Clark County Wind Tunnel Study

Section II

Estimation of Valley-Wide PM_{10} emissions using UNLV 1995 wind tunnel-derived emission factors, 1998-1999 emission factors, revised vacant land classifications, and GIS-based mapping of vacant lands

September 13, 2000 – Draft Final Report

Estimation of Valley-Wide PM-10 emissions using UNLV 1995 wind tunnel-derived emission factors, 1998-1999 emission factors, revised vacant land classifications, and GIS-based mapping of vacant lands

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DRAFT Final Report DRAFT

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September 13, 2000

Executive Summary

This final report addresses in detail several subject areas specifically requested by the client, Clark County Comprehensive Planning, as essential for proper documentation of the Valley-wide PM-10 vacant land estimate that is part of the Clark County"s PM-10 State Implementation Plan (SIP) submission to US EPA. It is understood that this report, will be an Appendix in the SIP.

I. The methodology used for developing the estimate of 151,189 acres of vacant land within the BLM Land Disposal Boundary is discussed. The acreage is generated by processing a database comprised of Clark County Assessor's information, dated 11/29/99, about vacant land parcels larger than ½ acre that have a zero integer value for land use codes. The Assessor's database shows 148,575 acres vacant within the Land Disposal Boundary. The process of assigning the land to Thiessen polygons and dividing shared grid cells among polygons introduces a +2,624 acre (+1.8%) error into the vacant land estimate when it is ready to be used for PM-10 valley wide estimate.

II. The rationale for selection of a 20 mph minimum wind-speed for initiation of a Valley-wide PM-10 erosion event is described and explained. The 20 mph threshold corresponds to the 10th percentile PM-10 threshold as determined from the 1995 UNLV wind tunnel field study database. Use of a 20 mph threshold is conservative, producing high estimates of PM-10 emissions, in that only a small percentage of Valley sites are likely to be eroding PM-10 at that velocity. The 50th %ile velocity is about 27 mph.

III. PM-10 emissions factors, corrected for the presence of initial spikes of loose PM-10, are presented for unstable lands, stable lands, stabilized lands (with suppressant freshly applied – not torn up), and stabilized lands with degraded suppressant (torn up). Emission factor values for unstable and stable lands are similar to those reported in the February 22, 2000 Draft report. Stabilized land emission factors have been revised to incorporate the effects of initial PM-10 spikes since the March 28 Draft report. This revision has a very small effect on the valley-wide emissions of PM-10 from a mixture of stable and stabilized (formerly unstable, but now treated with suppressant) lands.

IV. Field survey data are presented demonstrating the feasibility of classifying vacant parcels as stable or unstable, based on the proposed Clark County rule 41. UNLV visited 69 sites, mostly in the south and west parts of the Valley, and found that 63 of 69 visited sites would be rated as "stable" under the proposed rule. If additional site visits to

the north and east of the Valley were made, it is anticipated that the relative number of unstable sites would increase. UNLV developed a flow-chart to ease application of the rule in the field, and proposed an improvement to the rule procedure for measuring rock cover by collecting with a dust pan, then squaring up in a single layer in a cake pan and measuring the squared area.

V. UNLV analyzed 54 aerial orthophotos to determine standing shrub-sized vegetative densities on vacant lands. The arithmetic mean vegetative density was 9.7%, geometric mean 4.6%. If these observed densities were to hold for larger areas, it appears that, in general, there is insufficient standing shrub-sized vegetation on most desert lands to attenuate wind stress and reduce wind erosion.

Keywords: PM-10, wind erosion, emissions factors, Valley-wide, dust suppressants, GIS, Clark County

Acknowledgments

UNLV gratefully acknowledges the help and support of the client, Clark County Comprehensive Planning, which supplied much of the data and information to make this project possible, especially outputs from the Assessor's database and outputs from the digitized aerial photo database, provided by Majed Khater.

The contributions of Rodney Langston, Carrie MacDougall, and Will Cates immeasurably improved the quality of this report. UNLV also thanks the Clark County Health District for wind data and dust permit data, and offers thanks to Cheryl McDonnell-Canan and Lew Wallenmyer for their continued interest, commentary, and interactions on field site visits.

The following UNLV faculty and staff contributed to this project.

Shashi Nambisan	Jon Becker
Srinivas Pulugurtha	Sherrie Edwards
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Any errors and omissions are the sole responsibility of the author and Principal Investigator, David James

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I. Methodology For Computing The Number Of Acres Of Vacant Land Used In The Valley-Wide Estimate Of Wind-Eroded PM-10 Emissions.

