b> )		Matrix (F3)			Ot	her (Explain	in Remarks)	
	uck (A9) ( <b>LRR D</b> )			rk Surface	` '					
	d Below Dark Surfac	e (A11)		Dark Surfa	` '					
1	ark Surface (A12)			pressions (	(F8)		4			
	Mucky Mineral (S1)		Vernal Po	ols (F9)				-	ophytic vegetation	
	Gleyed Matrix (S4)						wet	iand nydroio	gy must be prese	nt.
	Layer (if present):									
Type:										
Depth (in Remarks: I	ches):	in, not ab	ole to obtain a soi	l sample.			Hydric	Soil Presen	t? Yes	No 💿
Remarks: I	Lined retention bas	in, not ab	ole to obtain a soi	l sample.			Hydric	Soil Presen	t? Yes 🔿	No (•)
Remarks: I	Lined retention bas		ole to obtain a soi	l sample.			-			
YDROLO Wetland Hy	OGY			l sample.			-	econdary Inc	dicators (2 or mor	e required)
YDROLO Wetland Hy Primary Indi	DGY rdrology Indicators: cators (any one indic		ficient)				-	econdary Ind	dicators (2 or mor arks (B1) ( <b>Riveri</b> n	e required)
YDROLO Wetland Hy Primary Indi Surface	DGY rdrology Indicators: cators (any one indicators) Water (A1)		ficient)	st (B11)			-	econdary Ind Water Ma	dicators (2 or mor arks (B1) ( <b>Riverin</b> t Deposits (B2) ( <b>R</b>	e required) e)
YDROLO Wetland Hy Primary Indi Surface X High Wa	oGY redrology Indicators: cators (any one indicators (A1) ater Table (A2)		ficient) Salt Crus	st (B11) ust (B12)	(040)		-	econdary Ind Water Ma Sediment	dicators (2 or mor arks (B1) ( <b>Riveri</b> n t Deposits (B2) ( <b>R</b> osits (B3) ( <b>Riveri</b> n	e required) e)
YDROLO Wetland Hy Primary Indi Surface X High Wa	OGY Idrology Indicators: cators (any one indicators) Water (A1) ater Table (A2) ion (A3)	ator is suff	ficient) Salt Crus Biotic Cr	st (B11) ust (B12) nvertebrate	` '		-	econdary Ind Water Ma Sediment Drift Depo	dicators (2 or mor arks (B1) ( <b>Riverin</b> t Deposits (B2) ( <b>R</b> posits (B3) ( <b>Riveri</b> n Patterns (B10)	e required) e) iverine) ne)
YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M	oGY drology Indicators: cators (any one indicators (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver	ator is suff	ficient) Salt Crus Biotic Cr Aquatic I Hydroge	st (B11) ust (B12) nvertebrate n Sulfide O	dor (C1)			econdary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas	dicators (2 or mor arks (B1) ( <b>Riverin</b> t Deposits (B2) ( <b>R</b> posits (B3) ( <b>Riveri</b> Patterns (B10) on Water Table (	e required) e) iverine) ne)
YDROLO Wetland Hy Primary Indi Surface X High Water M Water M Sedime	retention bas redrology Indicators: cators (any one indicators) Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver nt Deposits (B2) (No	ator is suff ine) nriverine)	ficient) Salt Crus Biotic Cr Aquatic I Hydroge Oxidized	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe	dor (C1) eres along	_		econdary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas Thin Muc	dicators (2 or mor arks (B1) ( <b>Riverin</b> t Deposits (B2) ( <b>R</b> osits (B3) ( <b>Riveri</b> Patterns (B10) on Water Table (k k Surface (C7)	e required) e) iverine) ne)
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YDROLO Wetland Hy Primary Indi Surface X High Water M Sedime Drift De Surface Inundati Water-S Field Obser	retention base described by the cology Indicators: cators (any one indicators: water (A1) ater Table (A2) from (A3) Marks (B1) (Nonriver ont Deposits (B2) (Nonriver one indicator) (Nonriver one in	ator is suffine) nriverine) rine) magery (B	ficient)  Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II S7) Other (E	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduct ron Reduct xplain in Re	dor (C1) eres along ed Iron (C4 ion in Plow emarks)	1)		econdary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas Thin Mucl Crayfish E Saturation Shallow A	dicators (2 or mor arks (B1) ( <b>Riveri</b> n t Deposits (B2) ( <b>R</b> posits (B3) ( <b>Riveri</b> n Patterns (B10) on Water Table ( k Surface (C7) Burrows (C8) n Visible on Aeria Aquitard (D3)	e required) e) iverine) ne)
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YDROLO Wetland Hy Primary Indi Surface X High Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P includes ca Describe Re	drology Indicators: cators (any one indicators) water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? Present? Y Present? Y Present? Y Present? Y Present? Y Present? Y	ator is suffine) nriverine) magery (B	ficient)  Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Other (E	st (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduct ron Reduct xplain in Re inches): inches):	dor (C1) eres along ed Iron (C4 ion in Plow emarks)  > 12"  N/A  N/A	ved Soils (0	ts (C3)	econdary Ind Water Ma Sediment Drift Depo Drainage Dry-Seas Thin Muci Crayfish E Saturation Shallow A FAC-Neu	dicators (2 or mor arks (B1) ( <b>Riverin</b> t Deposits (B2) ( <b>R</b> osits (B3) ( <b>Riverin</b> Patterns (B10) on Water Table (c k Surface (C7) Burrows (C8) n Visible on Aeria Aquitard (D3) tral Test (D5)	e required) e) liverine) ne) C2)

Applicant/Owner: AES Southland Development			unty: <u>Redondo</u>			≅9 Jan. 2013
				State:CA	Sampling Poin	t:SP-06
nvestigator(s):M. Fowler		Section	, Township, Ra	ange:T4S, R15W, S01;	T4S, R14W, S	806; T4S, R14V
andform (hillslope, terrace, etc.): Terrace (coastal)		Local re	elief (concave,	convex, none): Concave		Slope (%): ()
Subregion (LRR):C - Mediterranean California	Lat: 33°	51' 05	.05" N	Long: -118° 23' 38.23	3" W Da	atum: WGS84
Soil Map Unit Name: Chino silt loam				NWI classific		
Are climatic / hydrologic conditions on the site typical for this	time of ve	ar? Yes	No (			
	gnificantly			"Normal Circumstances"	,	No (
	aturally pro			eeded, explain any answe	· ·	
SUMMARY OF FINDINGS - Attach site map s						
		Jump	mig point i		, important	
	0					
•			s the Sample			
Wetland Hydrology Present? Yes No Remarks: Stormwater drainage, concrete banks.	) (O	V	vithin a Wetla	nd? Yes 💿	No 🔘	
VEGETATION	Abaduta	Domino	ant Indicator	Dominance Teet week	-chaof:	
	Absolute <u>% Cover</u>	Specie	ant Indicator s? Status	Number of Dominant S That Are OBL, FACW,	pecies	1 (A)
2.				- ₋⊢ Total Number of Domir	ant	
3.				Species Across All Stra		1 (B)
4.				Percent of Dominant S	oecies	
Total Cover Sapling/Shrub Stratum	: %			That Are OBL, FACW,		00.0 % (A/B)
1. <i>N/A</i>				Prevalence Index wor	ksheet:	
2.				Total % Cover of:	Mult	iply by:
3.				OBL species	x 1 =	0
4.				FACW species	15 x 2 =	30
5.				FAC species	x 3 =	0
Total Cover:	%			FACU species	x 4 =	0
Herb Stratum		<b>T</b> 7		UPL species	x 5 =	0
1. Agrostis gigantea 2.	15	Yes	FACW	Column Totals:	15 (A)	30 (B)
3.			<u> </u>	Prevalence Index	= B/A =	2.00
4.				Hydrophytic Vegetation	on Indicators:	
5.				Dominance Test is	>50%	
6.				× Prevalence Index i	s ≤3.0 <sup>1</sup>	
7.				Morphological Ada		
8.				data in Remark	•	,
Total Cover:	15 %			Problematic Hydro	priylic vegetalic	on (⊏xpiain)
Woody Vine Stratum				<sup>1</sup> Indicators of hydric so	il and wetland	hydrology must
1. <i>N/A</i>			<u> </u>	be present.	ni and welland	nydrology must
2Total Cover:	%			Hydrophytic Vegetation		
	of Biotic C		80 %		s 💿 No	

