

Changed Pages

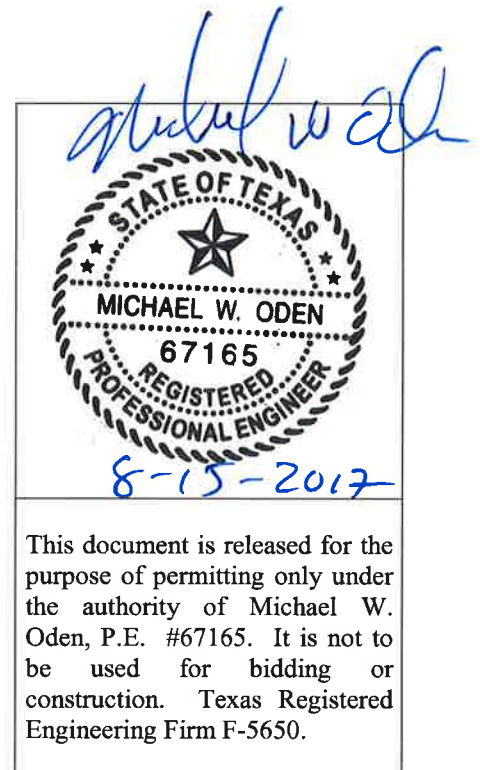
Part III, Appendix III-D.6-B

LCWP HELP Model Outputs

This entire section is being replaced

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

1. SUMMARY TABLE OF HELP MODEL RUNS



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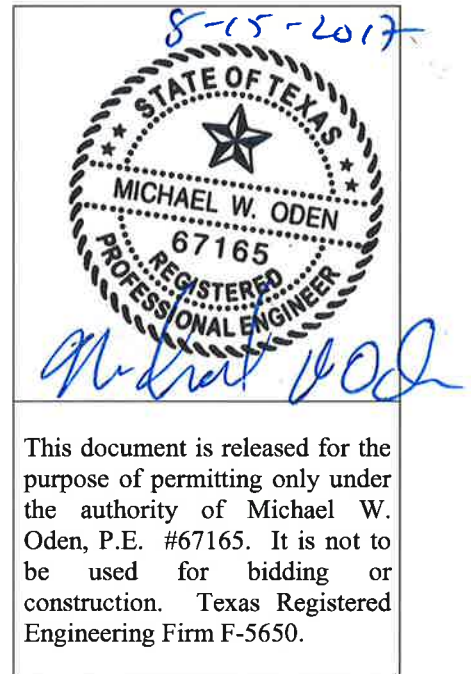
Table II-D.6-B-1
HELP Model Runs
Summary Table

HELP Model Output Location	Operating Conditions	Liner Configuration Identification in Model Name	Leachate Collection Layer Slope (percent)	Waste Thickness (Feet)	Drainage Length (feet)	Model Run Time (years)	Leachate Recirculation (percent)	Introduced Leachate (gallons/acre-day)	Maximum Head on Liner (in)	Peak Daily Leachate Generation Rate (gal/ac-day)
Attachment D.6-B-2a	Open	A	2.5	10	500	1	100	0	0.018	62.99
Attachment D.6-B-2b	Open	B	2.0	10	500	1	100	0	0.005	53.97
Attachment D.6-B-2c	Open	C	2.0	10	450	1	100	0	0.005	58.18
Attachment D.6-B-3	Intermediate	A	2.5	120.5	500	5	100	0	0.004	64.27
Attachment D.6-B-4	Closed	A	2.5	241	500	30	100	0	0	0.00
Attachment D.6-B-5a	Open	A	2.5	20	500	1	100	744	0.018	62.99
Attachment D.6-B-5b	Intermediate	A	2.5	50	500	1	100	744	0.017	62.99
Attachment D.6-B-5c	Intermediate	A	2.5	100	500	1	100	744	0.004	64.27

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

2. OPEN CONDITIONS

- A. LEACHATE COLLECTION SYSTEM CONFIGURATION A**
- B. LEACHATE COLLECTION SYSTEM CONFIGURATION B**
- C. LEACHATE COLLECTION SYSTEM CONFIGURATION C**



Pescadito Landfill – Open Conditions: Scenario A

WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.2000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 0.26 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.71399999000 CM/SEC
SLOPE = 2.50 PERCENT
DRAINAGE LENGTH = 500.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER
MATERIAL TEXTURE NUMBER 35
THICKNESS = 0.06 INCHES
POROSITY = 0.0000 VOL/VOL
FIELD CAPACITY = 0.0000 VOL/VOL
WILTING POINT = 0.0000 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
FML PINHOLE DENSITY = 3.00 HOLES/ACRE
FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Open Conditions: Scenario A

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4510 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000001000E-06 CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER = 85.00
FRACTION OF AREA ALLOWING RUNOFF = 0.0 PERCENT
AREA PROJECTED ON HORIZONTAL PLANE = 1.000 ACRES
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
INITIAL WATER IN EVAPORATIVE ZONE = 13.266 INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE = 38.946 INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE = 6.024 INCHES
INITIAL SNOW WATER = 0.000 INCHES
INITIAL WATER IN LAYER MATERIALS = 47.157 INCHES
TOTAL INITIAL WATER = 47.157 INCHES
TOTAL SUBSURFACE INFLOW = 0.00 INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE = 27.34 DEGREES
MAXIMUM LEAF AREA INDEX = 0.00
START OF GROWING SEASON (JULIAN DATE) = 0
END OF GROWING SEASON (JULIAN DATE) = 367
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
AVERAGE ANNUAL WIND SPEED = 11.60 MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY = 76.00 %
AVERAGE 2ND QUARTER RELATIVE HUMIDITY = 75.00 %
AVERAGE 3RD QUARTER RELATIVE HUMIDITY = 74.00 %
AVERAGE 4TH QUARTER RELATIVE HUMIDITY = 76.00 %

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Open Conditions: Scenario A

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS
AND STATION LATITUDE = 27.34 DEGREES

ANNUAL TOTALS FOR YEAR 1

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	0.000	0.000	0.00
EVAPOTRANSPIRATION	18.102	65711.812	111.06
RECIRCULATION INTO LAYER 2	0.006864	24.915	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006864	24.915	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.003	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-1.802	-6542.804	-11.06
SOIL WATER AT START OF YEAR	47.157	171178.500	
SOIL WATER AT END OF YEAR	45.354	164635.703	

Pescadito Landfill – Open Conditions: Scenario A

SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.010	0.00

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
	-----	-----	-----	-----	-----	-----
PRECIPITATION						

TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
RUNOFF						

TOTALS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
EVAPOTRANSPIRATION						

TOTALS	0.935 0.706	0.421 1.974	0.361 4.407	0.294 2.932	0.267 0.879	3.495 1.432
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2						

TOTALS	0.0060 0.0000	0.0007 0.0000	0.0001 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4						

TOTALS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Open Conditions: Scenario A

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0060	0.0007	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	0.000	(0.0000)	0.00	0.000
EVAPOTRANSPIRATION	18.102	(0.0000)	65711.81	111.058
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686	(0.00000)	24.915	0.04211
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000	(0.00000)	0.000	0.00000

Pescadito Landfill – Open Conditions: Scenario A

DRAINAGE RECIRCULATED FROM LAYER 4	0.00686 (0.00000)	24.915	0.04211
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.003	0.00001
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	-1.802 (0.0000)	-6542.80	-11.058

PEAK DAILY VALUES FOR YEARS	1 THROUGH	1
	----- (INCHES) -----	----- (CU. FT.) -----
PRECIPITATION	1.32	4791.600
RUNOFF	0.000	0.0000
DRAINAGE RECIRCULATED INTO LAYER 2	0.00232	8.42162
DRAINAGE COLLECTED FROM LAYER 4	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00232	8.42162
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.000000	0.00006
AVERAGE HEAD ON TOP OF LAYER 5	0.002	
MAXIMUM HEAD ON TOP OF LAYER 5	0.018	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)	0.0 FEET	
SNOW WATER	0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)		0.2346
MINIMUM VEG. SOIL WATER (VOL/VOL)		0.1840

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
by Bruce M. McEnroe, University of Kansas
ASCE Journal of Environmental Engineering
Vol. 119, No. 2, March 1993, pp. 262-270.

Pescadito Landfill – Open Conditions: Scenario A

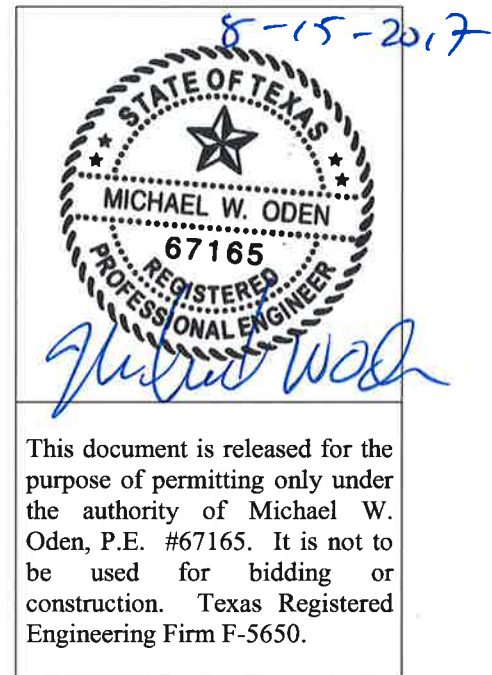
FINAL WATER STORAGE AT END OF YEAR 1

<u>LAYER</u>	<u>(INCHES)</u>	<u>(VOL/VOL)</u>
1	1.5392	0.2565
2	23.1312	0.1928
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

2. OPEN CONDITIONS

- A. LEACHATE COLLECTION SYSTEM CONFIGURATION A
- B. LEACHATE COLLECTION SYSTEM CONFIGURATION B**
- C. LEACHATE COLLECTION SYSTEM CONFIGURATION C



**Pescadito Landfill – Open Conditions
Scenario B**

Slope: 2.0 %
Drainage Length: 500 FT

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PRECIPITATION DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\PRECIP.D4
TEMPERATURE DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\TEMP.D7
SOLAR RADIATION DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\SOL.D13
EVAPOTRANSPIRATION DATA: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\EVAP_OPN.D1
SOIL AND DESIGN DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\OPEN_B.D10
OUTPUT DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\OPEN_B.OUT

TIME: 15:32 DATE: 8/3/2017

TITLE: PESCADITO-OPEN CONDITIONS

NOTE: INITIAL MOISTURE CONTENT OF THE LAYERS AND SNOW WATER
WERE SPECIFIED BY THE USER.