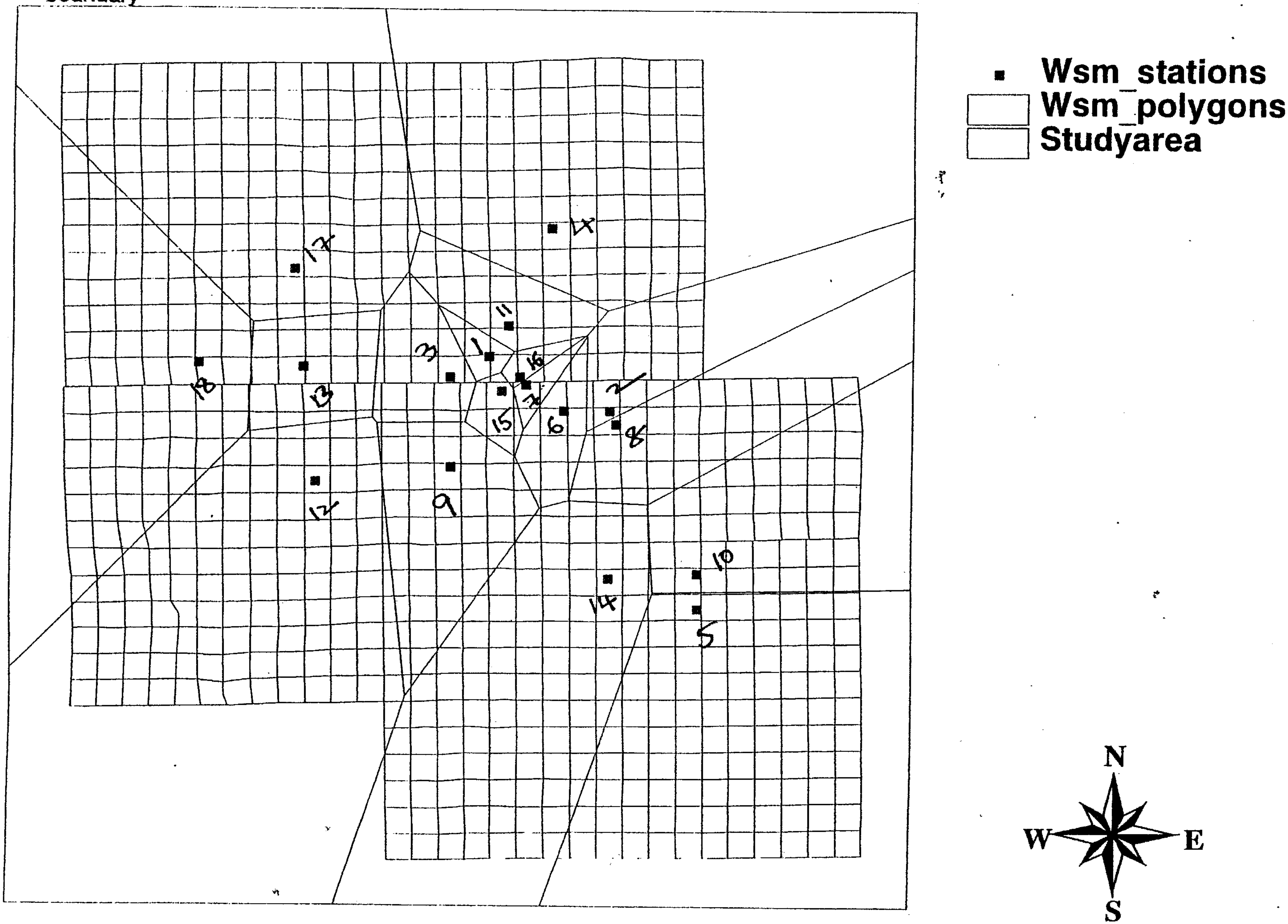
A. Vacant land estimates in each township, range and section were obtained by the following method (Khater, personal communication, Sept 2000)

1. The Clark County Assessor's database, effective date, November 1999 was used to develop information about the number of acres of vacant land in each township, range and section.
2. Queries were run on the database for parcels with any non-zero land use code. Land use codes are assigned integer values. For non-zero land use codes, the entire parcel corresponding to a non-zero code was assumed to be developed, or not vacant.
3. A zero value in the land-use code indicates that the assessor is not aware of any development on the parcel, and the parcel was classified as vacant.
4. This methodology of land use classification introduces some inaccuracies into vacant land estimates. For example, a non-zero code could be assigned to a 2.5-acre residential parcel. However, the parcel could have 0.5 acres that have been developed (with house, driveway and yard) and the remaining 2.0 acres would be undeveloped (vacant). The assessor's database will only change for this parcel if it is subdivided and sold.
5. For a particular township, range and section, the total number of acres of parcels with non-zero land use codes was determined, and subtracted from the total area of the section to develop an estimate of the number of acres of vacant land in that section.
6. On November 29, 1999, UNLV obtained from Clark County Comprehensive Planning (via Rodney Langston), the output from a query to this database to produce a summary of the vacant land areas within the Bureau of Land Management (BLM) Land Disposal Boundary. The query produced a file containing records comprised of the following fields: township, range, section, and vacant land area (acres). The total vacant land area within the Land Disposal Boundary identified by this query was 148,575 acres. A listing of all grid cells identified by this query is displayed in Table B-1 in the Appendix.

B. Locations of Clark County Health District (CCHD) Air Quality Division (AQD) monitoring stations were converted to UTM coordinates and overlaid on a Clark County grid comprised of the sections within the BLM Land Disposal Boundary (Figure 1).