Profile Des	cription: (Describe	to the depth	needed to docur	nent the indicator o	or confirm	n the absence of	indicators.)
Depth (inches)	Matrix			x Features	1 ?	To43	Dancada
(inches)	Color (moist)		Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
0-3		100				Rocks	Rock fill placed in drain
3-12	10 YR 4/3	100				Sand	Saturated
				·			
-							
	-			·			
1 -	Concentration, D=Dep			<sup>2</sup> Location: PL=Pore	-		
<sup>3</sup> Soil Textur	es: Clay, Silty Clay, S	Sandy Clay, Lo	oam, Sandy Clay	Loam, Sandy Loam,	, Clay Loa	am, Silty Clay Loan	n, Silt Loam, Silt, Loamy Sand, Sand.
I	Indicators: (Applicabl	e to all LRRs,		•			Problematic Hydric Soilsื:
Histoso	` '		Sandy Redo	` '			k (A9) (LRR C)
	Epipedon (A2)		Stripped Ma	` '			k (A10) ( <b>LRR B</b> )
1 📖	listic (A3) en Sulfide (A4)			ky Mineral (F1) ved Matrix (F2)			Vertic (F18) nt Material (TF2)
	ed Layers (A5) ( <b>LRR C</b>	<b>:</b> )	Depleted M			<u> </u>	plain in Remarks)
l 🗀	luck (A9) ( <b>LRR D</b> )	• /		Surface (F6)		× 0 11.01 (2.1	,
	ed Below Dark Surface	e (A11)	Depleted D	ark Surface (F7)			
1 1 1	Oark Surface (A12)			ressions (F8)			
	Mucky Mineral (S1)		Vernal Pool	s (F9)			nydrophytic vegetation and
	Gleyed Matrix (S4)					wetland hy	drology must be present.
1	Layer (if present):						
Type:							
Depth (ir	<i>'</i>					Hydric Soil Pro	9
							ever, the soil is saturated and may
b	e considered an art	ificial hydri	e soil. The soil	meets criteria 3 an	d meets	the definition of	a hydric soil.
HYDROLO	OGY						
	ydrology Indicators:					Seconda	ry Indicators (2 or more required)
1	icators (any one indica	ator is sufficio	nt)			· · · · · · · · · · · · · · · · · · ·	er Marks (B1) ( <b>Riverine</b> )
	, ,	ator is sufficie		(D11)		⊔	
L	e Water (A1) /ater Table (A2)		Salt Crust Biotic Crus				ment Deposits (B2) ( <b>Riverine</b> ) Deposits (B3) ( <b>Riverine</b> )
I 🗀 -	tion (A3)			vertebrates (B13)			nage Patterns (B10)
	Marks (B1) ( <b>Nonriveri</b>	ne)	·	Sulfide Odor (C1)			Season Water Table (C2)
	ent Deposits (B2) ( <b>Nor</b>	,		Rhizospheres along l	Living Ro		Muck Surface (C7)
l —	eposits (B3) (Nonriver			of Reduced Iron (C4			fish Burrows (C8)
l —	e Soil Cracks (B6)			n Reduction in Plow	,		ration Visible on Aerial Imagery (C9)
l —	tion Visible on Aerial I	magery (B7)		olain in Remarks)	(	·	low Aquitard (D3)
1 🖳	Stained Leaves (B9)	3 7 ( )		,			-Neutral Test (D5)
Field Obse							,
Surface Wa	iter Present? Y	es ( No	<ul><li>Depth (in</li></ul>	ches):			
Water Table		es No		<i>′</i> ———			
Saturation F		_	Depth (in	<i>'</i>			
	apillary fringe)	110			Wetl	and Hydrology P	resent? Yes 💿 No 🔘
Describe Re	ecorded Data (stream	gauge, monit	oring well, aerial	photos, previous insp	pections),	if available:	
Remarks: S	aturation is present	below the r	ock layer.				
US Army Corr	os of Engineers						

Project/Site: Redondo Beach Energy Project	Cı	ty/County:Redondo	o Beach/Los Angeles	Sampling Date:	Jan. 2013
Applicant/Owner: AES Southland Development			State:CA	Sampling Point:	SP-07
Investigator(s): M. Fowler	Se	ection, Township, R	ange:T4S, R15W, S01;	Γ4S, R14W, S	06; T4S, R14
Landform (hillslope, terrace, etc.): Terrace (coastal)		ocal relief (concave	, convex, none): Concave	Slo	ppe (%): ()
Subregion (LRR):C - Mediterranean California	Lat: 33° 5	1' 03.27" N	Long: -118° 23' 35.65	" W Datu	um: WGS84
Soil Map Unit Name: Chino silt loam			NWI classifica		
Are climatic / hydrologic conditions on the site typical fo	r this time of year	? Yes ( No			
Are Vegetation Soil or Hydrology	significantly di	_	"Normal Circumstances" p	,	No 🔘
Are Vegetation Soil X or Hydrology	naturally probl		needed, explain any answer	_	, 140 ()
		,	•	,	
SUMMARY OF FINDINGS - Attach site ma	ap showing s	ampling point	locations, transects,	important fe	atures, etc.
Hydrophytic Vegetation Present? Yes	No 💿				
Hydric Soil Present? Yes    Yes	No 💮	Is the Sample	ed Area		
Wetland Hydrology Present? Yes  Remarks: Fuel oil tank containment basin (locati	No 🔘	within a Wetla	and? Yes 🔘	No 💿	
VEGETATION					
		ominant Indicator	Dominance Test works	sheet:	
Tree Stratum (Use scientific names.)  1. N/A	<u>% Cover</u> S	pecies? Status	Number of Dominant Sp That Are OBL, FACW, o		) (A)
2. 3.	· · · · · · · · · · · · · · · · · · ·	·	Total Number of Domina Species Across All Strat		) (B)
4.			Percent of Dominant Sp	ecies	
Total C Sapling/Shrub Stratum	Cover: %		That Are OBL, FACW, o		) % (A/B)
1. <i>N/A</i>			Prevalence Index work	sheet:	
2.			Total % Cover of:	Multip	ly by:
3.			OBL species	x 1 =	0
4.		<del></del> -	FACW species	x 2 =	0
5.			FAC species	x 3 =	0
Total C	over: %		FACU species	x 4 =	0
Herb Stratum			UPL species	x 5 =	0
1. <u>N/A</u> 2.			Column Totals:	(A)	0 (B)
3.			Prevalence Index	= B/A =	
4.			Hydrophytic Vegetatio	n Indicators:	
5.	<del></del>		Dominance Test is		
6.			Prevalence Index is	≤3.0 <sup>1</sup>	
7.			Morphological Adap		
8.		<del></del>	data in Remarks	•	
Total C	over: %		Problematic Hydrop	hytic Vegetation	' (Explain)
Woody Vine Stratum	, ,		1 Indicators of budgio aci	l and watland by	idealagui mariat
1. <u>N/A</u>			<ul><li>Indicators of hydric soi</li><li>be present.</li></ul>	i and welland ny	drology must
2			Hydrophytic		
ZTotal C	cover: %		Vegetation		

	scription: (Describe	to the depth n		ment the in	dicator	or confirm	n the absend	ce of indicators.)
Depth (inches)	Matrix Color (moist)	% (	Color (moist)	x Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
0-4	10 YR 2/2	100	, ,				Sand	
4-8	10 YR 4/3	100					Sand	Saturated
8-12	10 YR 4/2	100					Sand	Saturated & high water table
	- 10 1 K 4/2						Sand	
-	· ·	· —— —						Bottom of pit
	-							
	_							
	Concentration, D=Dep							nnel, M=Matrix.
					dy Loam,	, Clay Loa		Loam, Silt Loam, Silt, Loamy Sand, Sand.
Histoso	Indicators: (Applicable (A1)	ie to ali LKKS, t	Sandy Red	-				n Muck (A9) ( <b>LRR C</b> )
	Epipedon (A2)		Stripped M	` '				n Muck (A10) ( <b>LRR B</b> )
	Histic (A3)		Loamy Mu	cky Mineral	(F1)			uced Vertic (F18)
Hydrog	jen Sulfide (A4)		Loamy Gle	yed Matrix (	F2)		Red	Parent Material (TF2)
l 🗀	ed Layers (A5) ( <b>LRR (</b>	<b>S</b> )	Depleted N				X Othe	er (Explain in Remarks)
	luck (A9) (LRR D)	(* 4 4 )		k Surface (F	,			
· — ·	ed Below Dark Surface	e (A11)		ark Surface	` '			
	Dark Surface (A12) Mucky Mineral (S1)		Vernal Poo	ressions (F	0)		<sup>4</sup> Indicato	rs of hydrophytic vegetation and
	Gleyed Matrix (S4)		vernari oc	13 (1 3)				nd hydrology must be present.
	Layer (if present):							, , ,
Type:								
Depth (ii	nches):						Hydric So	oil Present? Yes   No
Remarks: S	Soil is saturated at 4	". The entire	site is located	on artifici	al fill.; l	nowever	the soil is	saturated and may be considered an
1	rtificial hydric soil.				ĺ		,	,
	·							
	201							
HYDROLO							0	
	ydrology Indicators:		1)				Sec	condary Indicators (2 or more required)
	licators (any one indic	ator is sufficien	,	(5.44)			— Ц	Water Marks (B1) (Riverine)
l 🖳	e Water (A1)		Salt Crus					Sediment Deposits (B2) (Riverine)
<u>  -   -   -   -   -   -   -   -   -  </u>	/ater Table (A2)		Biotic Cru		(D40)			Drift Deposits (B3) (Riverine)
النا ا	tion (A3)	· \	·	vertebrates	,			Drainage Patterns (B10)
	Marks (B1) (Nonriver	,		Sulfide Odd Rhizosphere		Livina Da	oto (C2) 🖂	Dry-Season Water Table (C2)
	ent Deposits (B2) ( <b>No</b> eposits (B3) ( <b>Nonrive</b> )	•		of Reduced	•	·	ois (C3)	Thin Muck Surface (C7) Crayfish Burrows (C8)
	e Soil Cracks (B6)	ille)		on Reduction	`	,	C6)	Saturation Visible on Aerial Imagery (C9)
	tion Visible on Aerial I	mageny (R7)		plain in Ren		eu Solis (	C0)	Shallow Aquitard (D3)
	Stained Leaves (B9)	magery (br)		piairi ir rteri	narks)			FAC-Neutral Test (D5)
Field Obse	` '							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		es No (	<ul><li>Depth (ir</li></ul>	iches):				
Water Table		es 🕟 No (	~	· · · · · · · · · · · · · · · · · · ·	12"			
Saturation I				· · · · · · · · · · · · · · · · · · ·	8"			
(includes ca	apillary fringe)	es   No (	<u> </u>	· <del></del>		I	-	ogy Present? Yes   No
Describe R	ecorded Data (stream	gauge, monito	ring well, aerial	photos, pre	vious ins <sub>l</sub>	pections),	if available:	
Remarks:								
US Army Corr	os of Engineers							