LAYER 1

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 6.00 INCHES
POROSITY = 0.4520 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 2

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 18
THICKNESS = 120.00 INCHES
POROSITY = 0.6710 VOL/VOL

Pescadito Landfill – Open Conditions
Scenario B

FIELD CAPACITY = 0.2920 VOL/VOL
 WILTING POINT = 0.0770 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.2000 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
 NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
 IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
 POROSITY = 0.4510 VOL/VOL
 FIELD CAPACITY = 0.4110 VOL/VOL
 WILTING POINT = 0.3110 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 0.26 INCHES
 POROSITY = 0.8500 VOL/VOL
 FIELD CAPACITY = 0.0100 VOL/VOL
 WILTING POINT = 0.0050 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 3.71399999000 CM/SEC
 SLOPE = 2.00 PERCENT
 DRAINAGE LENGTH = 500.0 FEET
 NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
 LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER

MATERIAL TEXTURE NUMBER 35

THICKNESS = 0.06 INCHES
 POROSITY = 0.0000 VOL/VOL
 FIELD CAPACITY = 0.0000 VOL/VOL
 WILTING POINT = 0.0000 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
 FML PINHOLE DENSITY = 3.00 HOLES/ACRE
 FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
 FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Open Conditions

Scenario B

LAYER 6

TYPE 3 - BARRIER SOIL LINER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4510 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000001000E-06 CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER = 85.00
FRACTION OF AREA ALLOWING RUNOFF = 0.0 PERCENT
AREA PROJECTED ON HORIZONTAL PLANE = 1.000 ACRES
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
INITIAL WATER IN EVAPORATIVE ZONE = 13.266 INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE = 38.946 INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE = 6.024 INCHES
INITIAL SNOW WATER = 0.000 INCHES
INITIAL WATER IN LAYER MATERIALS = 47.157 INCHES
TOTAL INITIAL WATER = 47.157 INCHES
TOTAL SUBSURFACE INFLOW = 0.00 INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE = 27.34 DEGREES
MAXIMUM LEAF AREA INDEX = 0.00
START OF GROWING SEASON (JULIAN DATE) = 0
END OF GROWING SEASON (JULIAN DATE) = 367
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
AVERAGE ANNUAL WIND SPEED = 11.60 MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY = 76.00 %
AVERAGE 2ND QUARTER RELATIVE HUMIDITY = 75.00 %
AVERAGE 3RD QUARTER RELATIVE HUMIDITY = 74.00 %
AVERAGE 4TH QUARTER RELATIVE HUMIDITY = 76.00 %

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Open Conditions
Scenario B

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS
 AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
EVAPOTRANSPIRATION	0.935	0.421	0.361	0.294	0.267	3.495
	0.706	1.974	4.407	2.932	0.838	1.552
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0055	0.0009	0.0003	0.0001	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0055	0.0009	0.0003	0.0001	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Open Conditions

Scenario B

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON	0.000	0.000	0.000	0.000	0.000	0.000
TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY	0.000	0.000	0.000	0.000	0.000	0.000
HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	INCHES	CU. FEET	PERCENT
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	0.000	0.000	0.00
EVAPOTRANSPIRATION	18.181	65997.125	111.54
RECIRCULATION INTO LAYER 2	0.006863	24.914	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006863	24.914	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.005	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-1.881	-6828.115	-11.54
SOIL WATER AT START OF YEAR	47.157	171178.500	
SOIL WATER AT END OF YEAR	45.276	164350.391	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.011	0.00

Pescadito Landfill – Open Conditions
Scenario B

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<u>RUNOFF</u>						
TOTALS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	0.935 0.706	0.421 1.974	0.361 4.407	0.294 2.932	0.267 0.838	3.495 1.552
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0055 0.0000	0.0009 0.0000	0.0003 0.0000	0.0001 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
<u>LATERAL DRAINAGE COLLECTED FROM LAYER 4</u>						
TOTALS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
<u>LATERAL DRAINAGE RECIRCULATED FROM LAYER 4</u>						
TOTALS	0.0055 0.0000	0.0009 0.0000	0.0003 0.0000	0.0001 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Open Conditions

Scenario B

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	0.000	(0.0000)	0.00	0.000
EVAPOTRANSPIRATION	18.181	(0.0000)	65997.12	111.540
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686	(0.00000)	24.914	0.04211
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000	(0.00000)	0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00686	(0.00000)	24.914	0.04211
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000	(0.00000)	0.005	0.00001
AVERAGE HEAD ON TOP OF LAYER 5	0.000	(0.000)		

Pescadito Landfill – Open Conditions
Scenario B

CHANGE IN WATER STORAGE -1.881 (0.0000) -6828.11 -11.540

	PEAK DAILY VALUES FOR YEARS 1 THROUGH 1	
	(INCHES)	(CU. FT.)
PRECIPITATION	1.32	4791.600
RUNOFF	0.000	0.0000
DRAINAGE RECIRCULATED INTO LAYER 2	0.00199	7.21469
DRAINAGE COLLECTED FROM LAYER 4	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00199	7.21469
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.000000	0.000006
AVERAGE HEAD ON TOP OF LAYER 5	0.002	
MAXIMUM HEAD ON TOP OF LAYER 5	0.005	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)	0.0 FEET	
SNOW WATER	0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)		0.2345
MINIMUM VEG. SOIL WATER (VOL/VOL)		0.1844

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
 by Bruce M. McEnroe, University of Kansas
 ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.

Pescadito Landfill – Open Conditions
Scenario B

FINAL WATER STORAGE AT END OF YEAR 1


LAYER	(INCHES)	(VOL/VOL)
1	1.4502	0.2417
2	23.1416	0.1928
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

2. OPEN CONDITIONS

- A. LEACHATE COLLECTION SYSTEM CONFIGURATION A
- B. LEACHATE COLLECTION SYSTEM CONFIGURATION B
- C. LEACHATE COLLECTION SYSTEM CONFIGURATION C

8-15-2017



The seal is circular with a five-pointed star in the center. The text around the star reads "STATE OF TEXAS" at the top, "MICHAEL W. ODEN" in the middle, and "67165 REGISTERED PROFESSIONAL ENGINEER" at the bottom. Below the seal is a handwritten signature in blue ink that reads "Michael W. Oden".

This document is released for the purpose of permitting only under the authority of Michael W. Oden, P.E. #67165. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

Pescadito Landfill – Open Conditions: Scenario C

WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.2000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER
MATERIAL TEXTURE NUMBER 0

THICKNESS = 0.26 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.71399999000 CM/SEC
SLOPE - 2.00 PERCENT
DRAINAGE LENGTH = 450.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER
MATERIAL TEXTURE NUMBER 35

THICKNESS = 0.06 INCHES
POROSITY = 0.0000 VOL/VOL
FIELD CAPACITY = 0.0000 VOL/VOL
WILTING POINT = 0.0000 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
FML PINHOLE DENSITY = 3.00 HOLES/ACRE
FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Open Conditions: Scenario C

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4510 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000001000E-06 CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER = 85.00
FRACTION OF AREA ALLOWING RUNOFF = 0.0 PERCENT
AREA PROJECTED ON HORIZONTAL PLANE = 1.000 ACRES
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
INITIAL WATER IN EVAPORATIVE ZONE = 13.266 INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE = 38.946 INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE = 6.024 INCHES
INITIAL SNOW WATER = 0.000 INCHES
INITIAL WATER IN LAYER MATERIALS = 47.157 INCHES
TOTAL INITIAL WATER = 47.157 INCHES
TOTAL SUBSURFACE INFLOW = 0.00 INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE = 27.34 DEGREES
MAXIMUM LEAF AREA INDEX = 0.00
START OF GROWING SEASON (JULIAN DATE) = 0
END OF GROWING SEASON (JULIAN DATE) = 367
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
AVERAGE ANNUAL WIND SPEED = 11.60 MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY = 76.00 %
AVERAGE 2ND QUARTER RELATIVE HUMIDITY = 75.00 %
AVERAGE 3RD QUARTER RELATIVE HUMIDITY = 74.00 %
AVERAGE 4TH QUARTER RELATIVE HUMIDITY = 76.00 %

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Open Conditions: Scenario C

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS
AND STATION LATITUDE = 27.34 DEGREES

ANNUAL TOTALS FOR YEAR 1

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	0.000	0.000	0.00
EVAPOTRANSPIRATION	18.102	65709.164	111.05
RECIRCULATION INTO LAYER 2	0.006863	24.914	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006863	24.914	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.004	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-1.802	-6540.173	-11.05
SOIL WATER AT START OF YEAR	47.157	171178.500	
SOIL WATER AT END OF YEAR	45.355	164638.328	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00

Pescadito Landfill – Open Conditions: Scenario C

SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.010	0.00

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<u>RUNOFF</u>						
TOTALS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	0.935 0.706	0.421 1.974	0.361 4.407	0.294 2.933	0.267 0.877	3.495 1.432
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0058 0.0000	0.0007 0.0000	0.0003 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
<u>LATERAL DRAINAGE COLLECTED FROM LAYER 4</u>						
TOTALS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Open Conditions: Scenario C

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0058	0.0007	0.0003	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	0.000	(0.0000)	0.00	0.000
EVAPOTRANSPIRATION	18.102	(0.0000)	65709.16	111.053
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686	(0.00000)	24.914	0.04211
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000	(0.00000)	0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00686	(0.00000)	24.914	0.04211

Pescadito Landfill – Open Conditions: Scenario C

PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.004	0.00001
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	-1.802 (0.0000)	-6540.17	-11.053

PEAK DAILY VALUES FOR YEARS	1 THROUGH	1
	----- (INCHES) -----	----- (CU. FT.) -----
PRECIPITATION	1.32	4791.600
RUNOFF	0.000	0.0000
DRAINAGE RECIRCULATED INTO LAYER 2	0.00214	7.77770
DRAINAGE COLLECTED FROM LAYER 4	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00214	7.77770
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.000000	0.00006
AVERAGE HEAD ON TOP OF LAYER 5	0.002	
MAXIMUM HEAD ON TOP OF LAYER 5	0.005	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)	0.0 FEET	
SNOW WATER	0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)		0.2345
MINIMUM VEG. SOIL WATER (VOL/VOL)		0.1840

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
by Bruce M. McEnroe, University of Kansas
ASCE Journal of Environmental Engineering
Vol. 119, No. 2, March 1993, pp. 262-270.

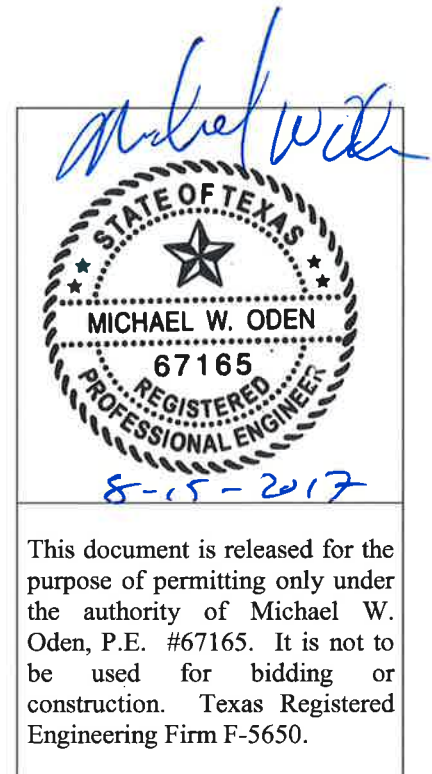
Pescadito Landfill – Open Conditions: Scenario C

FINAL WATER STORAGE AT END OF YEAR 1

LAYER	(INCHES)	(VOL/VOL)
1	1.5392	0.2565
2	23.1320	0.1928
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

**ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS**

3. INTERMEDIATE CONDITIONS



Pescadito Landfill – Intermediate Conditions: Scenario A

WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.1928 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 0.26 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.82999992000 CM/SEC
SLOPE = 2.50 PERCENT
DRAINAGE LENGTH = 500.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER
MATERIAL TEXTURE NUMBER 35
THICKNESS = 0.06 INCHES
POROSITY = 0.0000 VOL/VOL
FIELD CAPACITY = 0.0000 VOL/VOL
WILTING POINT = 0.0000 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
FML PINHOLE DENSITY = 3.00 HOLES/ACRE
FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Intermediate Conditions: Scenario A