C. An ARCInfo® macro was written to create a set of Thiessen polygons using the CCHD AQD monitoring station locations as the origins. Straight lines were drawn to connect monitoring station locations.

Figure 1: Thiessen polygons centered around CCHD wind monitoring stations – superimposed on BLM Land disposal boundary



Perpendicular bisectors were then drawn outward from the lines connecting the monitoring stations. The lines were extended until they intersected another perpendicular bisector, then stopped. These perpendicular bisectors comprise the boundaries of the Thiessen polygons. Bisectors that extended to the BLM boundary stop at the BLM boundary. These Thiessen polygons became a layer in the ARCInfo® Geographic Information Systems (GIS) database.

D. A database query was developed and run to find all grid cells (sections) touched or contained by each Thiessen polygon. The total vacant land area associated with each Thiessen polygon was then computed by summing the vacant land areas for all grid cells touched by or contained within each Thiessen polygon.

E. The method described in step D leads to vacant land areas in grid cells straddling a Thiessen polygon boundary being counted on each side of the boundary. As a result of this "double-counting," vacant land areas associated with each polygon would be overestimated if the "double-counting" were not corrected. Because of the duplication of grid cells, total vacant land area associated with the Thiessen polygons, prior to correction, was 183,345 acres. A listing of all grid cells associated with each polygon is contained in Table B-2 in the Appendix.

F. The following technique was developed to correct the double-counting error.
   1. A Microsoft Access97® database was developed by UNLV's Srinivas Pulugurtha that labeled each township, range and section with a unique record identifier.
   2. After assignment of grid cells to the Thiessen polygons, and entry of this information into the database. A query was run to find all records that contained duplicates of the unique identifier. Duplicate records indicated grid cells that were associated with more than one polygon.
   3. It was assumed that all duplicate grid cells associated with each polygon, were, on average, half in the polygon, and half out of the polygon. Vacant land areas for duplicated cells associated with each polygon were summed, divided by two and subtracted from the original total vacant area computed for the polygon to obtain a corrected vacant land area estimate. A hypothetical example might clarify this technique.

G. Hypothetical example, with rounded numbers:
   1. Thiessen Polygons A and B are generated from the ARCInfo macro. All grid cells touched by or contained in Polygon A have a total of 5,000 acres of vacant land. All grid cells touched by or contained in

Polygon B, which is adjacent to Polygon A, have a total of 8,000 acres of vacant land.

2. A find duplicates query shows that there are 10 grid cells associated with the polygon that are duplicated (associated with other polygons). The 10 grid cells have a total of 500 acres of vacant land.
3. It is assumed that these bordering grid cells lie half in Polygon A and half in other polygons. So, the 500 acre total is divided by 2, and subtracted from the total for A. Polygon A's corrected vacant land area is then 5000 - 250 = 4750 acres.

H. This correction process is repeated for all polygons that have duplicated grid cells.

I. *Corrected* vacant land areas for were summed over all Thiessen polygons to generate the total area of vacant land to be used in computing the Valley-wide estimate. The total value, after correction, generated for use in the vacant land PM-10 calculations is 151,189 acres. A tabular summary of the corrected land areas for each polygon is shown in Table 1. A listing of duplicated grid cells for each polygon may be found in Table B-3 in the Appendix.

J. This total area, because of a correction process that assumes half the area in each polygon, is 2,624 acres (1.8%) higher than the raw area data provided by Clark County from the Assessor's database.

K. Summary discussion of Sources of Error in determination of the number of acres of vacant land

1. *Development of vacant land estimates in each section from Clark County Assessor's land use codes.* As previously discussed, this technique tends to over-estimate the number of acres of developed land at parcel scale, because it does not have information about the amount of development within each parcel. As a result, it tends to underestimate the number of acres of vacant land in each section.
2. *Development of number of acres of vacant land in each polygon.* Error is introduced in the assumption that all grid cells straddling a polygon boundary are equally shared between the two adjacent polygons. This assumption may be approximately correct for large polygons containing lots of cells, but may be less accurate for polygons that contain only a few grid cells. The outcome of processing the grid cell data in this manner to prepare it for use in the PM-10 emissions estimate, introduced a 1.8% overestimate of in the number acres of vacant land used in the PM-10 vacant land emissions estimates.