Project/Site: Redondo Beach Energy Project		City/County	Redondo	Beach/Los Angeles	Sampl	ing Date:9 Ja	an. 2013
Applicant/Owner: AES Southland Development				State:CA	— Sampli	ing Point:SP-	.08
Investigator(s):M. Fowler		Section, To	wnship, Ra	nge:T4S, R15W, S0	 1; T4S, R	.14W, S <del>06</del> ;	T4S, R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)		Local relie	f (concave, o	convex, none): Conca	ave	Slope	(%): ()
Subregion (LRR):C - Mediterranean California	Lat: 33°	50' 56.95	" N	Long: -118° 23' 34	1.59" W	Datum:	WGS84
Soil Map Unit Name: Chino silt loam				NWI class	sification: N		
Are climatic / hydrologic conditions on the site typical for this ti	ime of ye	ar? Yes	No (	(If no, explain i	— n Remarks	.)	
Are Vegetation Soil or Hydrology sign	nificantly	disturbed?	Are "	Normal Circumstance	s" present?	Yes 🕟	No 🔘
	urally pro	blematic?		eded, explain any ans			
SUMMARY OF FINDINGS - Attach site map sh							ures, etc.
Hydrophytic Vegetation Present? Yes No	•						
Hydric Soil Present? Yes   No		ls ti	ne Sampled	Area			
Wetland Hydrology Present? Yes   No		with	nin a Wetlar	nd? Yes(	) No	o	
Remarks: Fuel oil tank containment basin (location - 0)	8).						
VEGETATION							
	bsolute	Dominant	Indicator	Dominance Test w	orksheet:		
	6 Cover	Species?	Status	Number of Dominan			
1. <u>N/A</u>				That Are OBL, FAC	W, or FAC:	1	(A)
2				Total Number of Do	minant		
3				Species Across All S	Strata:	2	(B)
4				Percent of Dominan			
Sapling/Shrub Stratum  Total Cover:	%			That Are OBL, FAC	W, or FAC:	50.0	% (A/B)
1. N/A				Prevalence Index v	vorksheet:		
2.				Total % Cover of	of:	Multiply b	y:
3.				OBL species		x 1 =	0
4				FACW species		x 2 =	10
5				FAC species		x 3 =	0
Total Cover:	%			FACU species		x 4 =	0
1. Sonchus oleraceus	12	Yes	UPL	UPL species	12	x 5 =	60
2. Agrostis gigantea	5		FACW	Column Totals:	17	(A)	70 (B)
3.				Prevalence Inc	dex = B/A	=	4.12
4.				Hydrophytic Veget	ation Indic	ators:	
5.				Dominance Tes	t is >50%		
6.				Prevalence Inde			
7.				Morphological A		s¹ (Provide su a separate sh	
8.				Problematic Hy			<i>'</i>
Total Cover: Woody Vine Stratum	17 %				a. op,	0901411011 (=	
1. N/A				<sup>1</sup> Indicators of hydric	soil and v	vetland hydro	ology must
2.				be present.		•	
Total Cover:	%			Hydrophytic			
% Bare Ground in Herb Stratum 83 % % Cover o	f Biotic C	rust ()	%	Vegetation Present?	Yes (	No 💿	
Remarks:							

Profile Des	scription: (Describe	to the depth n	eeded to docur	nent the indicator	or confir	m the absence of	indicators.)
Depth	Matrix			x Features	1 2	Tautum 3	Damande
(inches)	Color (moist)		Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
0-3	10 YR 3/2	100				Sand	Saturation present
3-12	10 YR 4/3	95					
	10 YR 2/1	5					Oil residue
					-		
	-			· — — — — — — — — — — — — — — — — — — —		-	
	-			· — — — — — — — — — — — — — — — — — — —			-
	_						
<sup>1</sup> Type: C=0	Concentration, D=Dep	letion, RM=Re	duced Matrix.	<sup>2</sup> Location: PL=Pore	E Lining, F	RC=Root Channel,	M=Matrix.
<sup>3</sup> Soil Textur	res: Clay, Silty Clay, S	Sandy Clay, Lo	am, Sandy Clay	Loam, Sandy Loam	, Clay Lo	am, Silty Clay Loar	m, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicab	le to all LRRs, i	unless otherwise	noted.)		Indicators for	Problematic Hydric Soils:
Histoso	` '		Sandy Redo	` '			k (A9) ( <b>LRR C</b> )
	Epipedon (A2)		Stripped Ma	` '			k (A10) ( <b>LRR B</b> )
	Histic (A3)			ky Mineral (F1)			Vertic (F18)
	gen Sulfide (A4) ed Layers (A5) ( <b>LRR (</b>	~)	Depleted M	ed Matrix (F2)		<u> </u>	nt Material (TF2) plain in Remarks)
	fuck (A9) ( <b>LRR D</b> )	<b>J</b> )		Surface (F6)		Z Other (LX	piair iir Kemarks)
	ed Below Dark Surfac	e (A11)		ark Surface (F7)			
	Dark Surface (A12)	,		ressions (F8)			
Sandy	Mucky Mineral (S1)		Vernal Pool	s (F9)		<sup>4</sup> Indicators of	hydrophytic vegetation and
Sandy	Gleyed Matrix (S4)					wetland hy	drology must be present.
Restrictive	Layer (if present):						
Type:							
Depth (i	nches):					Hydric Soil Pr	esent? Yes 💿 No 🔿
Remarks: 7	The entire site is loc	ated on artifi	cial fill. The so	oil is saturated an	d may be	e considered an a	rtificial hydric soil. The soil meets
C	criteria 3 and meets	the definition	n of a hydric so	oil.			
	201						
HYDROL							
	ydrology Indicators:						ry Indicators (2 or more required)
Primary Ind	dicators (any one indic	ator is sufficien	it)			Wat	er Marks (B1) ( <b>Riverine</b> )
	e Water (A1)		Salt Crust	, ,			ment Deposits (B2) (Riverine)
🖭 -	Vater Table (A2)		Biotic Crus				Deposits (B3) (Riverine)
ا ت	tion (A3)			vertebrates (B13)			nage Patterns (B10)
	Marks (B1) (Nonriver	,		Sulfide Odor (C1)			Season Water Table (C2)
	ent Deposits (B2) (No			Rhizospheres along			Muck Surface (C7)
	eposits (B3) (Nonrive	rine)		of Reduced Iron (C	,		rfish Burrows (C8)
	e Soil Cracks (B6)	(5-1)		n Reduction in Plov	ved Soils	· / 🗀	ration Visible on Aerial Imagery (C9)
L	tion Visible on Aerial	magery (B7)	Other (Exp	olain in Remarks)			low Aquitard (D3)
	Stained Leaves (B9)					FAC	-Neutral Test (D5)
Field Obse							
		es No	_	· —			
Water Table	e Present? Y	es 🕟 No	Depth (in	ches):>8"			
Saturation		es 💿 No	Depth (in	ches):	Wet	land Hydrology P	resent? Yes   No
	apillary fringe) ecorded Data (stream	gauge monito	ring well, aerial i	photos previous ins			resent: res 😉 No
Booonbore	Soorada Bata (otroani	gaago, mome	ing won, aonar	priotos, proviodo irie	,pootiono,	, ii availabio.	
Domarke: 1	V-4:	0!! 11 41	C	.:1:4			
Remarks.	Water is present at 8	s" below the s	surface in the s	011 ptt.			
US Army Cor	ps of Engineers						