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4510 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000001000E-06 CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER = 85.00
FRACTION OF AREA ALLOWING RUNOFF = 75.0 PERCENT
AREA PROJECTED ON HORIZONTAL PLANE = 1.000 ACRES
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
INITIAL WATER IN EVAPORATIVE ZONE = 14.186 INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE = 37.620 INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE = 7.428 INCHES
INITIAL SNOW WATER = 0.000 INCHES
INITIAL WATER IN LAYER MATERIALS = 304.411 INCHES
TOTAL INITIAL WATER = 304.411 INCHES
TOTAL SUBSURFACE INFLOW = 0.00 INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE = 27.34 DEGREES
MAXIMUM LEAF AREA INDEX = 1.00
START OF GROWING SEASON (JULIAN DATE) = 0
END OF GROWING SEASON (JULIAN DATE) = 367
EVAPORATIVE ZONE DEPTH = 60.0 INCHES
AVERAGE ANNUAL WIND SPEED = 11.60 MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY = 76.00 %
AVERAGE 2ND QUARTER RELATIVE HUMIDITY = 75.00 %
AVERAGE 3RD QUARTER RELATIVE HUMIDITY = 74.00 %
AVERAGE 4TH QUARTER RELATIVE HUMIDITY = 76.00 %

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Intermediate Conditions: Scenario A

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS
AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	1.474
	0.000	0.231	0.544	0.473	0.000	0.000
EVAPOTRANSPIRATION	1.249	0.467	0.436	0.448	0.613	2.935
	0.621	2.369	3.114	2.502	0.754	1.569
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0063	0.0005	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0063	0.0005	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Intermediate Conditions: Scenario A

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON	0.000	0.000	0.000	0.000	0.000	0.000
TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY	0.000	0.000	0.000	0.000	0.000	0.000
HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	2.722	9880.666	16.70
EVAPOTRANSPIRATION	17.076	61986.852	104.76
RECIRCULATION INTO LAYER 2	0.006864	24.915	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006864	24.915	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.003	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-3.498	-12698.575	-21.46
SOIL WATER AT START OF YEAR	304.411	1105013.250	
SOIL WATER AT END OF YEAR	300.913	1092314.620	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.060	0.00

Pescadito Landfill – Intermediate Conditions: Scenario A

MONTHLY TOTALS (IN INCHES) FOR YEAR 2

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.00 1.02	2.53 1.46	1.70 7.20	0.01 3.49	4.17 0.29	3.37 0.94
RUNOFF	0.000 0.252	0.128 0.019	0.359 2.315	0.000 0.671	2.145 0.000	1.293 0.000
EVAPOTRANSPIRATION	0.036 0.791	1.535 1.147	2.107 5.027	0.121 2.390	1.384 0.876	2.708 0.933
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 5	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 5	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

ANNUAL TOTALS FOR YEAR 2

	INCHES	CU. FEET	PERCENT
PRECIPITATION	26.18	95033.414	100.00
RUNOFF	7.182	26072.020	27.43

Pescadito Landfill – Intermediate Conditions: Scenario A

EVAPOTRANSPIRATION	19.054	69167.773	72.78
RECIRCULATION INTO LAYER 2	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 6	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-0.057	-206.381	-0.22
SOIL WATER AT START OF YEAR	300.913	1092314.620	
SOIL WATER AT END OF YEAR	300.856	1092108.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.002	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 3

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.20 1.52	1.92 1.27	0.63 3.38	0.00 0.62	1.32 0.29	7.54 0.61
RUNOFF	0.000 0.081	0.348 0.000	0.000 0.670	0.000 0.094	0.110 0.000	2.926 0.000
EVAPOTRANSPIRATION	0.188 1.561	1.529 1.141	0.674 2.811	0.019 0.588	1.211 0.107	4.478 0.563
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Intermediate Conditions: Scenario A

PERCOLATION/LEAKAGE THROUGH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON	0.000	0.000	0.000	0.000	0.000	0.000
TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY	0.000	0.000	0.000	0.000	0.000	0.000
HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 3

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	19.30	70059.008	100.00
RUNOFF	4.229	15352.106	21.91
EVAPOTRANSPIRATION	14.870	53978.758	77.05
RECIRCULATION INTO LAYER 2	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 6	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	0.201	728.038	1.04
SOIL WATER AT START OF YEAR	300.856	1092108.250	
SOIL WATER AT END OF YEAR	301.057	1092836.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.109	0.00

Pescadito Landfill – Intermediate Conditions: Scenario A

MONTHLY TOTALS (IN INCHES) FOR YEAR 4

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	1.06 1.57	1.72 0.80	1.42 4.29	0.22 3.33	5.20 0.29	1.02 1.23
RUNOFF	0.000 0.337	0.005 0.079	0.161 0.496	0.000 1.132	1.816 0.000	0.097 0.000
EVAPOTRANSPIRATION	1.066 1.244	1.915 0.743	1.267 3.441	0.223 2.370	3.387 0.387	0.926 1.151
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 5	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 5	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Intermediate Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 4

	INCHES	CU. FEET	PERCENT
PRECIPITATION	22.15	80404.516	100.00
RUNOFF	4.123	14966.299	18.61
EVAPOTRANSPIRATION	18.121	65777.898	81.81
RECIRCULATION INTO LAYER 2	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 6	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-0.094	-339.648	-0.42
SOIL WATER AT START OF YEAR	301.057	1092836.250	
SOIL WATER AT END OF YEAR	300.963	1092496.620	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.033	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 5

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.77 1.71	0.26 1.62	1.35 2.89	0.00 0.70	3.51 0.59	0.42 0.20
RUNOFF	0.000 0.184	0.000 0.151	0.106 0.666	0.000 0.000	1.403 0.000	0.000 0.000
EVAPOTRANSPIRATION	0.831 1.808	0.364 1.477	1.234 2.142	0.022 0.581	2.089 0.633	0.151 0.368

Pescadito Landfill – Intermediate Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 5

	INCHES	CU. FEET	PERCENT
PRECIPITATION	14.02	50892.621	100.00
RUNOFF	2.510	9110.605	17.90
EVAPOTRANSPIRATION	11.701	42476.387	83.46
RECIRCULATION INTO LAYER 2	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 6	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	-0.191	-694.362	-1.36
SOIL WATER AT START OF YEAR	300.963	1092496.620	

Pescadito Landfill – Intermediate Conditions: Scenario A

SOIL WATER AT END OF YEAR	300.772	1091802.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.007	0.00

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 5

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.47 1.16	1.38 1.59	1.09 4.26	0.05 2.21	2.84 0.44	3.19 0.91
STD. DEVIATIONS	0.43 0.70	0.97 0.75	0.57 1.72	0.10 1.43	2.13 0.21	2.81 0.53
<u>RUNOFF</u>						
TOTALS	0.000 0.171	0.096 0.096	0.125 0.938	0.000 0.474	1.095 0.000	1.158 0.000
STD. DEVIATIONS	0.000 0.134	0.151 0.096	0.148 0.773	0.000 0.459	0.986 0.000	1.195 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	0.674 1.205	1.162 1.375	1.144 3.307	0.167 1.686	1.737 0.552	2.240 0.917
STD. DEVIATIONS	0.537 0.501	0.700 0.613	0.647 1.074	0.178 1.007	1.062 0.307	1.718 0.476
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0013 0.0000	0.0001 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0028 0.0000	0.0002 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Intermediate Conditions: Scenario A

LATERAL DRAINAGE COLLECTED FROM LAYER 4

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0013	0.0001	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0028	0.0002	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 5

	INCHES		CU. FEET	PERCENT
PRECIPITATION	19.59	(4.794)	71111.7	100.00
RUNOFF	4.153	(1.8663)	15076.34	21.201
EVAPOTRANSPIRATION	16.165	(2.9412)	58677.54	82.515

Pescadito Landfill – Intermediate Conditions: Scenario A

DRAINAGE RECIRCULATED INTO LAYER 2	0.00137 (0.00307)	4.983	0.00701
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000 (0.00000)	0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00137 (0.00307)	4.983	0.00701
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.001	0.00000
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	-0.728 (1.5554)	-2642.19	-3.716

PEAK DAILY VALUES FOR YEARS	1 THROUGH	5
	(INCHES)	(CU. FT.)
	-----	-----
PRECIPITATION	2.72	9873.601
RUNOFF	1.654	6003.0674
DRAINAGE RECIRCULATED INTO LAYER 2	0.00237	8.59164
DRAINAGE COLLECTED FROM LAYER 4	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00237	8.59164
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.000000	0.000006
AVERAGE HEAD ON TOP OF LAYER 5	0.002	
MAXIMUM HEAD ON TOP OF LAYER 5	0.004	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)	32.7 FEET	
SNOW WATER	0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)		0.2364
MINIMUM VEG. SOIL WATER (VOL/VOL)		0.1744

Pescadito Landfill – Intermediate Conditions: Scenario A

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
 by Bruce M. McEnroe, University of Kansas
 ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.


FINAL WATER STORAGE AT END OF YEAR 5

LAYER	(INCHES)	(VOL/VOL)
1	3.3576	0.2798
2	276.7307	0.1914
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

**ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS**

4. CLOSED CONDITIONS

5-15-2012



Michael W. Oden

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Pescadito Landfill – Closed Conditions: Scenario A

WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER

MATERIAL TEXTURE NUMBER 18

THICKNESS = 2892.00 INCHES
POROSITY = 0.6710 VOL/VOL
FIELD CAPACITY = 0.2920 VOL/VOL
WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.1914 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 5
IS RECIRCULATED INTO THIS LAYER.

LAYER 4

TYPE 1 - VERTICAL PERCOLATION LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4107 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 5

TYPE 2 - LATERAL DRAINAGE LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 0.25 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.93700004000 CM/SEC
SLOPE = 2.50 PERCENT
DRAINAGE LENGTH = 500.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 3.

Pescadito Landfill – Closed Conditions: Scenario A

LAYER 6

TYPE 4 - FLEXIBLE MEMBRANE LINER

MATERIAL TEXTURE NUMBER 35

THICKNESS	=	0.06	INCHES
POROSITY	=	0.0000	VOL/VOL
FIELD CAPACITY	=	0.0000	VOL/VOL
WILTING POINT	=	0.0000	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.0000	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.199999996000E-12	CM/SEC
FML PINHOLE DENSITY	=	3.00	HOLES/ACRE
FML INSTALLATION DEFECTS	=	3.00	HOLES/ACRE
FML PLACEMENT QUALITY	=	3	- GOOD

LAYER 7

TYPE 3 - BARRIER SOIL LINER

MATERIAL TEXTURE NUMBER 0

THICKNESS	=	24.00	INCHES
POROSITY	=	0.4510	VOL/VOL
FIELD CAPACITY	=	0.4110	VOL/VOL
WILTING POINT	=	0.3110	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4510	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.100000001000E-06	CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER	=	85.00	
FRACTION OF AREA ALLOWING RUNOFF	=	100.0	PERCENT
AREA PROJECTED ON HORIZONTAL PLANE	=	1.000	ACRES
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
INITIAL WATER IN EVAPORATIVE ZONE	=	19.609	INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE	=	32.120	INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE	=	13.278	INCHES
INITIAL SNOW WATER	=	0.000	INCHES
INITIAL WATER IN LAYER MATERIALS	=	589.419	INCHES
TOTAL INITIAL WATER	=	589.419	INCHES
TOTAL SUBSURFACE INFLOW	=	0.00	INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