Table 1: Summary of area corrections for shared grid cells in each polygon

id	letter code	alt letter code	vacant land (acres)	adjustment (acres)	rev vacant land (acres)	bordering polygons	comment
1	cc		635	318	318	3,11,15,16	vacant land
2	ww		2,497	923	1,574	4,6,8,11	comprises
3	sl		2,510	1,195	1,315	1,9,11,12,13,17	all grid cells
4	bs	cr	25,920	3,551	22,369	2,11,17	contained in
5	pl	se	10,862	2,574	8,288	10,14	or touched by
6	mc	es	722	301	422	2,7,8,9,14,15	the boundary
7	ms	ec	339	170	170	6,15,16	for each
8	dm		3,276	1,084	2,192	2,6,10,14	polygon
9	fl		11,574	3,742	7,833	3,6,12,14,15	
10	pt		8,544	1,781	6,764	5,8,14	adjustment
11	jd		5,365	2,250	3,116	1,2,3,4,16,17	is 1/2 the
12	pm		34,568	3,906	30,662	3,9,13,18	total area
13	wj		2,177	655	1,523	3,12,17,18	of grid cells
14	gv		30,558	4,538	26,021	5,6,8,9,10	that cross
15	cw		369	177	192	1,3,6,7,9,16	a boundary
16	sa		414	207	207	1,7,11,15	
17	lo		28,958	2,857	26,102	3,4,11,13,18	rev vacant =
18	pv		14,057	1,932	12,125	12,13,17	vacant -
	Total		183,345	32,157	151,189		adjustment

Table 2:

Statistical summary - 10 meter threshold wind velocity distributions

Disturbed sites (new classification) n = 29				
		computed	extrapolated	
category	aero roughness (cm)	spike velocity @ 7.5 cm (mph)	spike velocity @ 10 m (mph)	Comment
minimum	0.0027	9.6	18.2	
arithm. 10th %ile			19.9	interpolated from plot
geom. mean-1 s.dev	0.0139	11.3	22.2	
geometric mean	0.0514	13	26.4	
geom. mean+1 s.dev	0.1898	14.9	31.3	
arithm. 90th %ile			33.4	interpolated from plot
maximum	0.4099	17.3	37.1	

Undisturbed sites (new classification) n = 56				
		computed	extrapolated	
category	aero roughness (cm)	spike velocity @ 7.5 cm (mph)	spike velocity @ 10 m (mph)	Comment
minimum	0.0001	6.7	12.4	
arithm. 10th %ile			20.4	interpolated from plot
geom. mean-1 s.dev	0.0124	10.9	21.8	
geometric mean	0.0712	12.7	27.0	
geom. mean+1 s.dev	0.4106	14.7	33.4	
arithm. 90th %ile			32.7	interpolated from plot
maximum	0.4899	19.1	39.1	

II. Determination of minimum wind velocity for erosion of PM-10 from vacant land surfaces

A. *Wind Tunnel Data source.* UNLV used data from the 1995 Wind tunnel field survey in the Las Vegas Valley to compute aerodynamic roughness heights, and velocities for initiation of PM-10 erosion. Wind tunnel flow velocity was gradually increased, and the centerline pitot tube pressure drop was recorded when the TSI Dust-Trak first measured a "spike" in PM-10 concentration exceeding 1 mg/m3 in the wind tunnel. Using site photos from UNLV's 1995 field data book, the field sites were reclassified as "stable" or "unstable" by UNLV according to criteria in the proposed Maricopa County / Clark County rules. Evidence of crusting, presence of flat vegetation and sizes of sheltering elements in the photographs were used to estimate stability of the photographed 1995 sites. In 1995, the sites had been subjectively classified as disturbed or undisturbed on the basis of evidence of human activity (debris, tire tracks, broken crust) at the field sites.

B. *Wind tunnel data processing.* The centerline pitot tube pressure drops corresponding to the initial PM-10 spike were converted to tunnel centerline (7.5-cm height) spike velocities. The aerodynamic roughness, determined from a series of velocity profile measurements over the soil surface, was used with the 7.5 cm data to extrapolate the spike velocities to a height of 10 meters, the global standard for measurement of wind speeds. Statistical analyses were performed on the extrapolated 10-meter spike velocities to determine a value that could be used for initiation of Valley-wide PM-10 erosion.

C. *Results.* Table 2 presents a statistical summary of the disturbed (unstable) and undisturbed (stable) 1995 wind tunnel datasets. Geometric mean 10 meter PM-10 spike velocity was 26.4 mph for the unstable sites, and 27.0 mph for stable sites. The 10th percentile interpolated value for unstable sites was 19.9 mph. The 10th percentile interpolated value for stable sites was 20.4 mph. Figure 2 (29 sites) shows a rapid jump from 10th %ile to 28th %ile between 22 and 24 mph for unstable (disturbed) sites. Figure 3 (56 sites) shows a smooth increase from 10th %ile at 20 mph, to 14th %ile at 22 mph to 21st %ile at 24 mph for stable lands.