Project/Site: Redondo Beach Energy Project	City/Co	unty:Redondo	Beach/Los Angeles	Sampling Date	:9 Jan. 20	013
Applicant/Owner: AES Southland Development			State:CA	Sampling Point	t:SP-09	
Investigator(s): M. Fowler	Section	ı, Township, Ra	nge:T4S, R15W, S01;	T4S, R14W, S	306; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	Local r	elief (concave,	convex, none): Concave	. S	Slope (%): (	0
Subregion (LRR):C - Mediterranean California Lat	 nt: 33° 51' 10	00.12" N	Long: -118° 23' 35.79	9" W Da	tum: WG	S84
Soil Map Unit Name: Chino silt loam			NWI classific	cation: None		
Are climatic / hydrologic conditions on the site typical for this time	of year? Ye	s ( No (	(If no, explain in F	Remarks.)		
	cantly disturbe		'Normal Circumstances"	present? Yes	<ul><li>No</li></ul>	
	ally problemati		eeded, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map show					eatures	, etc.
Hydrophytic Vegetation Present? Yes No (•						
Hydric Soil Present? Yes No (•		ls the Sampled	Area			
Wetland Hydrology Present? Yes   No		within a Wetlar	nd? Yes 🔘	No 💿		
Remarks: Fuel oil tank containment basin (location - 07U	i).					
VEGETATION						
Absolution Tree Stratum (Use scientific names.) % Columbia	olute Domin Cover Specie	ant Indicator es? Status	Dominance Test work			
1. N/A			Number of Dominant S That Are OBL, FACW,		0	(A)
2.			-		O	(
3.			<ul> <li>Total Number of Domir Species Across All Stra</li> </ul>		0	(B)
4.					U	,
Total Cover:	%		Percent of Dominant S That Are OBL, FACW,		0 %	(A/B)
Sapling/Shrub Stratum				1.1	,,,	` ′
1. N/A			Prevalence Index wor  Total % Cover of:		iply by:	
2			OBL species	x 1 =	<u>іріу бу.</u> 0	-
4.			FACW species	x 2 =	0	
5.			FAC species	x 3 =	0	
Total Cover:	0/0		FACU species	x 4 =	0	
Herb Stratum			UPL species	x 5 =	0	
1. <u>N/A</u>			Column Totals:	(A)	0	(B)
2.			Dravalance Index	- D/A -		
3.			Prevalence Index  Hydrophytic Vegetation			
5.			Dominance Test is			
6.		<u>.</u>	Prevalence Index i			
7.			Morphological Ada		de support	ing
8.		<u> </u>	data in Remark	s or on a separa	te sheet)	
Total Cover:	%		Problematic Hydro	phytic Vegetatio	n¹ (Explair	۱)
Woody Vine Stratum	70		1			
1. <u>N/A</u>			<sup>1</sup> Indicators of hydric so be present.	oil and wetland h	nydrology	must
2						
Total Cover:	%		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum % Cover of Bi	iotic Crust	%		s No	•	
Remarks: No vegetation is present.			<u> </u>			

Profile Des	scription: (Describe	to the depth	needed to docur	nent the indicator or	confirm	the absence of	indicators.)
Depth	Matrix			Features T		<b>-</b>	
(inches)	Color (moist)	%	Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
0-2	10 YR 3/1					Sand	
2-2.5	10 YR 2/1	100				Sand	Oil stain
2.5-5	10 YR 3/2	100				Sand	
5-8	5 YR 2.5/1	100				Sand	Oil smell
	- <del>3 TK 2.3/T</del>					Sund	· <del></del>
		· — — —					Bottom of pit
	_						
	_						
<sup>1</sup> Type: C=0	Concentration, D=Dep	letion, RM=R	educed Matrix.	<sup>2</sup> Location: PL=Pore L	ining, RC	C=Root Channel,	M=Matrix.
<sup>3</sup> Soil Textur	res: Clay, Silty Clay, S	Sandy Clay, L	oam, Sandy Clay	Loam, Sandy Loam, 0	Clay Loar	n, Silty Clay Loai	m, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicab	le to all LRRs	, unless otherwise	noted.)		Indicators for	Problematic Hydric Soils:
Histoso	, ,		Sandy Redo	` '			ck (A9) ( <b>LRR C</b> )
I —	Epipedon (A2)		Stripped Ma	, ,			ck (A10) ( <b>LRR B</b> )
	Histic (A3) gen Sulfide (A4)			ky Mineral (F1) red Matrix (F2)			Vertic (F18) nt Material (TF2)
	ed Layers (A5) ( <b>LRR (</b>	:)	Depleted M				plain in Remarks)
	fluck (A9) ( <b>LRR D</b> )	• )		Surface (F6)			plant in remarko)
	ed Below Dark Surfac	e (A11)	Depleted Da	ark Surface (F7)			
Thick [	Dark Surface (A12)		Redox Depi	ressions (F8)			
1 🗀 -	Mucky Mineral (S1)		Vernal Pool	s (F9)			hydrophytic vegetation and
	Gleyed Matrix (S4)					wetland hy	drology must be present.
1	Layer (if present):						
Type:							
Depth (i	<i>'</i>					Hydric Soil Pr	esent? Yes No
Remarks: I	Fuel oil residue in b	ottom of the	e soil pit at 8", a	romatic scent.			
HYDROLO	nev						
						Casanda	m. In disastana (2) an manusana manusima di
1	ydrology Indicators:						ry Indicators (2 or more required)
	dicators (any one indic	ator is sufficie	,	(F. 4.4)		🖂	er Marks (B1) (Riverine)
	e Water (A1)		Salt Crust				ment Deposits (B2) (Riverine)
	Vater Table (A2)		Biotic Crus				Deposits (B3) (Riverine)
🔼	tion (A3)	· \		vertebrates (B13)			nage Patterns (B10)
	Marks (B1) (Nonriver	,		Sulfide Odor (C1) Rhizospheres along Liv	ina Boot		Season Water Table (C2)  Muck Surface (C7)
l	ent Deposits (B2) ( <b>No</b> ı eposits (B3) ( <b>Nonrive</b> ı			of Reduced Iron (C4)	ilig Roo		rfish Burrows (C8)
-	e Soil Cracks (B6)	iiie)		n Reduction in Plowed	l Soile (C		rration Visible on Aerial Imagery (C9)
	tion Visible on Aerial I	magery (R7)		olain in Remarks)	) Siloc (C	· 🗀	llow Aquitard (D3)
	Stained Leaves (B9)	magory (Dr)	Outor (EX	nam m remarkoj			-Neutral Test (D5)
Field Obse							Troducti Foot (Bo)
		es 🔘 No	Depth (inc	rhes).			
Water Table		_	Depth (in	· —			
Saturation				· ————	_		
	apillary fringe)	es 💿 No	Depth (in		Wetla	and Hydrology P	resent? Yes   No
	ecorded Data (stream	gauge, moni	toring well, aerial p	ohotos, previous inspe	ctions), i	f available:	**************************************
Remarks: S	Saturation/moistness	s is present.					
		1					
US Army Cor	ps of Engineers						

Project/Site: Redondo Beach Energy Project		City/Co	ounty:Redondo	Beach/Los Angele	es Sa	mpling Date	9 Jan. 20	13
Applicant/Owner: AES Southland Development				State:CA	Sa	mpling Point	SP-10	
nvestigator(s):M. Fowler		Section	n, Township, Ra	ange:T4S, R15W, S	01; T4S	s, R14W, S	06; T4S,	R14V
andform (hillslope, terrace, etc.): Terrace (coastal)		Local r	relief (concave,	convex, none):Conc	ave	S	ope (%): ()	)
Subregion (LRR):C - Mediterranean California	Lat: 33	° 51' 00	0.92" N	Long: -118° 23' 3	34.30" V	V Da	tum: WGS	S84
Soil Map Unit Name: Chino silt loam				NWI cla	ssificatio	n: None		
Are climatic / hydrologic conditions on the site typical for th	is time of ve	ear? Ye	s ( No (	(If no, explain	in Rema	nrks.)		
	significantly			"Normal Circumstand	es" pres	ent? Yes	No	$\circ$
	naturally pr			eeded, explain any ar	•			
SUMMARY OF FINDINGS - Attach site map			•			•	eatures,	etc.
<u>.</u>	No 💿		<u> </u>	<u> </u>				
	No (		Is the Sample	d Area				
	No O		within a Wetla		$\circ$	No (•)		
Remarks: Fuel oil tank containment basin (location	- 07W).							
VEGETATION								
Tree Stratum (Use scientific names.)	Absolute % Cover		ant Indicator es? Status	Dominance Test				
1. <i>N/A</i>	70 0010.	_ороок		Number of Domina That Are OBL, FA			0	(A)
2.				-	•			` '
3.				Total Number of D Species Across All			1	(B)
4.				Paraent of Domina	nt Chaoi	20		. ,
Total Cove	er: %			<ul><li>Percent of Domina</li><li>That Are OBL, FAG</li></ul>	•		0.0 %	(A/B)
Sapling/Shrub Stratum				Prevalence Index	worksh			
1. <i>N/A</i> 2.				Total % Cover			ply by:	
3.		-		OBL species	01.	x 1 =	0	-
4.	_			FACW species	8	x 2 =	16	
5.				FAC species	O	x 3 =	0	
Total Cove	er: %			FACU species		x 4 =	0	
Herb Stratum				UPL species	45	x 5 =	225	
1. Sonchus oleraceus	45	Yes	UPL	Column Totals:	53	(A)	241	(B)
2. Agrostis gigantea	8	No	FACW	- Dravalance I	ndov = F	)/A —	4.55	
3. Trifolium sp.	5	No		Prevalence I			4.55	
4.				Dominance Te				
5.				Prevalence In				
6. 7.				Morphological			e supportir	na
8.	_					on a separa		
Total Cove	er: 50 av			Problematic H	ydrophyt	ic Vegetatio	n¹ (Explain	)
Woody Vine Stratum	er: 58 %							
1. <i>N/A</i>				<sup>1</sup> Indicators of hydr be present.	ic soil ar	nd wetland h	nydrology n	nust
2								
Total Cove	er: %			Hydrophytic Vegetation				
	or of Riotic (	Crust	%	Present?	Yes (	No (	•	
% Bare Ground in Herb Stratum % % Cove	of Diotic t		/0	1.1000		·		