Pescadito Landfill – Closed Conditions: Scenario A

STATION LATITUDE = 27.34 DEGREES
 MAXIMUM LEAF AREA INDEX = 2.00
 START OF GROWING SEASON (JULIAN DATE) = 0
 END OF GROWING SEASON (JULIAN DATE) = 367
 EVAPORATIVE ZONE DEPTH = 60.0 INCHES
 AVERAGE ANNUAL WIND SPEED = 11.60 MPH
 AVERAGE 1ST QUARTER RELATIVE HUMIDITY = 76.00 %
 AVERAGE 2ND QUARTER RELATIVE HUMIDITY = 75.00 %
 AVERAGE 3RD QUARTER RELATIVE HUMIDITY = 74.00 %
 AVERAGE 4TH QUARTER RELATIVE HUMIDITY = 76.00 %

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS
 AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	1.546
	0.000	0.141	0.693	0.606	0.000	0.000
EVAPOTRANSPIRATION	1.452	2.298	2.706	0.890	0.000	2.054
	0.000	2.452	2.926	2.386	0.681	1.548

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	2.987	10841.725	18.32
EVAPOTRANSPIRATION	19.392	70391.891	118.97
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-6.078	-22064.701	-37.29
SOIL WATER AT START OF YEAR	589.419	2139591.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.341	2117526.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.087	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 2

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.00 1.02	2.53 1.46	1.70 7.20	0.01 3.49	4.17 0.29	3.37 0.94
RUNOFF	0.000 0.317	0.138 0.000	0.436 3.067	0.000 0.933	2.807 0.000	1.676 0.000
EVAPOTRANSPIRATION	0.096 0.703	1.519 1.178	2.070 4.415	0.077 1.922	0.890 0.925	2.166 0.799
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 2

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	26.18	95033.414	100.00
RUNOFF	9.375	34030.000	35.81
EVAPOTRANSPIRATION	16.761	60843.406	64.02
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.044	159.965	0.17
SOIL WATER AT START OF YEAR	583.341	2117526.500	
SOIL WATER AT END OF YEAR	583.385	2117686.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.045	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 3

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.20 1.52	1.92 1.27	0.63 3.38	0.00 0.62	1.32 0.29	7.54 0.61
RUNOFF	0.000 0.048	0.411 0.000	0.000 0.766	0.000 0.118	0.153 0.000	3.852 0.000
EVAPOTRANSPIRATION	0.290 1.446	1.546 1.168	0.643 2.696	0.000 0.549	1.167 0.157	3.687 0.538

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 3

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	19.30	70059.008	100.00
RUNOFF	5.348	19414.240	27.71
EVAPOTRANSPIRATION	13.887	50408.926	71.95
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.065	235.737	0.34
SOIL WATER AT START OF YEAR	583.385	2117686.500	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.450	2117922.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.109	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 4

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	1.06	1.72	1.42	0.22	5.20	1.02
	1.57	0.80	4.29	3.33	0.29	1.23
RUNOFF	0.000	0.012	0.183	0.000	2.389	0.125
	0.421	0.082	0.586	1.516	0.000	0.000
EVAPOTRANSPIRATION	0.979	1.994	1.237	0.203	2.828	0.839
	1.205	0.718	3.249	1.631	0.853	0.884
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 4

	INCHES	CU. FEET	PERCENT
PRECIPITATION	22.15	80404.516	100.00
RUNOFF	5.313	19287.629	23.99
EVAPOTRANSPIRATION	16.620	60330.008	75.03
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.217	786.973	0.98
SOIL WATER AT START OF YEAR	583.450	2117922.250	
SOIL WATER AT END OF YEAR	583.666	2118709.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.097	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 5

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.77 1.71	0.26 1.62	1.35 2.89	0.00 0.70	3.51 0.59	0.42 0.20
RUNOFF	0.000 0.211	0.000 0.176	0.070 0.805	0.000 0.000	1.882 0.000	0.000 0.000
EVAPOTRANSPIRATION	1.036 1.733	0.416 1.488	1.281 2.047	0.000 0.464	1.628 0.703	0.143 0.361

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 5

	INCHES	CU. FEET	PERCENT
PRECIPITATION	14.02	50892.621	100.00
RUNOFF	3.144	11411.556	22.42
EVAPOTRANSPIRATION	11.298	41013.430	80.59
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.422	-1532.514	-3.01
SOIL WATER AT START OF YEAR	583.666	2118709.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.244	2117176.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.151	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 6

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.88 1.61	1.39 2.56	0.71 4.85	2.86 3.49	0.19 1.70	4.18 0.85
RUNOFF	0.041 0.495	0.398 0.568	0.000 1.881	1.685 1.593	0.000 0.572	2.397 0.000
EVAPOTRANSPIRATION	0.350 1.407	1.480 1.817	0.710 2.712	1.175 2.290	0.190 0.847	1.491 0.925
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 6

	INCHES	CU. FEET	PERCENT
PRECIPITATION	25.27	91730.102	100.00
RUNOFF	9.631	34958.809	38.11
EVAPOTRANSPIRATION	15.394	55878.734	60.92
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.246	892.656	0.97
SOIL WATER AT START OF YEAR	583.244	2117176.750	
SOIL WATER AT END OF YEAR	583.490	2118069.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.097	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 7

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.53 0.98	0.84 1.79	0.18 6.42	0.00 4.31	1.84 2.12	4.13 1.13
RUNOFF	0.000 0.267	0.015 0.034	0.000 2.229	0.000 1.755	0.312 0.091	1.585 0.000
EVAPOTRANSPIRATION	0.776 0.713	0.825 1.756	0.180 3.961	0.000 2.677	1.219 1.661	2.854 1.126

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 7

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	24.27	88100.094	100.00
RUNOFF	6.288	22823.758	25.91
EVAPOTRANSPIRATION	17.748	64425.820	73.13
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.234	850.560	0.97
SOIL WATER AT START OF YEAR	583.490	2118069.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.724	2118920.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.042	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 8

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.61 7.47	1.49 0.96	0.34 2.83	2.35 0.51	0.73 0.37	0.44 0.36
RUNOFF	0.000 5.067	0.172 0.000	0.000 0.725	1.041 0.000	0.000 0.000	0.000 0.000
EVAPOTRANSPIRATION	0.903 2.403	1.506 0.859	0.340 2.189	1.309 0.526	0.730 0.302	0.440 0.345
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 8

	INCHES	CU. FEET	PERCENT
PRECIPITATION	18.46	67009.797	100.00
RUNOFF	7.006	25430.369	37.95
EVAPOTRANSPIRATION	11.852	43021.004	64.20
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.397	-1441.675	-2.15
SOIL WATER AT START OF YEAR	583.724	2118920.000	
SOIL WATER AT END OF YEAR	583.327	2117478.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.100	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 9

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.61 0.85	0.78 4.09	0.09 2.09	0.53 0.88	0.52 3.26	3.57 0.51
RUNOFF	0.000 0.287	0.000 2.561	0.000 1.125	0.034 0.042	0.000 0.786	1.165 0.013
EVAPOTRANSPIRATION	0.625 0.563	0.847 1.529	0.091 0.965	0.496 0.838	0.520 1.036	2.405 0.834

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 9

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	17.78	64541.402	100.00
RUNOFF	6.013	21825.824	33.82
EVAPOTRANSPIRATION	10.749	39018.785	60.46
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	1.018	3696.910	5.73
SOIL WATER AT START OF YEAR	583.327	2117478.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	584.346	2121175.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.118	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 10

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.95 2.27	0.33 0.69	1.00 3.75	3.20 4.04	0.00 1.04	5.40 1.08
RUNOFF	0.000 1.447	0.000 0.000	0.000 1.212	1.042 1.143	0.000 0.000	3.199 0.095
EVAPOTRANSPIRATION	1.223 1.772	1.159 0.690	1.000 1.509	1.816 2.451	0.342 1.507	1.252 0.916
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 10

	INCHES	CU. FEET	PERCENT
PRECIPITATION	23.75	86212.500	100.00
RUNOFF	8.137	29538.715	34.26
EVAPOTRANSPIRATION	15.635	56756.836	65.83
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.023	-83.084	-0.10
SOIL WATER AT START OF YEAR	584.346	2121175.000	
SOIL WATER AT END OF YEAR	584.323	2121092.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.031	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 11

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	1.55	0.97	0.05	0.98	1.85	0.95
	3.52	4.21	2.13	0.31	0.90	0.53
RUNOFF	0.000	0.000	0.000	0.123	0.693	0.182
	1.431	1.827	0.522	0.000	0.163	0.000
EVAPOTRANSPIRATION	1.242	1.787	0.614	0.863	1.157	0.769
	1.811	2.661	1.607	0.263	0.724	0.591

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 11

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	17.95	65158.516	100.00
RUNOFF	4.940	17931.537	27.52
EVAPOTRANSPIRATION	14.089	51141.980	78.49
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-1.079	-3915.145	-6.01
SOIL WATER AT START OF YEAR	584.323	2121092.000	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.244	2117177.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.145	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 12

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.42	0.97	0.43	1.23	0.18	2.64
	0.63	0.92	5.10	1.74	4.50	0.29
RUNOFF	0.000	0.013	0.000	0.536	0.000	0.214
	0.035	0.048	1.829	0.411	1.190	0.000
EVAPOTRANSPIRATION	0.391	0.899	0.171	1.039	0.180	2.335
	0.403	1.154	2.351	2.249	1.661	1.013
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 12

	INCHES	CU. FEET	PERCENT
PRECIPITATION	19.05	69151.516	100.00
RUNOFF	4.276	15523.011	22.45
EVAPOTRANSPIRATION	13.848	50266.750	72.69
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.926	3361.694	4.86
SOIL WATER AT START OF YEAR	583.244	2117177.000	
SOIL WATER AT END OF YEAR	584.170	2120538.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.064	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 13

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.13 0.34	0.38 1.36	0.23 1.78	2.90 2.05	3.47 0.47	2.21 1.46
RUNOFF	0.000 0.000	0.000 0.585	0.000 0.308	1.675 0.558	1.847 0.000	0.989 0.289
EVAPOTRANSPIRATION	0.947 0.826	0.473 0.775	0.246 1.423	1.225 1.091	1.004 0.921	1.354 0.565

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 13

	INCHES	CU. FEET	PERCENT
PRECIPITATION	16.78	60911.418	100.00
RUNOFF	6.252	22693.486	37.26
EVAPOTRANSPIRATION	10.849	39380.582	64.65
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.320	-1162.513	-1.91
SOIL WATER AT START OF YEAR	584.170	2120538.500	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.850	2119376.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.138	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 14

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.46 1.02	0.03 1.49	0.15 3.45	0.09 4.35	1.16 0.45	3.05 0.75
RUNOFF	0.000 0.106	0.000 0.176	0.000 0.788	0.000 1.496	0.241 0.000	1.532 0.095
EVAPOTRANSPIRATION	0.909 0.914	0.187 1.314	0.149 1.989	0.091 2.819	0.919 1.156	1.518 0.516
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 14

	INCHES	CU. FEET	PERCENT
PRECIPITATION	16.45	59713.508	100.00
RUNOFF	4.435	16098.339	26.96
EVAPOTRANSPIRATION	12.481	45305.445	75.87
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.466	-1690.263	-2.83
SOIL WATER AT START OF YEAR	583.850	2119376.000	
SOIL WATER AT END OF YEAR	583.385	2117685.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.010	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 15

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.20 0.46	0.44 1.27	0.39 3.68	0.00 1.28	3.65 0.81	3.26 1.65
RUNOFF	0.000 0.000	0.000 0.343	0.000 0.717	0.000 0.104	2.195 0.053	2.060 0.052
EVAPOTRANSPIRATION	0.340 0.460	0.433 0.927	0.397 2.583	0.000 0.982	1.454 0.996	1.201 0.971