D. *Discussion.* The author (James) used a 20 mph threshold for unstable, stable in the Feb 22 and March 28 computations of Valley-wide PM-10 vacant land estimates. This is "conservative", in that we assume the whole valley starts to emit PM-10 at 20 mph, when in fact, only 10% of the sites may be emitting PM-10 at that velocity. As a result, a 20 mph threshold tends to overestimate the amount of emitted PM-10. Effects of rain on windy

Figure 2

Disturbed (Unstable) threshold velocity frequency distribution

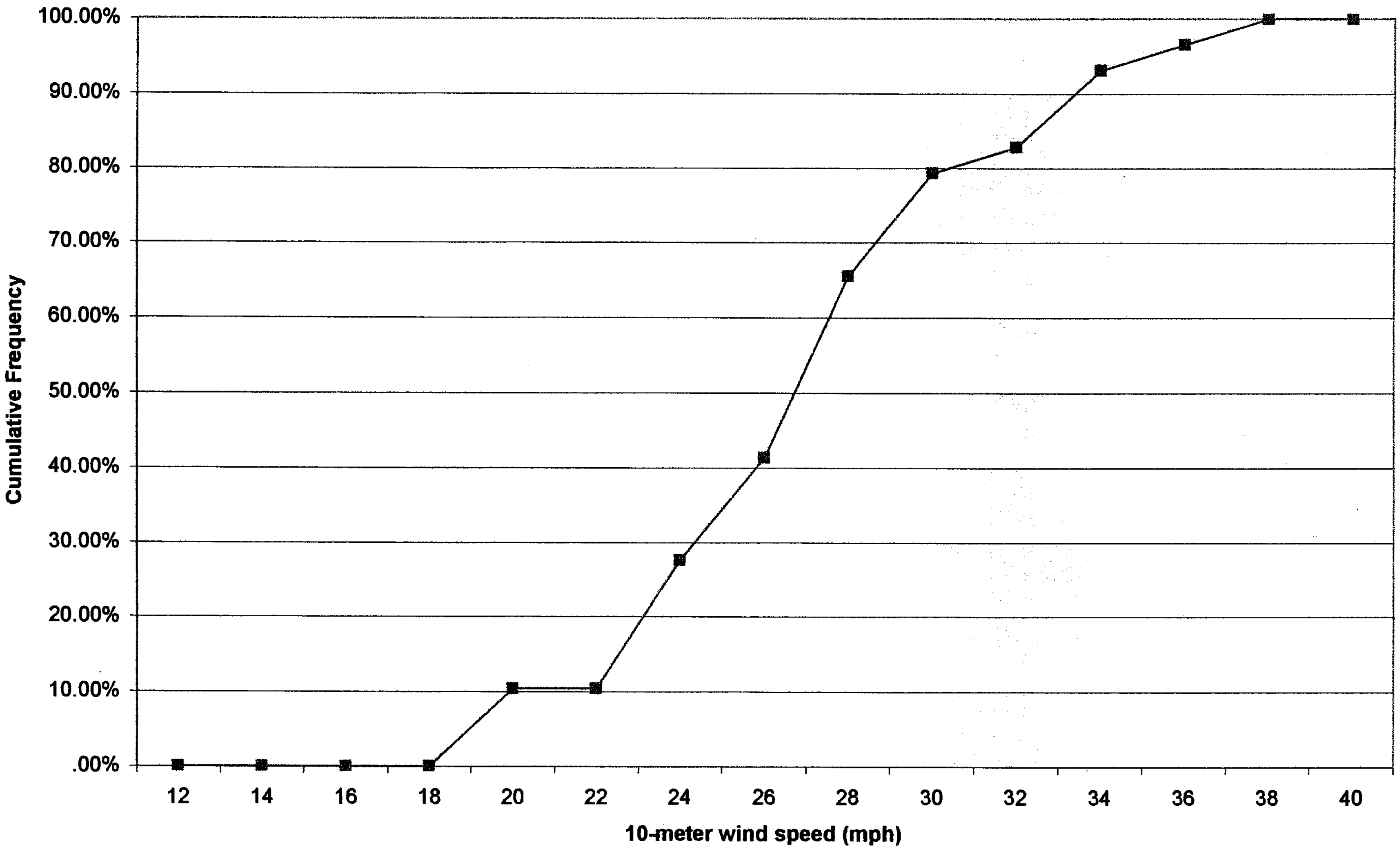
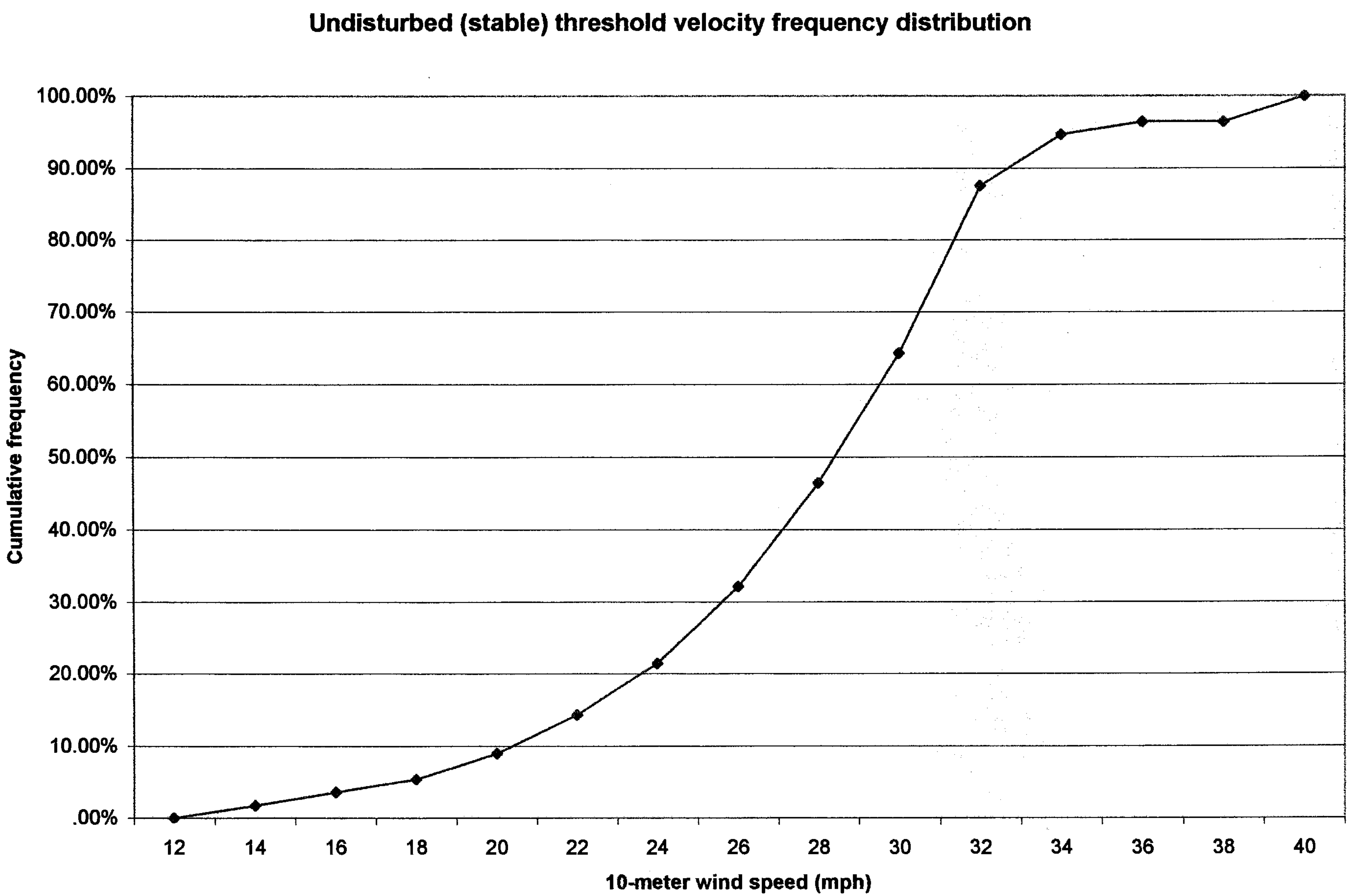