Depth	Matrix			x Features		<b>-</b> . 3	<b>-</b> .
inches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
0-8	10 YR 3/2	100				Sand	Saturated
							Bottom of pit
	_						
	-					-	
	-						
	_						
Type: C=0	 Concentration, D=Dep	letion, RM=I	Reduced Matrix.	Location: PL=Po	re Linina. F	RC=Root Channe	el. M=Matrix.
• •	•				-		am, Silt Loam, Silt, Loamy Sand, Sa
ydric Soil	Indicators: (Applicab	le to all LRR	s, unless otherwis	e noted.)		Indicators fo	or Problematic Hydric Soils:
Histoso	ol (A1)		Sandy Redo	ox (S5)			uck (A9) ( <b>LRR C</b> )
	Epipedon (A2)		Stripped M	latrix (S6)		2 cm Mi	uck (A10) ( <b>LRR B</b> )
	Histic (A3)			cky Mineral (F1)			ed Vertic (F18)
	gen Sulfide (A4)			eyed Matrix (F2)			rent Material (TF2)
	ed Layers (A5) (LRR	C)	Depleted N	` '			Explain in Remarks)
	fluck (A9) (LRR D)	a (A11)		k Surface (F6)			
	ed Below Dark Surfac Dark Surface (A12)	e (ATT)		Dark Surface (F7) Dressions (F8)			
	Mucky Mineral (S1)		Vernal Poo			<sup>4</sup> Indicators o	of hydrophytic vegetation and
	Gleyed Matrix (S4)		Venturi oc	) (1 0)			hydrology must be present.
	Layer (if present):						,
	-uju ( p. uuu).						
Type:							
Type:	nches):					Hydric Soil I	Procent? Vac A No
Depth (i	<u> </u>	may ha arti	ficial hydric soi	l Ponded water i	c nrecent	Hydric Soil F	<u> </u>
Depth (i	nches):Soils are saturated,	may be arti	ficial hydric soi	l. Ponded water i	s present :	-	<u> </u>
Depth (i	<u> </u>	may be arti	ficial hydric soi	l. Ponded water i	s present :	-	<u> </u>
Depth (i	<u> </u>	may be arti	ficial hydric soi	l. Ponded water i	s present a	-	<u> </u>
Depth (i	Soils are saturated,	may be arti	ficial hydric soi	l. Ponded water i	s present a	-	<u> </u>
Depth (in the control of the control	Soils are saturated,		ficial hydric soi	l. Ponded water i	s present :	and most likely	meets criteria 3.
Depth (ii	Soils are saturated,  OGY  ydrology Indicators:			l. Ponded water i	s present a	and most likely	dary Indicators (2 or more required)
Depth (i	Soils are saturated,  OGY  ydrology Indicators: licators (any one indic		ient)		s present a	second	dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Depth (ii lemarks: §  /DROL( /etland H rimary Ind  Surface	OGY ydrology Indicators: licators (any one indicators (Water (A1)		ient) Salt Crus	t (B11)	s present :	Second Wa	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Depth (ii lemarks: §  /DROLO /etland H rimary Ind Surface High W	OGY ydrology Indicators: licators (any one indicators (A1) //ater Table (A2)		ient) Salt Crus Biotic Cru	t (B11) ust (B12)	s present :	Second War Se	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine)
Depth (ii Depth	OGY ydrology Indicators: licators (any one indicators (A1) //ater Table (A2) tion (A3)	ator is suffic	ient) Salt Crus Biotic Cru Aquatic Ir	t (B11) ist (B12) nvertebrates (B13)	s present a	Second Second Second Dri	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10)
Depth (ii demarks: §  POROLO Vetland H rimary Ind Surface High W Satura Water	OGY ydrology Indicators: dicators (any one indicators (A1) //ater Table (A2) tion (A3) Marks (B1) (Nonriver	ator is suffic	ient) Salt Crus Biotic Cru Aquatic Ir	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1)		Second Second Second Dri Dri	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
Depth (ii Depth (ii Demarks: §  Primary Ind Surface High W Satura Water Sedime	OGY ydrology Indicators: licators (any one indice e Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverent Deposits (B2) (No	ator is suffic ine) nriverine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon	g Living Ro	Second Second Second Dri Dri Dri ots (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7)
Depth (ii Remarks: S  YDROLO  Vetland H  Primary Ind  Surface  High W  Satura  Water  Sedime  Drift De	DGY ydrology Indicators: licators (any one indice Water (A1) //ater Table (A2) tion (A3) Marks (B1) (Nonriverent Deposits (B2) (Nonrivereposits (B3) (Nonr	ator is suffic ine) nriverine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (G	g Living Ro	Second  Second  Second  Dri  Dri  Dri  Crists (C3)  Th	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8)
Depth (ii Remarks: S  YDROLO  Vetland H Trimary Ind  K Surface K High W K Satura Water Sedime Drift De Surface	DGY ydrology Indicators: licators (any one indicators (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverent Deposits (B2) (Noeposits (B3) (Nonriverence Soil Cracks (B6)	ine) nriverine) rine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Control (C	g Living Ro	Second Second Second Dri Dri Dri Cots (C3) Sa	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (C
Depth (ii demarks: §  /DROLO /etland H rimary Ind Surface Use Satura Use Sedime Surface Surface Inunda	DGY ydrology Indicators: licators (any one indicators (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverent Deposits (B2) (Noeposits (B3) (Nonriverent Deposits (B6) (Nonriverent Dep	ine) nriverine) rine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (G	g Living Ro	Second   Wa   Se   Dri   Dr.   Cr.   Cf.   Sa   Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) din Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3)
Pepth (ii Remarks: §  Popth (ii Remarks: §	OGY ydrology Indicators: dicators (any one indicators (any one indicator) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriver) ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aerial Stained Leaves (B9)	ine) nriverine) rine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Control (C	g Living Ro	Second   Wa   Se   Dri   Dr.   Cr.   Cf.   Sa   Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) turation Visible on Aerial Imagery (C
Depth (ii Remarks: S  POROLO Vetland H Trimary Ind Surface Satura Water Sedime Drift De Surface Ununda Water- ield Obse	DGY ydrology Indicators: dicators (any one indicators (any one indicators (any one indicators) dater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver es Soil Cracks (B6) tion Visible on Aerial Stained Leaves (B9)	ine) nriverine) rine)	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plo	g Living Ro	Second   Wa   Se   Dri   Dr.   Cr.   Cf.   Sa   Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) din Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3)
Depth (ii Remarks: S  POROLO Vetland H Trimary Ind Surface Satura Water Sedime Drift De Surface Ununda Water- ield Obse	DGY ydrology Indicators: dicators (any one indicators (any one indicators (any one indicators) dater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver es Soil Cracks (B6) tion Visible on Aerial Stained Leaves (B9)	ine) nriverine) rine)	ient) Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plo	g Living Ro	Second   Wa   Se   Dri   Dr.   Cr.   Cf.   Sa   Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) din Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3)
Depth (ii Remarks: S  YDROLO  Vetland H Trimary Ind  Surface  Water  Drift De  Surface  Ununda  Water- ield Obse	DGY ydrology Indicators: licators (any one indicators (any one indicators) water Table (A2) tion (A3) Marks (B1) (Nonriverse (B2) (Nonriverse (B3) (Nonriverse (B3) (Nonriverse (B4) (Nonriverse	ine) nriverine) rine) Imagery (B7)	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks)	g Living Ro	Second   Wa   Se   Dri   Dr.   Cr.   Cf.   Sa   Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) din Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3)
Depth (ii Remarks: S  YDROLO Vetland H Trimary Ind Surface Water Sedime Surface Ununda Water- ield Obse	DGY ydrology Indicators: dicators (any one indicators (any one ind	ine) nriverine) rine) Imagery (B7) (es • N	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches):	g Living Ro C4) wed Soils	Second  Second  Second  Dri  Dri  Cri  (C6)  Sa  FA	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
Depth (ii Remarks: S  YDROLO Vetland H Trimary Ind Surface Water Sedime Drift De Surface Undes called Obse	DGY ydrology Indicators: licators (any one indicators (any one indicators) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverse) ent Deposits (B2) (Nonriverse) ent Oracks (B6) tion Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present? apillary fringe)	ine) nriverine) rine) Imagery (B7) (es  Nover No	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches): chches):	g Living Ro C4) wed Soils	Second Wa Se Dri Dri Dri Cri (C6) Sa Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) diment Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) din Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3)
Depth (ii Remarks: S  YDROLO  Vetland H Primary Ind Surface Water Sedime Drift De Surface Water- Sedime Curface Water- Surface Water- Surface Curface Water- Surface Water-	DGY ydrology Indicators: dicators (any one indicators (any one ind	ine) nriverine) rine) Imagery (B7) (es  Nover No	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches): chches):	g Living Ro C4) wed Soils	Second Wa Se Dri Dri Dri Cri (C6) Sa Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
Primary Indix Saturation Inunda Water-Field Obse	DGY ydrology Indicators: licators (any one indicators (any one indicators) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverse) ent Deposits (B2) (Nonriverse) ent Oracks (B6) tion Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present? apillary fringe)	ine) nriverine) rine) Imagery (B7) (es  Nover No	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches): chches):	g Living Ro C4) wed Soils	Second Wa Se Dri Dri Dri Cri (C6) Sa Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
Depth (ii Remarks: S  YDROLO  Vetland H Primary Ind Surface Water Sedime Drift De Surface Ununda Water- Field Obse Surface Water Table Saturation I Includes ca	DGY ydrology Indicators: licators (any one indicators (any one indicators) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverse) ent Deposits (B2) (Nonriverse) ent Oracks (B6) tion Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present? apillary fringe)	ine) nriverine) rine) Imagery (B7) (es  Nover No	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches): chches):	g Living Ro C4) wed Soils	Second Wa Se Dri Dri Dri Cri (C6) Sa Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
Depth (ii Remarks: S  YDROLO  Vetland H Primary Ind Surface Water Sedime Drift De Surface Water- Gurface Water Table Saturation Includes ca	DGY ydrology Indicators: licators (any one indicators (any one indicators) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriverse) ent Deposits (B2) (Nonriverse) ent Oracks (B6) tion Visible on Aerial Stained Leaves (B9) ervations: ater Present? Present? apillary fringe)	ine) nriverine) rine) Imagery (B7) (es  Nover No	ient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	t (B11) ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Plotoplain in Remarks) chches): chches):	g Living Ro C4) wed Soils	Second Wa Se Dri Dri Dri Cri (C6) Sa Sh	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) ain Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
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Project/Site: Redondo Beach Energy Project	City/Cou	unty:Redondo	Beach/Los Angeles	Sampling Date	:9 Jan. 20	013
Applicant/Owner: AES Southland Development			State:CA	Sampling Point	:SP-11	
Investigator(s): M. Fowler	Section	, Township, Ra	nge:T4S, R15W, S01;	T4S, R14W, S	306; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	Local re	elief (concave,	convex, none):Concave	S	lope (%): (	0
Subregion (LRR):C - Mediterranean California Lat	nt: 33° 50' 56	.50" N	Long: -118° 23' 33.7	7" W Da	tum: WG	S84
Soil Map Unit Name: Chino silt loam			NWI classific	cation: None		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes	No (	(If no, explain in F			
	cantly disturbe		Normal Circumstances"	present? Yes (	No	
	ally problemation		eded, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map show					eatures	, etc.
Hydrophytic Vegetation Present? Yes No (•						
Hydric Soil Present? Yes No		s the Sampled	Area			
Wetland Hydrology Present? Yes No (	,	vithin a Wetlar	nd? Yes	No 💿		
Remarks: Fuel oil tank containment basin (location - 09).						
VEGETATION						
Abso Tree Stratum (Use scientific names.) % Co	olute Domina Gover Specie	ant Indicator s? Status	Dominance Test work			
1. N/A			Number of Dominant S That Are OBL, FACW,	•	0	(A)
2.			•		O	,
3.			Total Number of Domir Species Across All Stra		0	(B)
4.		<del></del> .			O	` '
Total Cover:	%		Percent of Dominant S That Are OBL, FACW,		0 %	(A/B)
Sapling/Shrub Stratum			Prevalence Index wor	drahaati		
1. <u>N/A</u> 2.			Total % Cover of:		iply by:	
3.			OBL species	x 1 =	0	-
4.			FACW species	x 2 =	0	
5.			FAC species	x 3 =	0	
Total Cover:	%		FACU species	x 4 =	0	
Herb Stratum			UPL species	x 5 =	0	
1. <u>N/A</u>			Column Totals:	(A)	0	(B)
2.			Dravalance Index	. – D/A –		
3.			Prevalence Index  Hydrophytic Vegetati			
4.   5.			Dominance Test is			
6.			Prevalence Index i			
7.			Morphological Ada		de supporti	ing
8.		<u> </u>		s or on a separa	,	
Total Cover:	%		Problematic Hydro	phytic Vegetation	n¹ (Explair	۱)
Woody Vine Stratum	70		1			
1. <u>N/A</u>			Indicators of hydric so be present.	oil and wetland h	nydrology	must
2						
Total Cover:	%		Hydrophytic Vegetation			
% Bare Ground in Herb Stratum % Cover of Bio	iotic Crust	%		s No (	•	
Remarks: No vegetation was present.			<u> </u>			