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

 MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 15

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	17.09	62036.699	100.00
RUNOFF	5.524	20053.098	32.32
EVAPOTRANSPIRATION	10.744	39001.687	62.87
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.821	2981.722	4.81
SOIL WATER AT START OF YEAR	583.385	2117685.750	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	584.206	2120667.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0001	0.194	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 16

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.98 3.69	0.34 3.76	0.05 2.83	2.63 1.49	0.17 1.75	0.64 0.14
RUNOFF	0.013 1.932	0.000 2.642	0.000 0.210	1.456 0.146	0.000 0.703	0.121 0.000
EVAPOTRANSPIRATION	1.076 1.844	1.135 1.118	0.107 2.194	1.174 1.592	0.170 0.686	0.433 0.668
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 16

	INCHES	CU. FEET	PERCENT
PRECIPITATION	18.47	67046.102	100.00
RUNOFF	7.223	26219.689	39.11
EVAPOTRANSPIRATION	12.197	44274.699	66.04
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.950	-3448.101	-5.14
SOIL WATER AT START OF YEAR	584.206	2120667.500	
SOIL WATER AT END OF YEAR	583.256	2117219.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	-0.0001	-0.183	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 17

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.53 2.92	0.75 2.98	0.42 3.29	0.22 2.33	3.01 0.31	3.82 1.35
RUNOFF	0.000 0.999	0.146 0.481	0.000 0.783	0.000 0.306	0.738 0.000	1.161 0.180
EVAPOTRANSPIRATION	0.533 1.462	0.613 2.776	0.420 2.500	0.220 2.234	2.272 0.187	2.637 0.497

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 17

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	21.93	79605.914	100.00
RUNOFF	4.794	17402.455	21.86
EVAPOTRANSPIRATION	16.351	59353.051	74.56
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.785	2850.339	3.58
SOIL WATER AT START OF YEAR	583.256	2117219.500	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	584.041	2120069.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.071	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 18

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.00 0.26	0.35 1.06	2.93 6.22	1.97 4.07	0.22 0.41	1.21 1.75
RUNOFF	0.000 0.000	0.000 0.073	0.265 2.947	0.415 1.808	0.000 0.000	0.420 0.068
EVAPOTRANSPIRATION	0.796 0.501	0.350 0.987	2.376 3.209	1.844 2.142	0.220 0.595	0.549 1.009
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 18

	INCHES	CU. FEET	PERCENT
PRECIPITATION	20.45	74233.492	100.00
RUNOFF	5.995	21762.812	29.32
EVAPOTRANSPIRATION	14.578	52917.887	71.29
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.123	-447.325	-0.60
SOIL WATER AT START OF YEAR	584.041	2120069.750	
SOIL WATER AT END OF YEAR	583.918	2119622.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.121	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 19

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.88 4.12	1.31 0.75	1.22 1.44	1.00 3.92	2.36 1.22	0.53 0.44
RUNOFF	0.000 2.412	0.705 0.000	0.000 0.237	0.411 0.774	1.387 0.146	0.000 0.000
EVAPOTRANSPIRATION	1.073 1.604	0.743 0.853	1.562 1.203	0.589 2.730	0.973 1.324	0.530 0.538

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 19

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	19.19	69659.695	100.00
RUNOFF	6.073	22043.518	31.64
EVAPOTRANSPIRATION	13.723	49813.195	71.51
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.605	-2196.965	-3.15
SOIL WATER AT START OF YEAR	583.918	2119622.500	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.313	2117425.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.055	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 20

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.69 2.09	0.16 0.97	0.81 5.25	1.98 0.91	0.27 0.00	0.06 0.83
RUNOFF	0.000 0.733	0.000 0.338	0.000 3.061	0.480 0.000	0.000 0.000	0.000 0.120
EVAPOTRANSPIRATION	0.712 1.354	0.205 0.635	0.761 1.833	1.549 1.228	0.270 0.038	0.060 0.684
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 20

	INCHES	CU. FEET	PERCENT
PRECIPITATION	14.02	50892.605	100.00
RUNOFF	4.732	17176.068	33.75
EVAPOTRANSPIRATION	9.330	33868.066	66.55
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.042	-151.545	-0.30
SOIL WATER AT START OF YEAR	583.313	2117425.500	
SOIL WATER AT END OF YEAR	583.271	2117274.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.016	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 21

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.83 0.72	0.60 1.05	0.07 2.27	1.08 2.36	2.41 0.62	1.31 2.34
RUNOFF	0.002 0.109	0.000 0.085	0.000 0.097	0.013 0.726	1.118 0.000	0.272 0.565
EVAPOTRANSPIRATION	0.488 0.580	0.964 1.002	0.073 2.194	1.067 1.635	1.292 0.463	1.012 0.936

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 21

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	15.66	56845.797	100.00
RUNOFF	2.986	10840.327	19.07
EVAPOTRANSPIRATION	11.703	42483.559	74.73
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.970	3521.880	6.20
SOIL WATER AT START OF YEAR	583.271	2117274.000	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	584.241	2120795.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.030	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 22

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	1.77 0.42	0.83 0.87	0.78 4.52	0.97 1.86	0.55 0.58	3.16 1.38
RUNOFF	0.356 0.000	0.108 0.000	0.109 2.058	0.000 0.944	0.082 0.000	1.074 0.485
EVAPOTRANSPIRATION	1.051 0.903	2.081 0.870	0.670 2.145	0.971 1.233	0.468 0.580	1.604 0.364
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 22

	INCHES	CU. FEET	PERCENT
PRECIPITATION	17.69	64214.723	100.00
RUNOFF	5.216	18934.424	29.49
EVAPOTRANSPIRATION	12.939	46968.883	73.14
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.465	-1688.491	-2.63
SOIL WATER AT START OF YEAR	584.241	2120795.750	
SOIL WATER AT END OF YEAR	583.776	2119107.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.093	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 23

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.09 2.18	0.12 0.67	0.00 1.64	2.07 1.89	2.69 1.07	2.12 1.96
RUNOFF	0.000 0.340	0.000 0.000	0.000 0.121	0.580 0.407	1.334 0.042	0.918 0.128
EVAPOTRANSPIRATION	0.613 1.220	0.128 1.292	0.000 1.068	1.488 1.934	1.358 0.966	1.200 0.848

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 23

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	16.50	59895.016	100.00
RUNOFF	3.870	14046.564	23.45
EVAPOTRANSPIRATION	12.116	43979.414	73.43
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.515	1868.839	3.12
SOIL WATER AT START OF YEAR	583.776	2119107.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	584.291	2120976.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0001	0.196	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 24

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	1.46 0.00	2.05 4.21	1.84 4.56	3.96 2.34	0.00 0.00	0.79 0.97
RUNOFF	0.105 0.000	0.106 1.261	0.000 2.024	1.604 0.387	0.000 0.000	0.227 0.000
EVAPOTRANSPIRATION	1.169 0.000	2.642 2.482	2.374 2.912	2.301 1.515	0.055 0.528	0.563 0.802
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 24

	INCHES	CU. FEET	PERCENT
PRECIPITATION	22.18	80513.406	100.00
RUNOFF	5.714	20741.791	25.76
EVAPOTRANSPIRATION	17.344	62959.625	78.20
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.878	-3187.993	-3.96
SOIL WATER AT START OF YEAR	584.291	2120976.250	
SOIL WATER AT END OF YEAR	583.413	2117788.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.017	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 25

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.74 0.33	2.84 3.80	1.00 4.09	0.48 1.21	1.15 0.51	1.06 0.12
RUNOFF	0.000 0.000	0.180 1.258	0.000 1.095	0.000 0.108	0.000 0.000	0.126 0.000
EVAPOTRANSPIRATION	0.908 0.330	2.067 2.461	1.593 2.395	0.480 1.330	1.147 0.964	0.937 0.120

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 25

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	17.33	62907.898	100.00
RUNOFF	2.767	10045.407	15.97
EVAPOTRANSPIRATION	14.730	53471.387	85.00
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.168	-608.840	-0.97
SOIL WATER AT START OF YEAR	583.413	2117788.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.245	2117179.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.055	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 26

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.41 0.42	0.78 4.51	1.13 3.21	0.00 4.27	5.86 0.60	2.48 0.48
RUNOFF	0.000 0.000	0.000 1.190	0.112 0.532	0.000 0.981	3.506 0.000	0.586 0.000
EVAPOTRANSPIRATION	0.409 0.420	0.781 2.692	0.996 3.289	0.022 2.486	1.992 1.263	2.256 0.535
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 26

	INCHES	CU. FEET	PERCENT
PRECIPITATION	24.15	87664.516	100.00
RUNOFF	6.906	25067.752	28.60
EVAPOTRANSPIRATION	17.141	62222.379	70.98
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.103	374.432	0.43
SOIL WATER AT START OF YEAR	583.245	2117179.250	
SOIL WATER AT END OF YEAR	583.348	2117553.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.052	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 27

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.61 0.74	0.15 2.32	1.18 1.13	0.55 1.30	4.62 0.92	5.08 0.88
RUNOFF	0.000 0.040	0.000 0.503	0.000 0.000	0.000 0.000	1.814 0.000	3.157 0.000
EVAPOTRANSPIRATION	0.697 0.694	0.166 1.823	1.180 1.130	0.541 1.300	2.805 0.551	1.933 1.033

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 27

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	19.48	70712.398	100.00
RUNOFF	5.514	20015.164	28.31
EVAPOTRANSPIRATION	13.854	50288.336	71.12
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.113	408.774	0.58
SOIL WATER AT START OF YEAR	583.348	2117553.750	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.461	2117962.500	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.126	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 28

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	0.61 3.11	0.08 4.58	1.35 0.68	0.25 5.11	3.33 0.10	1.24 0.89
RUNOFF	0.000 1.805	0.000 2.308	0.345 0.000	0.000 1.701	2.025 0.000	0.347 0.000
EVAPOTRANSPIRATION	0.809 1.238	0.097 2.300	0.992 0.718	0.263 2.773	1.305 0.735	0.893 0.399
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 28

	INCHES	CU. FEET	PERCENT
PRECIPITATION	21.33	77427.898	100.00
RUNOFF	8.532	30971.973	40.00
EVAPOTRANSPIRATION	12.522	45456.320	58.71
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.275	999.668	1.29
SOIL WATER AT START OF YEAR	583.461	2117962.500	
SOIL WATER AT END OF YEAR	583.736	2118962.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.059	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 29

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION	1.03 0.48	2.62 4.29	0.33 6.12	0.01 4.97	4.10 1.23	0.36 0.79
RUNOFF	0.008 0.000	0.665 1.202	0.000 2.544	0.000 2.981	2.303 0.309	0.000 0.130
EVAPOTRANSPIRATION	1.096 0.480	1.933 3.088	0.763 3.307	0.017 1.694	1.797 1.217	0.360 0.464

Pescadito Landfill – Closed Conditions: Scenario A

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 29

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	26.33	95577.930	100.00
RUNOFF	10.143	36817.441	38.52
EVAPOTRANSPIRATION	16.214	58856.520	61.58
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	-0.026	-96.156	-0.10
SOIL WATER AT START OF YEAR	583.736	2118962.250	

Pescadito Landfill – Closed Conditions: Scenario A

SOIL WATER AT END OF YEAR	583.710	2118866.000	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.125	0.00

MONTHLY TOTALS (IN INCHES) FOR YEAR 30

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.50 3.04	1.84 6.28	1.70 2.40	0.71 2.63	0.70 1.61	0.72 1.72
RUNOFF	0.000 1.027	0.000 3.113	0.139 1.090	0.037 0.693	0.000 0.025	0.000 0.185
EVAPOTRANSPIRATION	0.957 1.469	1.413 3.711	1.477 1.305	1.190 1.668	0.626 1.228	0.794 1.173
LATERAL DRAINAGE RECIRCULATED INTO LAYER 3	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 5	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 6	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000