Figure 3



Undisturbed (stable) threshold velocity frequency distribution
Cumulative frequency
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
.00%
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
10-meter wind speed (mph)

days were neglected in these reports. As a result, the Feb 22 and March 28 estimates were likely too high.

Uniform use of wind speeds 25 mph or higher in computing Valley-wide estimates would give disproportionate weight to stable land emissions, because, winds 25 mph or higher generate emissions from 100% - 25% = 75% of stable, undisturbed land sites (Figure 3), but only 100 - 35 = 65% of unstable land sites (Figure 2). A lower wind speed threshold is needed for unstable sites. Winds 20 mph or higher for unstable lands would generate emissions from 100 - 10 = 90% of unstable sites. Windy days with rain should be excluded from PM-10 Valley-wide emissions estimates, as wet soil does not emit PM-10, and PM-10 emitted just before a rain would be rapidly rained out of the atmosphere.

The amount of land area that could be associated with the potential to emit in the 20-22, 22-24, 24-26 mph speed ranges is currently unknown. It might be possible to correlate UNLV wind tunnel data to US Natural Resource Conservation Service soil classification and wind erosion databases, but that effort was beyond the scope of this project.

E. *Wind data source.* 1999 Hourly average wind observations from 18 Clark County monitoring stations (Table A.1.1 – Figure A1) were used in the computation of Valley-wide estimates. Wind-speeds for a particular station (for example Lone Mountain, LO, Polygon 17) were assumed to be valid over the entire polygon. This approach introduces error into the PM-10 estimate, as varying terrain and the presence of sheltering urban infrastructure in at least part of each polygon will contribute to variation of wind speeds within each polygon.

F. *Wind data processing.* ASCII wind data files containing hourly average wind speeds for 18 CCHD monitoring stations were obtained by UNLV February 2000 and imported into a MS Access97 database. The database was queried to develop new computer files containing records corresponding only to sustained hourly wind speeds greater than or equal to 20 mph. These records were used to compute hour-by hour PM10 emissions for each Thiessen polygon corresponding to a CCHD monitoring station.
The database was also queried for missing records to determine the %availability of CCHD monitoring stations during 1999.