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup>	Texture <sup>3</sup>	Remarks
			Color (moist) // Type	LUC		= -
0-5	10 YR 4/4				Sand	Slight moisture present
					Rock	_
						Shovel refusal
						_
						_
[vpo: C=0	Concentration D-Dan	lotion DM-Da	oduced Matrix 21 costion DI - Dare Li	nina D	C=Doot Channal	N-Motrice
• •	Concentration, D=Dep		educed Matrix. <sup>2</sup> Location: PL=Pore Li pam, Sandy Clay Loam, Sandy Loam, C	-		
			unless otherwise noted.)	lay Loa		r Problematic Hydric Soils:
Histoso		io to un zitito,	Sandy Redox (S5)			ick (A9) (LRR C)
Histic E	Epipedon (A2)		Stripped Matrix (S6)		2 cm Mu	ick (A10) ( <b>LRR B</b> )
Black H	Histic (A3)		Loamy Mucky Mineral (F1)		Reduced	d Vertic (F18)
	jen Sulfide (A4)		Loamy Gleyed Matrix (F2)			ent Material (TF2)
	ed Layers (A5) (LRR (	C)	Depleted Matrix (F3)		Other (E	xplain in Remarks)
_	luck (A9) (LRR D)	o (A11)	Redox Dark Surface (F6)			
	ed Below Dark Surfac Dark Surface (A12)	e (A11)	Depleted Dark Surface (F7) Redox Depressions (F8)			
	Mucky Mineral (S1)		Vernal Pools (F9)		<sup>4</sup> Indicators o	f hydrophytic vegetation and
	Gleyed Matrix (S4)		Vernair cols (1 5)			ydrology must be present.
 estrictive	Layer (if present):					
Type:						
Depth (ii	nches):		<u> </u>		Hydric Soil P	resent? Yes No 💿
	·	<b>("</b> .			Hydric Soil P	resent? Yes No   No
	Inable to dig past 5	(".			Hydric Soil P	resent? Yes No  No
	·	;".			Hydric Soil P	resent? Yes No  No
Remarks: [	Jnable to dig past 5	"".			Hydric Soil P	resent? Yes No  No
demarks: [	Jnable to dig past 5					
YDROLO	Jnable to dig past 5  OGY  ydrology Indicators:				Second	ary Indicators (2 or more required)
YDROLO	Jnable to dig past 5		nt)		Second Wa	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> )
YDROLO Vetland Hyrimary Ind	DGY ydrology Indicators: licators (any one indicators) water (A1)		Salt Crust (B11)		Second Wa	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
YDROLO Vetland Hy rimary Ind Surface High W	DGY ydrology Indicators: licators (any one indicators (A1) //ater Table (A2)		Salt Crust (B11) Biotic Crust (B12)		Second Wa Sec	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
YDROLO Vetland Hy rimary Ind Surface High W	DGY ydrology Indicators: icators (any one indicators (A1) //ater Table (A2) tion (A3)	ator is sufficie	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)		Second Wa Sec Drii	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10)
YDROLO Vetland Hy rimary Ind Surface High W Saturat Water I	DGY  ydrology Indicators: icators (any one indicators (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriver	ator is sufficier	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Second Wa Sec Drit Dra Dry	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) tinage Patterns (B10) r-Season Water Table (C2)
YDROLO Vetland Hy rimary Ind Surface High W Satural Water I Sedime	Jnable to dig past 5  OGY  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  /ater Table (A2)  tion (A3)  Marks (B1) (Nonriverent Deposits (B2) (No	ator is sufficier ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv	ing Roo	Second Wa Sec Drit Drit Drop ots (C3)	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water I Sedime	DGY ydrology Indicators: licators (any one indice Water (A1) //ater Table (A2) tion (A3) Marks (B1) (Nonriverent Deposits (B2) (Norivereposits (B3) (Nonrivereposits (B3) (Nonri	ator is sufficier ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4)	Ü	Second Wa Sec Dri Dri Dra Dry ots (C3) Cra	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10) -Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8)
YDROLO Vetland Hy rimary Ind Surface High W Saturat Water I Sedime Drift De	Jnable to dig past 5  OGY  ydrology Indicators: licators (any one indicate Water (A1)  /ater Table (A2) tion (A3)  Marks (B1) (Nonriverent Deposits (B2) (Nonriverent Deposits (B3) (Nonriverent Soil Cracks (B6)	ator is sufficientine) ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Ü	Second   Wa   Sec     Dri	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> ) if Deposits (B3) ( <b>Riverine</b> ) inage Patterns (B10) -Season Water Table (C2) in Muck Surface (C7) in Mick Surface (C8) uration Visible on Aerial Imagery (C
YDROLO Vetland Hy rimary Ind Surface Water I Sedime Surface Surface Inunda	DGY  ydrology Indicators: licators (any one indicators (any one indicator) water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriver) ent Deposits (B2) (Nonriver) ent Soil Cracks (B6) tion Visible on Aerial I	ator is sufficientine) ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4)	Ü	Second   Wa   Sec   Dri   Dra   Dry   Ots (C3)   Thi   Cra   C6)   Sat   Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) syfish Burrows (C8) curation Visible on Aerial Imagery (Callow Aquitard (D3)
YDROLO Vetland Hy Inimary Ind Surface High W Satural Water I Sedime Drift De Surface Inunda Water-	Jnable to dig past 5  OGY  ydrology Indicators: icators (any one indicate Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver ent Depos	ator is sufficientine) ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Ü	Second   Wa   Sec   Dri   Dra   Dry   Ots (C3)   Thi   Cra   C6)   Sat   Sha	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> ) if Deposits (B3) ( <b>Riverine</b> ) inage Patterns (B10) -Season Water Table (C2) in Muck Surface (C7) in Mick Surface (C8) in Muck Surface (C8) in Muck Surface (C8)
YDROLO Vetland Hy Primary Ind Surface High W Satural Water I Sedime Drift De Surface Inunda Water-	Jnable to dig past 5  OGY  ydrology Indicators: icators (any one indicate Water (A1) /ater Table (A2) tion (A3) Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver ent Depos	ator is sufficientine) ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Ü	Second   Wa   Sec   Dri   Dra   Dry   Ots (C3)   Thi   Cra   C6)   Sat   Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) syfish Burrows (C8) curation Visible on Aerial Imagery (Callow Aquitard (D3)
YDROLO Vetland Hy rimary Ind Surface High W Saturat Water I Sedime Drift De Surface Ununda Water-i	Jnable to dig past 5  OGY  ydrology Indicators: licators (any one indice e Water (A1) //ater Table (A2) ltion (A3)  Marks (B1) (Nonriver ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) ltion Visible on Aerial I Stained Leaves (B9)  irvations:	ator is sufficientine) ine) nriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)	Ü	Second   Wa   Sec   Dri   Drz   Dry   ots (C3)   Thi   Cra   C6	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> ) if Deposits (B3) ( <b>Riverine</b> ) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) in Sylvantian Visible on Aerial Imagery (Callow Aquitard (D3)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water I Sedime Surface Inunda Water-: Field Obse	Jnable to dig past 5  Jogy  Jogy  Jogy Indicators:  Jogo Indicator	ine) nriverine) rine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)	Ü	Second   Wa   Sec   Dri   Drz   Dry   ots (C3)   Thi   Cra   C6	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) syfish Burrows (C8) curation Visible on Aerial Imagery (Callow Aquitard (D3)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Sedime Surface Inunda Water- Field Obse Surface Water Table Saturation I	Jnable to dig past 5  OGY  Verology Indicators: icators (any one indicated of the Water (A1)  Jater Table (A2) tion (A3)  Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver ent Deposits (B6) (Nonriver	ine) nriverine) rine) Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils ((	Second Wa Second Dri Dri Dri Dra Dry ots (C3) Sat	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ninage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Vater I Sedime Surface Inunda Water- Gurface Water- Vater Table Surface Water Table Saturation Includes ca	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> ) if Deposits (B3) ( <b>Riverine</b> ) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) in Sylvantian Visible on Aerial Imagery (Callow Aquitard (D3)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Vater I Surface Inunda Water- Field Obse Surface Water Table Saturation I	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) syfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)
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YDROLO Vetland Hy Primary Ind Surface High W Saturat Vater I Sedime Surface Inunda Water- Gurface Water- Vater Table Surface Water Table Saturation Includes ca	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ninage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water I Sedime Unift De Unift D	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ninage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)
Vetland Hyrimary Ind Surface High W Saturat Water I Sedime Surface Inunda Water-ield Obse	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ninage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)
Vetland Hyrimary Ind Surface High W Saturat Water I Sedime Surface Inunda Water-ield Obse	Jnable to dig past 5  Jogy  ydrology Indicators: licators (any one indicators (any one indicators)  Water (A1)  Jater Table (A2)  Ition (A3)  Marks (B1) (Nonriverent Deposits (B2) (Noriverent Deposits (B3) (Nonriverent Deposits (B6) (Non	ine) nriverine) rine) Imagery (B7)  Yes No Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	Soils (0	Second Wa Second Drii Dra Drii Dry ots (C3) Thi Cra C6) Sat FA	ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> ) if Deposits (B3) ( <b>Riverine</b> ) sinage Patterns (B10) r-Season Water Table (C2) in Muck Surface (C7) syfish Burrows (C8) uration Visible on Aerial Imagery (Callow Aquitard (D3) C-Neutral Test (D5)