Pescadito Landfill – Closed Conditions: Scenario A

ANNUAL TOTALS FOR YEAR 30

	INCHES	CU. FEET	PERCENT
PRECIPITATION	23.85	86575.508	100.00
RUNOFF	6.311	22907.777	26.46
EVAPOTRANSPIRATION	17.012	61752.781	71.33
RECIRCULATION INTO LAYER 3	0.000000	0.000	0.00
DRAINAGE COLLECTED FROM LAYER 5	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 5	0.000000	0.000	0.00
PERC./LEAKAGE THROUGH LAYER 7	0.000000	0.000	0.00
AVG. HEAD ON TOP OF LAYER 6	0.0000		
CHANGE IN WATER STORAGE	0.528	1915.144	2.21
SOIL WATER AT START OF YEAR	583.710	2118866.000	
SOIL WATER AT END OF YEAR	584.237	2120781.250	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	-0.0001	-0.194	0.00

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 30

	JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PRECIPITATION						
TOTALS	0.66 1.65	0.98 2.31	0.79 3.57	1.08 2.49	1.97 0.96	2.35 0.97
STD. DEVIATIONS	0.44 1.61	0.81 1.57	0.69 1.65	1.17 1.44	1.76 0.97	1.81 0.57
RUNOFF						
TOTALS	0.018 0.651	0.102 0.700	0.055 1.135	0.371 0.741	0.894 0.136	0.964 0.080

Pescadito Landfill – Closed Conditions: Scenario A

STD. DEVIATIONS	0.067	0.193	0.113	0.575	1.059	1.079
	1.073	0.923	0.941	0.735	0.291	0.142

EVAPOTRANSPIRATION

TOTALS	0.798	1.090	0.906	0.763	1.033	1.342
	1.015	1.619	2.267	1.688	0.848	0.733

STD. DEVIATIONS	0.329	0.730	0.754	0.657	0.767	0.892
	0.603	0.836	0.906	0.743	0.418	0.307

LATERAL DRAINAGE RECIRCULATED INTO LAYER 3

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LATERAL DRAINAGE COLLECTED FROM LAYER 5

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LATERAL DRAINAGE RECIRCULATED FROM LAYER 5

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 7

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 6

AVERAGES	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Closed Conditions: Scenario A

STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 30

	INCHES		CU. FEET	PERCENT
	-----		-----	-----
PRECIPITATION	19.78 (3.525)		71796.6	100.00
RUNOFF	5.848 (1.9349)		21228.51	29.568
EVAPOTRANSPIRATION	14.103 (2.5324)		51195.05	71.306
DRAINAGE RECIRCULATED INTO LAYER 3	0.00000 (0.00000)		0.000	0.00000
LATERAL DRAINAGE COLLECTED FROM LAYER 5	0.00000 (0.00000)		0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 5	0.00000 (0.00000)		0.000	0.00000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.00000 (0.00000)		0.000	0.00000
AVERAGE HEAD ON TOP OF LAYER 6	0.000 (0.000)			
CHANGE IN WATER STORAGE	-0.173 (1.2472)		-627.00	-0.873

PEAK DAILY VALUES FOR YEARS 1 THROUGH 30

	(INCHES)	(CU. FT.)
	-----	-----
PRECIPITATION	4.24	15391.199
RUNOFF	3.577	12983.0488
DRAINAGE RECIRCULATED INTO LAYER 3	0.00000	0.00000
DRAINAGE COLLECTED FROM LAYER 5	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 5	0.00000	0.00000
PERCOLATION/LEAKAGE THROUGH LAYER 7	0.000000	0.00000

Pescadito Landfill – Closed Conditions: Scenario A

AVERAGE HEAD ON TOP OF LAYER	6	0.000	
MAXIMUM HEAD ON TOP OF LAYER	6	0.000	
LOCATION OF MAXIMUM HEAD IN LAYER	5		
(DISTANCE FROM DRAIN)		0.0 FEET	
SNOW WATER		0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)			0.3268
MINIMUM VEG. SOIL WATER (VOL/VOL)			0.2213

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
 by Bruce M. McEnroe, University of Kansas
 ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.

FINAL WATER STORAGE AT END OF YEAR 30

LAYER	(INCHES)	(VOL/VOL)
1	2.7658	0.3951
2	9.2417	0.3081
3	551.5465	0.1907
4	9.8568	0.4107
5	0.0025	0.0100
6	0.0000	0.0000
7	10.8240	0.4510
SNOW WATER	0.000	

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

- 5. ANALYSES WITH INTRODUCED CONTAMINATED WATER**
- A. OPEN CONDITIONS – 20 FEET OF WASTE**
 - B. INTERMEDIATE CONDITIONS – 50 FEET OF WASTE**
 - C. INTERMEDIATE CONDITIONS – 100 FEET OF WASTE**

8-15-2017



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Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

Slope: 2.5 %
Drainage Length: 500 FT

**
**
**
HYDROLOGIC EVALUATION OF LANDFILL PERFORMANCE
**
HELP MODEL VERSION 3.07 (1 NOVEMBER 1997)
**
DEVELOPED BY ENVIRONMENTAL LABORATORY
**
USAE WATERWAYS EXPERIMENT STATION
**
FOR USEPA RISK REDUCTION ENGINEERING LABORATORY
**
**

PRECIPITATION DATA FILE: C:\HELP3\pesc\PRECIP.D4
TEMPERATURE DATA FILE: C:\HELP3\pesc\TEMP.D7
SOLAR RADIATION DATA FILE: C:\HELP3\pesc\SOL.D13
EVAPOTRANSPIRATION DATA: C:\HELP3\pesc\EVAP_OPN.D1
SOIL AND DESIGN DATA FILE: C:\HELP3\pesc\OPEN2010.D1
OUTPUT DATA FILE: C:\HELP3\pesc\OPEN2010.OU

TIME: 12:21 DATE: 8/3/2017

TITLE: PESCADITO-OPEN CONDITIONS

NOTE: INITIAL MOISTURE CONTENT OF THE LAYERS AND SNOW WATER
WERE SPECIFIED BY THE USER.

LAYER 1

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 6.00 INCHES
POROSITY = 0.4520 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 2

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 18
THICKNESS = 240.00 INCHES
POROSITY = 0.6710 VOL/VOL
FIELD CAPACITY = 0.2920 VOL/VOL

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.2000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
SUBSURFACE INFLOW = 10.00 INCHES/YR
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER

MATERIAL TEXTURE NUMBER 0

THICKNESS = 0.26 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.71399999000 CM/SEC
SLOPE = 2.50 PERCENT
DRAINAGE LENGTH = 500.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER

MATERIAL TEXTURE NUMBER 35

THICKNESS = 0.06 INCHES
POROSITY = 0.0000 VOL/VOL
FIELD CAPACITY = 0.0000 VOL/VOL
WILTING POINT = 0.0000 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
FML PINHOLE DENSITY = 3.00 HOLES/ACRE
FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS	=	24.00	INCHES
POROSITY	=	0.4510	VOL/VOL
FIELD CAPACITY	=	0.4110	VOL/VOL
WILTING POINT	=	0.3110	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4510	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.100000001000E-06	CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER	=	85.00	
FRACTION OF AREA ALLOWING RUNOFF	=	0.0	PERCENT
AREA PROJECTED ON HORIZONTAL PLANE	=	1.000	ACRES
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
INITIAL WATER IN EVAPORATIVE ZONE	=	13.266	INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE	=	38.946	INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE	=	6.024	INCHES
INITIAL SNOW WATER	=	0.000	INCHES
INITIAL WATER IN LAYER MATERIALS	=	71.157	INCHES
TOTAL INITIAL WATER	=	71.157	INCHES
TOTAL SUBSURFACE INFLOW	=	10.00	INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE	=	27.34	DEGREES
MAXIMUM LEAF AREA INDEX	=	0.00	
START OF GROWING SEASON (JULIAN DATE)	=	0	
END OF GROWING SEASON (JULIAN DATE)	=	367	
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
AVERAGE ANNUAL WIND SPEED	=	11.60	MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY	=	76.00	%
AVERAGE 2ND QUARTER RELATIVE HUMIDITY	=	75.00	%
AVERAGE 3RD QUARTER RELATIVE HUMIDITY	=	74.00	%
AVERAGE 4TH QUARTER RELATIVE HUMIDITY	=	76.00	%

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS
 AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
EVAPOTRANSPIRATION	0.621	0.377	0.337	0.279	0.256	3.491
	0.706	1.974	4.411	2.946	1.381	1.257
SUBSURFACE INFLOW INTO LAYER 2	0.8493	0.7671	0.8493	0.8219	0.8493	0.8219
	0.8493	0.8493	0.8219	0.8493	0.8219	0.8493
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0060	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0060	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

PERCOLATION/LEAKAGE THROUGH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON	0.000	0.000	0.000	0.000	0.000	0.000
TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY	0.000	0.000	0.000	0.000	0.000	0.000
HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	0.000	0.000	0.00
EVAPOTRANSPIRATION	18.037	65476.059	110.66
SUBSURFACE INFLOW INTO LAYER 2	10.000000	36300.000	61.35
RECIRCULATION INTO LAYER 2	0.006864	24.915	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006864	24.915	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.003	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	8.263	29992.893	50.69
SOIL WATER AT START OF YEAR	71.157	258298.469	
SOIL WATER AT END OF YEAR	79.419	288291.344	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	0.052	0.00

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<u>RUNOFF</u>						
TOTALS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	0.621 0.706	0.377 1.974	0.337 4.411	0.279 2.946	0.256 1.381	3.491 1.257
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>SUBSURFACE INFLOW INTO LAYER 2</u>						
TOTALS	0.8493 0.8493	0.7671 0.8493	0.8493 0.8219	0.8219 0.8493	0.8493 0.8219	0.8219 0.8493
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0060 0.0000	0.0006 0.0000	0.0002 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
<u>LATERAL DRAINAGE COLLECTED FROM LAYER 4</u>						
TOTALS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0060	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	0.000	(0.0000)	0.00	0.000
EVAPOTRANSPIRATION	18.037	(0.0000)	65476.06	110.659
SUBSURFACE INFLOW INTO LAYER 2	10.00000		36300.000	61.34969
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686	(0.00000)	24.915	0.04211

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000 (0.00000)	0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00686 (0.00000)	24.915	0.04211
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.003	0.00001
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	8.263 (0.0000)	29992.89	50.690

	PEAK DAILY VALUES FOR YEARS	1 THROUGH	1
		(INCHES)	(CU. FT.)
		-----	-----
PRECIPITATION		1.32	4791.600
RUNOFF		0.000	0.0000
DRAINAGE RECIRCULATED INTO LAYER 2		0.00232	8.42162
DRAINAGE COLLECTED FROM LAYER 4		0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4		0.00232	8.42162
PERCOLATION/LEAKAGE THROUGH LAYER 6		0.000000	0.00006
AVERAGE HEAD ON TOP OF LAYER 5		0.002	
MAXIMUM HEAD ON TOP OF LAYER 5		0.018	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)		0.0 FEET	
SNOW WATER		0.00	0.0000
MAXIMUM VEG. SOIL WATER (VOL/VOL)			0.2583
MINIMUM VEG. SOIL WATER (VOL/VOL)			0.2119

*** Maximum heads are computed using McEnroe's equations. ***

Pescadito Landfill – Open Conditions: Scenario A
w/Leachate Introduced

Reference: Maximum Saturated Depth over Landfill Liner
 by Bruce M. McEnroe, University of Kansas
 ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.