A summary of results is shown in Table 3. The table shows that the CCHD stations had, on average, 95.2% of the year's wind hours recorded. Two stations, Green Valley (GV) and Winterwood (WW) had much lower than average availability. The 70% availability of Winterwood does not introduce significant error because it is associated with a small polygon. The 83%

Table 3

1999 Wind frequency summary
Shaded cells exceed average

CCHD station	Site Name	Wind hours < 15 mph	Wind hours 15-19.99 mph	Wind hours > 20 mph	hours unavailable	Total hours	% available
AP	Apex	7344	618	347	461	8760	94.9%
BS	Craig Road	8301	244	48	167	8760	98.1%
CC	City Center	7951	34	3	772	8760	91.2%
CW	Crestwood	8603	16	20	121	8760	98.6%
DM	Dime III	8392	134	16	218	8760	97.5%
FL	Flamingo	8296	315	59	90	8760	99.0%
GV	Green Valley	6899	307	33	1521	8760	82.6%
JD	J D Smith	8368	151	12	229	8760	97.4%
JN	Jean	7980	596	169	15	8760	99.8%
LF	Laughlin	7245	605	270	640	8760	92.7%
LO	Lone Mountain	7917	390	95	358	8760	95.9%
MC	East Sahara	8110	135	14	501	8760	94.3%
MS	Microscale	8497	164	23	76	8760	99.1%
PL	S.E. Valley	7914	374	79	393	8760	95.5%
PM	Paul Meyer Park	8417	274	26	43	8760	99.5%
PT	Pittman	8505	183	26	46	8760	99.5%
PV	Palo Verde	8016	522	162	60	8760	99.3%
SA	Sunrise Acres	8270	383	35	72	8760	99.2%
SL	Shadow Lane	8606	85	5	64	8760	99.3%
WJ	Walter Johnson	8189	224	20	327	8760	96.3%
WW	Winterwood	5938	146	18	2658	8760	69.7%
	averages	7988	281	70	420		95.2%
	totals (incl AP,JN,LF)	167,758	5,900	1,480	8,822	183,960	
	Valley totals	145,189	4,081	694	7,716	157,680	

Table 3 (continued)

1999 Wind frequency summary
Shaded cells exceed average

CCHD station	Site Name	% unavailable	% <15 mph	% 15-19.99 mph	% >20 mph	Acres vac land
AP	Apex	5.1%	83.8%	7.1%	4.0%	not in valley
BS	Craig Road	1.9%	94.8%	2.8%	0.5%	22,369
CC	City Center	8.8%	90.8%	0.4%	0.0%	318
CW	Crestwood	1.4%	98.2%	0.2%	0.2%	192
DM	Dime III	2.5%	95.8%	1.5%	0.2%	2,192
FL	Flamingo	1.0%	94.7%	3.6%	0.7%	7,833
GV	Green Valley	17.4%	78.8%	3.5%	0.4%	26,021
JD	J D Smith	2.6%	95.5%	1.7%	0.1%	3,116
JN	Jean	0.2%	91.1%	6.8%	1.9%	not in valley
LF	Laughlin	7.3%	82.7%	6.9%	3.1%	not in valley
LO	Lone Mountain	4.1%	90.4%	4.5%	1.1%	26,102
MC	East Sahara	5.7%	92.6%	1.5%	0.2%	422
MS	Microscale	0.9%	97.0%	1.9%	0.3%	170
PL	S.E. Valley	4.5%	90.3%	4.3%	0.9%	8,288
PM	Paul Meyer Park	0.5%	96.1%	3.1%	0.3%	30,662
PT	Pittman	0.5%	97.1%	2.1%	0.3%	6,764
PV	Palo Verde	0.7%	91.5%	6.0%	1.8%	12,125
SA	Sunrise Acres	0.8%	94.4%	4.4%	0.4%	207
SL	Shadow Lane	0.7%	98.2%	1.0%	0.1%	1,315
WJ	Walter Johnson	3.7%	93.5%	2.6%	0.2%	1,523
WW	Winterwood	30.3%	67.8%	1.7%	0.2%	1,574
	averages	4.8%	91.2%	3.2%	0.8%	
	totals (incl AP,JN,LF)					
	Valley totals					151,193

availability of Green Valley does introduce some error into the calculation, as Green Valley is associated with the third largest Thiessen polygon (26,021 acres). The effect of the omission is to reduce the magnitude of estimated PM-10 eroded from vacant lands.

Table 4 shows that the Green Valley station is missing records for four of the Valley-wide 1999 wind events exceeding 20 mph, February 25, March 30, March 31, and December 7. Inclusion of these records would lead to an increase the amount of estimated PM-10 in both the design day estimate (probably by about 50-100 tons, 10-20% of total)) and the 1999 design year estimate, (perhaps by 500-1000 tons, 3-5% of total).

Table 3 shows that selection of a 20 mph threshold for initiation of PM-10 yields 694 total erosive hours, about 0.8% of the 157,680 total hours of record for all 18 Valley monitoring stations. If a 15-mph threshold was used, then 4,081 erosive hours would contribute to PM-10 erosion, about 3.2% of the total hours of record for the Valley stations. At the two windiest sites in the network, Palo Verde (PV), recorded 1.8% of its wind hours over 20 mph, and Lone Mountain (LO) recorded 1.1% of its wind hours over 20 mph.