Project/Site: Redondo Beach Energy Project	City/Co	unty:Redondo	Beach/Los Angeles	Sampling Date:	9 Jan. 20	13
Applicant/Owner: AES Southland Development			State:CA	Sampling Point:	SP-12	
Investigator(s): M. Fowler	Section	, Township, Ra	nge:T4S, R15W, S01;	T4S, R14W, S	06; T4S,	R14W
Landform (hillslope, terrace, etc.): Terrace (coastal)	Local r	elief (concave,	convex, none):Concave	SI	ope (%): ()	)
Subregion (LRR):C - Mediterranean California Lat	t: 33° 50' 59	.96" N	Long: -118° 23' 35.65	3" W Dat	tum: WGS	S84
Soil Map Unit Name: Chino silt loam			NWI classific	cation: None		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes	No (	(If no, explain in F	lemarks.)		
	cantly disturbe		/ 'Normal Circumstances"	oresent? Yes (	No	$\circ$
	illy problemati		eded, explain any answe	ers in Remarks.)	2	
SUMMARY OF FINDINGS - Attach site map show					eatures,	etc.
Hydrophytic Vegetation Present? Yes No (•	,					
Hydric Soil Present? Yes No	I .	s the Sampled	Area			
Wetland Hydrology Present? Yes No (		vithin a Wetlar	nd? Yes	No 💿		
Remarks: Fuel oil tank containment basin (location - 08).						
\						
VEGETATION						
Abso Tree Stratum (Use scientific names.)  Abso % Co		ant Indicator s? Status	Dominance Test work			
1. N/A			Number of Dominant S That Are OBL, FACW,		0	(A)
2.			•			` ′
3.			Total Number of Domir Species Across All Stra		0	(B)
4.			Percent of Dominant S	nacios		
Total Cover:	%		That Are OBL, FACW,		0 %	(A/B)
Sapling/Shrub Stratum			Prevalence Index wor	kabaati		
1. <i>N/A</i> 2.			Total % Cover of:		ply by:	
3.			OBL species	x 1 =	0	-
4.			FACW species	x 2 =	0	
5.			FAC species	x 3 =	0	
Total Cover:	%		FACU species	x 4 =	0	
Herb Stratum			UPL species	x 5 =	0	
1. <u>N/A</u>			Column Totals:	(A)	0	(B)
2			Dravalance Index	. – D/A –		
3.			Prevalence Index  Hydrophytic Vegetation			
4. 5.			Dominance Test is			
6.			Prevalence Index i			
7.			Morphological Ada		e supporti	ng
8.		<u> </u>	data in Remark	s or on a separat	te sheet)	
Total Cover:	%		Problematic Hydro	phytic Vegetation	า <sup>1</sup> (Explain	)
Woody Vine Stratum	70		1			
1. <u>N/A</u>			Indicators of hydric so be present.	il and wetland h	ydrology r	must
2						
Total Cover:	%		Hydrophytic Vegetation			
$\%$ Bare Ground in Herb Stratum $\underline{-100\%}$ % Cover of Bio	iotic Crust	%		s No (	•	
Remarks: No vegetation was present.			<u> </u>			