FINAL WATER STORAGE AT END OF YEAR 1

LAYER	(INCHES)	(VOL/VOL)
1	1.5905	0.2651
2	57.1448	0.2381
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

- 5. SENSITIVITY ANALYSES WITH INTRODUCED LEACHATE**
- A. OPEN CONDITIONS
 - B. INTERMEDIATE CONDITIONS – 50 FEET OF WASTE**
 - C. INTERMEDIATE CONDITIONS – 100 FEET OF WASTE

8-15-2017



Michael W. Oden

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Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

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**
**          HYDROLOGIC EVALUATION OF LANDFILL PERFORMANCE          **
**          HELP MODEL VERSION 3.07 (1 NOVEMBER 1997)              **
**          DEVELOPED BY ENVIRONMENTAL LABORATORY                  **
**          USAE WATERWAYS EXPERIMENT STATION                     **
**          FOR USEPA RISK REDUCTION ENGINEERING LABORATORY       **
**
**
*****
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PRECIPITATION DATA FILE:   C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\PRECIP.D4
TEMPERATURE DATA FILE:    C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\TEMP.D7
SOLAR RADIATION DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\SOL.D13
EVAPOTRANSPIRATION DATA:  C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\EVAP_INT.D1
SOIL AND DESIGN DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\INT5010.D10
OUTPUT DATA FILE:         C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\INT5010.OUT
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TIME: 15:56 DATE: 8/3/2017

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TITLE: Pescadito Intermediate Conditions

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NOTE: INITIAL MOISTURE CONTENT OF THE LAYERS AND SNOW WATER
WERE SPECIFIED BY THE USER.

LAYER 1

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0

THICKNESS	=	12.00	INCHES
POROSITY	=	0.4510	VOL/VOL
FIELD CAPACITY	=	0.4110	VOL/VOL
WILTING POINT	=	0.3110	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4110	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.999999975000E-05	CM/SEC

LAYER 2

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 18

THICKNESS	=	600.00	INCHES
POROSITY	=	0.6710	VOL/VOL
FIELD CAPACITY	=	0.2920	VOL/VOL

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

WILTING POINT = 0.0770 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.2381 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
 SUBSURFACE INFLOW = 10.00 INCHES/YR
 NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
 IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER
 MATERIAL TEXTURE NUMBER 0

THICKNESS = 24.00 INCHES
 POROSITY = 0.4510 VOL/VOL
 FIELD CAPACITY = 0.4110 VOL/VOL
 WILTING POINT = 0.3110 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER
 MATERIAL TEXTURE NUMBER 0

THICKNESS = 0.26 INCHES
 POROSITY = 0.8500 VOL/VOL
 FIELD CAPACITY = 0.0100 VOL/VOL
 WILTING POINT = 0.0050 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 3.71399999000 CM/SEC
 SLOPE = 2.50 PERCENT
 DRAINAGE LENGTH = 500.0 FEET
 NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
 LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER
 MATERIAL TEXTURE NUMBER 35

THICKNESS = 0.06 INCHES
 POROSITY = 0.0000 VOL/VOL
 FIELD CAPACITY = 0.0000 VOL/VOL
 WILTING POINT = 0.0000 VOL/VOL
 INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
 EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
 FML PINHOLE DENSITY = 3.00 HOLES/ACRE
 FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
 FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS	=	24.00	INCHES
POROSITY	=	0.4510	VOL/VOL
FIELD CAPACITY	=	0.4110	VOL/VOL
WILTING POINT	=	0.3110	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4510	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.100000001000E-06	CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER	=	85.00	
FRACTION OF AREA ALLOWING RUNOFF	=	75.0	PERCENT
AREA PROJECTED ON HORIZONTAL PLANE	=	1.000	ACRES
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
INITIAL WATER IN EVAPORATIVE ZONE	=	16.361	INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE	=	37.620	INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE	=	7.428	INCHES
INITIAL SNOW WATER	=	0.000	INCHES
INITIAL WATER IN LAYER MATERIALS	=	168.483	INCHES
TOTAL INITIAL WATER	=	168.483	INCHES
TOTAL SUBSURFACE INFLOW	=	10.00	INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE	=	27.34	DEGREES
MAXIMUM LEAF AREA INDEX	=	1.00	
START OF GROWING SEASON (JULIAN DATE)	=	0	
END OF GROWING SEASON (JULIAN DATE)	=	367	
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
AVERAGE ANNUAL WIND SPEED	=	11.60	MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY	=	76.00	%
AVERAGE 2ND QUARTER RELATIVE HUMIDITY	=	75.00	%
AVERAGE 3RD QUARTER RELATIVE HUMIDITY	=	74.00	%
AVERAGE 4TH QUARTER RELATIVE HUMIDITY	=	76.00	%

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
COEFFICIENTS FOR BROWNSVILLE TEXAS

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS
 AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	1.476
	0.000	0.242	0.580	0.442	0.000	0.000
EVAPOTRANSPIRATION	1.249	0.464	0.433	0.444	0.616	3.139
	0.888	1.761	3.633	2.557	0.746	1.583
SUBSURFACE INFLOW INTO LAYER 2	0.8493	0.7671	0.8493	0.8219	0.8493	0.8219
	0.8493	0.8493	0.8219	0.8493	0.8219	0.8493
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0061	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0061	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

PERCOLATION/LEAKAGE THROUGH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON	0.000	0.000	0.000	0.000	0.000	0.000
TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY	0.000	0.000	0.000	0.000	0.000	0.000
HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	INCHES	CU. FEET	PERCENT
	-----	-----	-----
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	2.740	9946.933	16.81
EVAPOTRANSPIRATION	17.513	63573.195	107.44
SUBSURFACE INFLOW INTO LAYER 2	10.000000	36300.000	61.35
RECIRCULATION INTO LAYER 2	0.006864	24.915	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006864	24.915	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.003	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	6.047	21948.937	37.10
SOIL WATER AT START OF YEAR	168.483	611591.812	
SOIL WATER AT END OF YEAR	174.529	633540.750	
SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0000	-0.065	0.00

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<u>RUNOFF</u>						
TOTALS	0.000 0.000	0.000 0.242	0.000 0.580	0.000 0.442	0.000 0.000	1.476 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	1.249 0.888	0.464 1.761	0.433 3.633	0.444 2.557	0.616 0.746	3.139 1.583
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>SUBSURFACE INFLOW INTO LAYER 2</u>						
TOTALS	0.8493 0.8493	0.7671 0.8493	0.8493 0.8219	0.8219 0.8493	0.8493 0.8219	0.8219 0.8493
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0061 0.0000	0.0006 0.0000	0.0002 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
<u>LATERAL DRAINAGE COLLECTED FROM LAYER 4</u>						
TOTALS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0061	0.0006	0.0002	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	2.740	(0.0000)	9946.93	16.811
EVAPOTRANSPIRATION	17.513	(0.0000)	63573.20	107.443
SUBSURFACE INFLOW INTO LAYER 2	10.00000		36300.000	61.34969
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686	(0.00000)	24.915	0.04211
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000	(0.00000)	0.000	0.00000

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

DRAINAGE RECIRCULATED FROM LAYER 4	0.00686 (0.00000)	24.915	0.04211
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.003	0.00001
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	6.047 (0.0000)	21948.94	37.095

	PEAK DAILY VALUES FOR YEARS	1 THROUGH	1
		(INCHES)	(CU. FT.)
		-----	-----
PRECIPITATION		1.32	4791.600
RUNOFF		0.703	2553.2805
DRAINAGE RECIRCULATED INTO LAYER 2		0.00232	8.42162
DRAINAGE COLLECTED FROM LAYER 4		0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4		0.00232	8.42162
PERCOLATION/LEAKAGE THROUGH LAYER 6		0.000000	0.00006
AVERAGE HEAD ON TOP OF LAYER 5		0.002	
MAXIMUM HEAD ON TOP OF LAYER 5		0.018	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)		0.0 FEET	
SNOW WATER		0.00	0.0000

MAXIMUM VEG. SOIL WATER (VOL/VOL)	0.2727
MINIMUM VEG. SOIL WATER (VOL/VOL)	0.2021

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
by Bruce M. McEnroe, University of Kansas

Pescadito Landfill – Intermediate Conditions (50 ft of Waste): Scenario A
w/Leachate Introduced

ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.

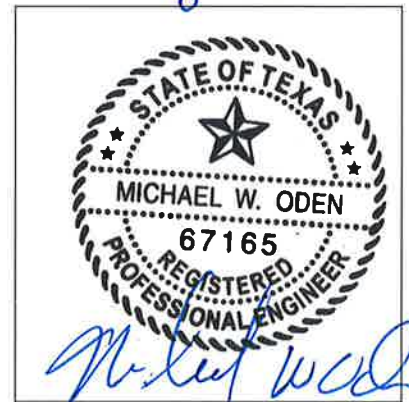
FINAL WATER STORAGE AT END OF YEAR 1

LAYER	(INCHES)	(VOL/VOL)
1	3.3673	0.2806
2	150.4781	0.2508
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

ATTACHMENT B
TO APPENDIX III-D.6
HELP MODEL OUTPUTS

- 5. SENSITIVITY ANALYSES WITH INTRODUCED LEACHATE**
- A. OPEN CONDITIONS
 - B. INTERMEDIATE CONDITIONS – 50 FEET OF WASTE
 - C. INTERMEDIATE CONDITIONS – 100 FEET OF WASTE

8-15-2017



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Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

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*****
*****
**
**
**
**          HYDROLOGIC EVALUATION OF LANDFILL PERFORMANCE          **
**          HELP MODEL VERSION 3.07 (1 NOVEMBER 1997)              **
**          DEVELOPED BY ENVIRONMENTAL LABORATORY                  **
**          USAE WATERWAYS EXPERIMENT STATION                    **
**          FOR USEPA RISK REDUCTION ENGINEERING LABORATORY      **
**
*****
*****
```

```
PRECIPITATION DATA FILE:   C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\PRECIP.D4
TEMPERATURE DATA FILE:    C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\TEMP.D7
SOLAR RADIATION DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\SOL.D13
EVAPOTRANSPIRATION DATA:  C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\EVAP_INT.D1
SOIL AND DESIGN DATA FILE: C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\INT10010.D1
OUTPUT DATA FILE:         C:\DOCUME~1\XPMUSER\DESKTOP\HELP3\PESC\INT10010.OU
```

TIME: 15:57 DATE: 8/3/2017

```
*****
```

TITLE: Pescadito Intermediate Conditions

```
*****
```

NOTE: INITIAL MOISTURE CONTENT OF THE LAYERS AND SNOW WATER
WERE SPECIFIED BY THE USER.

LAYER 1

```
TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS           = 12.00 INCHES
POROSITY             = 0.4510 VOL/VOL
FIELD CAPACITY      = 0.4110 VOL/VOL
WILTING POINT       = 0.3110 VOL/VOL
INITIAL SOIL WATER  = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC
```

LAYER 2

```
TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 18
THICKNESS           = 1200.00 INCHES
POROSITY             = 0.6710 VOL/VOL
FIELD CAPACITY      = 0.2920 VOL/VOL
```

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

WILTING POINT = 0.0770 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.2508 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.100000005000E-02 CM/SEC
SUBSURFACE INFLOW = 10.00 INCHES/YR
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM LAYER # 4
IS RECIRCULATED INTO THIS LAYER.

LAYER 3

TYPE 1 - VERTICAL PERCOLATION LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 24.00 INCHES
POROSITY = 0.4510 VOL/VOL
FIELD CAPACITY = 0.4110 VOL/VOL
WILTING POINT = 0.3110 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.4110 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.999999975000E-05 CM/SEC

LAYER 4

TYPE 2 - LATERAL DRAINAGE LAYER
MATERIAL TEXTURE NUMBER 0
THICKNESS = 0.26 INCHES
POROSITY = 0.8500 VOL/VOL
FIELD CAPACITY = 0.0100 VOL/VOL
WILTING POINT = 0.0050 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0100 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 3.82999992000 CM/SEC
SLOPE = 2.50 PERCENT
DRAINAGE LENGTH = 500.0 FEET
NOTE: 100.00 PERCENT OF THE DRAINAGE COLLECTED FROM THIS
LAYER IS RECIRCULATED INTO LAYER # 2.

LAYER 5

TYPE 4 - FLEXIBLE MEMBRANE LINER
MATERIAL TEXTURE NUMBER 35
THICKNESS = 0.06 INCHES
POROSITY = 0.0000 VOL/VOL
FIELD CAPACITY = 0.0000 VOL/VOL
WILTING POINT = 0.0000 VOL/VOL
INITIAL SOIL WATER CONTENT = 0.0000 VOL/VOL
EFFECTIVE SAT. HYD. COND. = 0.199999996000E-12 CM/SEC
FML PINHOLE DENSITY = 3.00 HOLES/ACRE
FML INSTALLATION DEFECTS = 3.00 HOLES/ACRE
FML PLACEMENT QUALITY = 3 - GOOD

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

LAYER 6

TYPE 3 - BARRIER SOIL LINER
MATERIAL TEXTURE NUMBER 0

THICKNESS	=	24.00	INCHES
POROSITY	=	0.4510	VOL/VOL
FIELD CAPACITY	=	0.4110	VOL/VOL
WILTING POINT	=	0.3110	VOL/VOL
INITIAL SOIL WATER CONTENT	=	0.4510	VOL/VOL
EFFECTIVE SAT. HYD. COND.	=	0.100000001000E-06	CM/SEC

GENERAL DESIGN AND EVAPORATIVE ZONE DATA

NOTE: SCS RUNOFF CURVE NUMBER WAS USER-SPECIFIED.

SCS RUNOFF CURVE NUMBER	=	85.00	
FRACTION OF AREA ALLOWING RUNOFF	=	75.0	PERCENT
AREA PROJECTED ON HORIZONTAL PLANE	=	1.000	ACRES
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
INITIAL WATER IN EVAPORATIVE ZONE	=	16.970	INCHES
UPPER LIMIT OF EVAPORATIVE STORAGE	=	37.620	INCHES
LOWER LIMIT OF EVAPORATIVE STORAGE	=	7.428	INCHES
INITIAL SNOW WATER	=	0.000	INCHES
INITIAL WATER IN LAYER MATERIALS	=	326.583	INCHES
TOTAL INITIAL WATER	=	326.583	INCHES
TOTAL SUBSURFACE INFLOW	=	10.00	INCHES/YEAR

EVAPOTRANSPIRATION AND WEATHER DATA

NOTE: EVAPOTRANSPIRATION DATA WAS OBTAINED FROM
BROWNSVILLE TEXAS

STATION LATITUDE	=	27.34	DEGREES
MAXIMUM LEAF AREA INDEX	=	1.00	
START OF GROWING SEASON (JULIAN DATE)	=	0	
END OF GROWING SEASON (JULIAN DATE)	=	367	
EVAPORATIVE ZONE DEPTH	=	60.0	INCHES
AVERAGE ANNUAL WIND SPEED	=	11.60	MPH
AVERAGE 1ST QUARTER RELATIVE HUMIDITY	=	76.00	%
AVERAGE 2ND QUARTER RELATIVE HUMIDITY	=	75.00	%
AVERAGE 3RD QUARTER RELATIVE HUMIDITY	=	74.00	%
AVERAGE 4TH QUARTER RELATIVE HUMIDITY	=	76.00	%

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

NOTE: PRECIPITATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY PRECIPITATION (INCHES)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
0.82	0.86	0.88	1.37	2.65	2.68
1.93	2.29	3.09	2.41	1.07	0.91

NOTE: TEMPERATURE DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS

NORMAL MEAN MONTHLY TEMPERATURE (DEGREES FAHRENHEIT)

<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
56.50	61.00	68.80	76.00	82.00	86.50
87.90	87.90	82.90	75.40	65.50	57.70

NOTE: SOLAR RADIATION DATA WAS SYNTHETICALLY GENERATED USING
 COEFFICIENTS FOR BROWNSVILLE TEXAS
 AND STATION LATITUDE = 27.34 DEGREES

MONTHLY TOTALS (IN INCHES) FOR YEAR 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
PRECIPITATION	0.32	0.49	0.35	0.01	0.00	3.60
	0.00	2.82	3.54	2.89	0.72	1.56
RUNOFF	0.000	0.000	0.000	0.000	0.000	1.476
	0.000	0.242	0.538	0.442	0.000	0.000
EVAPOTRANSPIRATION	1.249	0.464	0.434	0.445	0.619	3.140
	0.854	1.752	3.663	2.544	0.739	1.570
SUBSURFACE INFLOW INTO LAYER 2	0.8493	0.7671	0.8493	0.8219	0.8493	0.8219
	0.8493	0.8493	0.8219	0.8493	0.8219	0.8493
LATERAL DRAINAGE RECIRCULATED INTO LAYER 2	0.0063	0.0004	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4	0.0063	0.0004	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

MONTHLY SUMMARIES FOR DAILY HEADS (INCHES)

AVERAGE DAILY HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000
STD. DEVIATION OF DAILY HEAD ON TOP OF LAYER 5	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000

ANNUAL TOTALS FOR YEAR 1

	<u>INCHES</u>	<u>CU. FEET</u>	<u>PERCENT</u>
PRECIPITATION	16.30	59169.004	100.00
RUNOFF	2.698	9793.400	16.55
EVAPOTRANSPIRATION	17.472	63424.934	107.19
SUBSURFACE INFLOW INTO LAYER 2	10.000000	36300.000	61.35
RECIRCULATION INTO LAYER 2	0.006864	24.915	0.04
DRAINAGE COLLECTED FROM LAYER 4	0.0000	0.000	0.00
RECIRCULATION FROM LAYER 4	0.006864	24.915	0.04
PERC./LEAKAGE THROUGH LAYER 6	0.000001	0.003	0.00
AVG. HEAD ON TOP OF LAYER 5	0.0000		
CHANGE IN WATER STORAGE	6.130	22250.367	37.60
SOIL WATER AT START OF YEAR	326.583	1185494.750	
SOIL WATER AT END OF YEAR	332.712	1207745.120	

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

SNOW WATER AT START OF YEAR	0.000	0.000	0.00
SNOW WATER AT END OF YEAR	0.000	0.000	0.00
ANNUAL WATER BUDGET BALANCE	0.0001	0.302	0.00

AVERAGE MONTHLY VALUES IN INCHES FOR YEARS 1 THROUGH 1

	<u>JAN/JUL</u>	<u>FEB/AUG</u>	<u>MAR/SEP</u>	<u>APR/OCT</u>	<u>MAY/NOV</u>	<u>JUN/DEC</u>
<u>PRECIPITATION</u>						
TOTALS	0.32 0.00	0.49 2.82	0.35 3.54	0.01 2.89	0.00 0.72	3.60 1.56
STD. DEVIATIONS	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
<u>RUNOFF</u>						
TOTALS	0.000 0.000	0.000 0.242	0.000 0.538	0.000 0.442	0.000 0.000	1.476 0.000
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>EVAPOTRANSPIRATION</u>						
TOTALS	1.249 0.854	0.464 1.752	0.434 3.663	0.445 2.544	0.619 0.739	3.140 1.570
STD. DEVIATIONS	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000	0.000 0.000
<u>SUBSURFACE INFLOW INTO LAYER 2</u>						
TOTALS	0.8493 0.8493	0.7671 0.8493	0.8493 0.8219	0.8219 0.8493	0.8493 0.8219	0.8219 0.8493
<u>LATERAL DRAINAGE RECIRCULATED INTO LAYER 2</u>						
TOTALS	0.0063 0.0000	0.0004 0.0000	0.0001 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000
STD. DEVIATIONS	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

LATERAL DRAINAGE COLLECTED FROM LAYER 4

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

LATERAL DRAINAGE RECIRCULATED FROM LAYER 4

TOTALS	0.0063	0.0004	0.0001	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

PERCOLATION/LEAKAGE THROUGH LAYER 6

TOTALS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGES OF MONTHLY AVERAGED DAILY HEADS (INCHES)

DAILY AVERAGE HEAD ON TOP OF LAYER 5

AVERAGES	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD. DEVIATIONS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

AVERAGE ANNUAL TOTALS & (STD. DEVIATIONS) FOR YEARS 1 THROUGH 1

	INCHES		CU. FEET	PERCENT
PRECIPITATION	16.30	(0.000)	59169.0	100.00
RUNOFF	2.698	(0.0000)	9793.40	16.552

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

EVAPOTRANSPIRATION	17.472 (0.0000)	63424.93	107.193
SUBSURFACE INFLOW INTO LAYER 2	10.00000	36300.000	61.34969
DRAINAGE RECIRCULATED INTO LAYER 2	0.00686 (0.00000)	24.915	0.04211
LATERAL DRAINAGE COLLECTED FROM LAYER 4	0.00000 (0.00000)	0.000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00686 (0.00000)	24.915	0.04211
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.00000 (0.00000)	0.003	0.00000
AVERAGE HEAD ON TOP OF LAYER 5	0.000 (0.000)		
CHANGE IN WATER STORAGE	6.130 (0.0000)	22250.37	37.605

PEAK DAILY VALUES FOR YEARS	1 THROUGH	1
	----- (INCHES) -----	----- (CU. FT.) -----
PRECIPITATION	1.32	4791.600
RUNOFF	0.703	2553.3096
DRAINAGE RECIRCULATED INTO LAYER 2	0.00237	8.59164
DRAINAGE COLLECTED FROM LAYER 4	0.00000	0.00000
DRAINAGE RECIRCULATED FROM LAYER 4	0.00237	8.59164
PERCOLATION/LEAKAGE THROUGH LAYER 6	0.000000	0.00006
AVERAGE HEAD ON TOP OF LAYER 5	0.002	
MAXIMUM HEAD ON TOP OF LAYER 5	0.004	
LOCATION OF MAXIMUM HEAD IN LAYER 4 (DISTANCE FROM DRAIN)	32.7 FEET	
SNOW WATER	0.00	0.0000

Pescadito Landfill – Intermediate Conditions (100 ft of Waste): Scenario A
w/Leachate Introduced

MAXIMUM VEG. SOIL WATER (VOL/VOL) 0.2828
 MINIMUM VEG. SOIL WATER (VOL/VOL) 0.2011

*** Maximum heads are computed using McEnroe's equations. ***

Reference: Maximum Saturated Depth over Landfill Liner
 by Bruce M. McEnroe, University of Kansas
 ASCE Journal of Environmental Engineering
 Vol. 119, No. 2, March 1993, pp. 262-270.

FINAL WATER STORAGE AT END OF YEAR 1

LAYER	(INCHES)	(VOL/VOL)
1	3.3672	0.2806
2	308.6612	0.2572
3	9.8571	0.4107
4	0.0026	0.0100
5	0.0000	0.0000
6	10.8240	0.4510
SNOW WATER	0.000	