Depth	Matrix		Redo	x Features			
(inches)	Color (moist)	%	Color (moist)	%Type¹	_Loc²	Texture <sup>3</sup>	Remarks
0-2	10 YR 2/1	100				Loamy sand	
2-8	10 YR 3/1	100				Loamy sand	
	_ 10 1 K 3/1					Loanly Sand	
							Shovel refusal
	_				-		_
	_						_
<sup>1</sup> Type: C=0	Concentration, D=Dep	letion, RM=l	Reduced Matrix.	<sup>2</sup> Location: PL=Por	e Lining, F	RC=Root Channel	, M=Matrix.
<sup>3</sup> Soil Textu	res: Clay, Silty Clay,	Sandy Clay,	Loam, Sandy Clay		-		am, Silt Loam, Silt, Loamy Sand, Sand.
Hydric Soil	Indicators: (Applicab	le to all LRR	s, unless otherwis	e noted.)		Indicators fo	r Problematic Hydric Soils:
Histose	ol (A1)		Sandy Redo	ox (S5)		1 cm Mu	ick (A9) ( <b>LRR C</b> )
Histic I	Epipedon (A2)		Stripped M	atrix (S6)		2 cm Mu	ick (A10) ( <b>LRR B</b> )
Black I	Histic (A3)		Loamy Mu	cky Mineral (F1)		Reduced	d Vertic (F18)
Hydrog	gen Sulfide (A4)			yed Matrix (F2)		Red Par	ent Material (TF2)
	ed Layers (A5) ( <b>LRR</b> (	C)	Depleted N	` '		Other (E	xplain in Remarks)
	Muck (A9) ( <b>LRR D</b> )		1 1	k Surface (F6)			
	ed Below Dark Surfac	e (A11)		Oark Surface (F7)			
	Dark Surface (A12)			pressions (F8)		4	
	Mucky Mineral (S1)		Vernal Poo	ols (F9)			f hydrophytic vegetation and
	Gleyed Matrix (S4)					wetiand n	ydrology must be present.
	e Layer (if present):						
Type:							
Depth (i	·					Hydric Soil P	resent? Yes No 💿
Remarks: I	Unable to dig past 8	3". Some di	scoloration may	be present from o	oil residu	e.	
LIVEROL	000						
	OGY lydrology Indicators:						ary Indicators (2 or more required)
Wetland H			ient)				ary Indicators (2 or more required) ter Marks (B1) ( <b>Riverine</b> )
Wetland H	lydrology Indicators:		ient)	t (B11)		Wa	
Wetland H Primary Inc	lydrology Indicators: dicators (any one indic		,			Wa	ter Marks (B1) (Riverine)
Wetland H Primary Inc Surfac High W	lydrology Indicators: dicators (any one indic e Water (A1)		Salt Crus Biotic Cru			Wa Sec	ter Marks (B1) ( <b>Riverine</b> ) diment Deposits (B2) ( <b>Riverine</b> )
Wetland H Primary Inc Surfac High W Satura	lydrology Indicators: dicators (any one indic se Water (A1) Vater Table (A2)	ator is suffic	Salt Crus Biotic Cru Aquatic Ir	ıst (B12)		Wa Sec	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Wetland H Primary Inc Surfac High W Satura Water	dydrology Indicators: dicators (any one indicators (A1) water (A1) Vater Table (A2) ution (A3)	ator is suffic	Salt Crus Biotic Cru Aquatic Ir Hydroger	ust (B12) nvertebrates (B13)	Living Ro	Wa Sec Drit Dra Dry	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10)
Wetland H Primary Inc Surfac High W Satura Water Sedime	lydrology Indicators: dicators (any one indicators (any one indicators) de Water (A1) Vater Table (A2) ution (A3) Marks (B1) (Nonriver ent Deposits (B2) (No	eator is suffic rine) nriverine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	ust (B12) nvertebrates (B13) n Sulfide Odor (C1)	-	Wa   Wa   Sec   Drit   Dry   Ots (C3)   Thi	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10) r-Season Water Table (C2)
Wetland H Primary Inc Surfac High W Satura Water Sedime	dicators (any one indicators: dicators (any one indicators (A1) Water Table (A2) Aution (A3) Marks (B1) (Nonriver ent Deposits (B2) (No	eator is suffic rine) nriverine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	nst (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C	4)	Wa   Wa   Sec   Drit   Dry	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ninage Patterns (B10) n-Season Water Table (C2) n Muck Surface (C7) nyfish Burrows (C8)
Wetland H Primary Inc Surfac High W Satura Water Sedime Drift De	dicators (any one indicators: dicators (any one indicators (A1) Vater Table (A2) Ation (A3) Marks (B1) (Nonriverent Deposits (B2) (Nonriverence Soil Cracks (B6)	eator is suffic vine) nriverine) rine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	ust (B12) nvertebrates (B13) o Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plo	4)	Wa   Wa   Sec   Drit   Drot   Dry   Ots (C3)   Thi   Cra   C6)   Sat	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) dinage Patterns (B10) ft-Season Water Table (C2) ft Muck Surface (C7) ft Surface (C8) ft Surface (C8) ft Surface (C9)
Wetland H Primary Inc Surfac High W Satura Water Sedime Drift De Surfac	dicators (any one indicators: dicators (any one indicators (any one indicators) de Water (A1) Vater Table (A2) Ation (A3) Marks (B1) (Nonriverent Deposits (B2) (Nonriverent Deposits (B3) (Nonriverent Cracks (B6) Ation Visible on Aerial	eator is suffic vine) nriverine) rine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	nst (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C	4)	Wa   Wa   Sec   Drit   Dropots (C3)   Thi   Cra   C6)   Sat   Sha	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) uyfish Burrows (C8) urration Visible on Aerial Imagery (C9) allow Aquitard (D3)
Primary Inc Surfac High W Satura Water Sedim Drift D Surfac Inunda Water	dicators: (any one indicators: dicators (any one indicators (any one indicators) (any one ind	eator is suffic vine) nriverine) rine)	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con non Reduction in Plo	4)	Wa   Wa   Sec   Drit   Dropots (C3)   Thi   Cra   C6)   Sat   Sha	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) dinage Patterns (B10) ft-Season Water Table (C2) ft Muck Surface (C7) ft Surface (C8) ft Surface (C8) ft Surface (C9)
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Wetland H Primary Inc Surfac High W Satura Water Sedime Drift De Surface Inunda Water- Field Obse	dicators (any one indicators: dicators (any one indicators (any one indicators))  Marks (B1) (Nonriver ent Deposits (B2) (Nonriver ent Deposits (B3) (Nonriver ent Deposits (B3) (Nonriver ent Deposits (B6) (Nonriver ent Deposits (B6) (Nonriver ent Cracks (B6))  Set Soil Cracks (B6)  Set Stained Leaves (B9)  Set Stained Leaves (B9)  Set Stained Leaves (B9)  Set Stained Leaves (B9)	rine) nriverine) rine) Imagery (B7	Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Other (Ex	nvertebrates (B13) a Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plotoplain in Remarks)	4)	Wa   Wa   Sec   Drit   Dropots (C3)   Thi   Cra   C6)   Sat   Sha	ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) uinage Patterns (B10) r-Season Water Table (C2) n Muck Surface (C7) uyfish Burrows (C8) urration Visible on Aerial Imagery (C9) allow Aquitard (D3)
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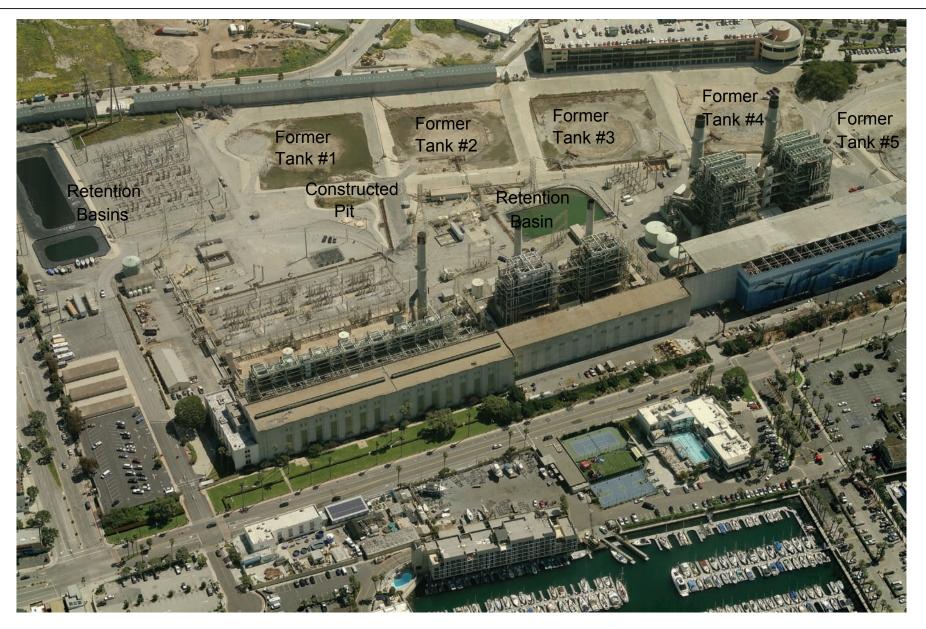


FIGURE 1
Photograph of Existing Site
AES Redondo Beach Energy Project



#### Legend

Wetland Delineation - Sample Locations Constructed Pit - 0.08 Acres Former Tank 1 - 0.431 Acres Former Tank 2 - 0.202 Acres Former Tank 3 - 0.066 Acres 0 250 500 Feet

# FIGURE 2 **Location of Wetland Delineation** Sampling Points AES Redondo Beach Energy Project

Redondo Beach, California