In conclusion, winds exceeding a 20 mph threshold for PM-10 erosion occurred 0.8% of the time in 1999, and engage 10% or more of the 1995 wind tunnel sites in the emission of PM-10.

III. Final Version of PM-10 Emission Factors

The February 22, 2000 draft report presented emissions factors for unstable desert lands and stable desert lands, corrected for the presence of "spikes" in the data during the initial one to two minutes of wind erosion. The draft contained computed Valley-wide 1999 Design Year and February 25, 1999 design day Valley-wide emissions for varying ratios of stable and unstable vacant lands. The emissions factors were computed from 1995 UNLV wind tunnel data collected over the entire Las Vegas Valley.

The March 28, 2000 Draft report presented additional emissions factors for lands stabilized with commercial dust suppressants, not corrected for spikes. The emissions factors came from Phase II of the 1998-1999 UNLV wind tunnel study of the comparative performance of different commercial dust suppressants. Tests of the dust suppressants were performed on treated land on the east side of the Las Vegas Valley, a location where uncrusted, untreated soil was an extremely high dust emitter.

In this report, final emissions factors are presented in six categories:

Table 4

1999 Windy day tally - CCHD AQD monitoring stations

Date	BS	CC	CW	DM	FL	GV	JD	LF	LO	MC	MS	PL	PM	PT	PV	SA	SL	WJ	WW	Total reporting
1/8/1999								1	1				1		1					4
1/20/1999	1				1	1		1	1		1	1			1					8
1/21/1999	1				1	1		1	1				1		1	1		1	1	10
1/23/1999												1								1
1/25/1999								1												1
1/26/1999							1	1	1										1	4
2/9/1999								1	1			1	1	1	1			1	1	8
2/10/1999	1							1	1	1		1		1	1	1				8
2/19/1999									1											1
2/21/1999	1				1			1	1			1			1			1		7
2/25/1999	1			1	1		1	1	1	1	1	1	1	1	1	1		1	1	15
3/3/1999					1			1				1	1	1	1					6
3/4/1999					1															1
3/6/1999								1												1
3/8/1999								1							1					2
3/9/1999								1	1		1	1	1	1	1			1	1	9
3/15/1999				1				1	1						1					4
3/20/1999				1	1			1	1			1	1		1			1	1	9
3/21/1999															1					1
3/23/1999															1					1
3/30/1999	1				1		1	1	1	1	1	1	1	1	1				1	12
3/31/1999	1	1		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	17
4/3/1999					1			1							1					3
4/5/1999	1							1				1							1	4
4/6/1999				1				1				1								3
4/7/1999								1												1
4/8/1999					1	1		1		1		1	1		1				1	8
4/9/1999	1					1		1	1			1		1	1					7
4/12/1999	1						1	1												3
4/14/1999								1							1					2
4/15/1999								1												1
4/16/1999								1												1
4/22/1999								1												1
4/26/1999															1					1
4/27/1999					1			1			1				1					4
4/28/1999					1			1					1		1					4
5/2/1999			1		1			1							1					4
5/3/1999			1					1	1			1	1		1					6

Table 4 (continued)

1999 Windy day tally - CCHD AQD monitoring stations

Date	BS	CG	CW	DM	FL	GV	JD	LF	LO	MC	MS	PL	PM	PT	PV	SA	SL	WJ	WW	Total reporting
5/8/1999								1												1
5/12/1999					1	1		1							1					4
5/13/1999					1	1		1			1			1	1					6
5/14/1999					1	1					1	1	1	1	1					7
5/26/1999	1								1				1		1	1				5
5/30/1999								1												1
6/1/1999								1												1
6/2/1999					1			1							1					3
6/3/1999					1												1			2
6/6/1999								1												1
6/16/1999								1							1					2
6/20/1999								1												1
6/21/1999						1		1							1					3
6/25/1999															1					1
7/3/1999						1									1					2
7/4/1999								1												1
7/6/1999						1						1								2
7/7/1999						1						1								2
7/9/1999	1																			1
7/14/1999	1							1								1				3
7/15/1999								1	1						1					3
7/27/1999				1		1	1	1	1			1		1	1					8
7/28/1999						1		1				1								3
7/29/1999								1												1
8/6/1999						1		1												2
8/10/1999								1												1
8/14/1999								1												1
8/30/1999								1							1					2
9/1/1999								1												1
9/18/1999	1									1						1				3
9/27/1999								1												1
9/28/1999								1												1
10/6/1999								1				1								2
10/15/1999									1											1
10/16/1999								1	1			1			1			1		5
10/21/1999	1																			1
10/29/1999								1							1					2
10/31/1999									1											1

Table A – Unstable vacant lands – spike corrected. Emissions factors are the same as in the February 22, 2000 report

Table B – Stable vacant lands – spike corrected. Emissions factors are the same as in the February 22, 2000 report

Table C – Phase II treated sites – not spike corrected and not torn up by truck tire. Emissions factors are the same as in the March 28, 2000 report.

Table D - Phase II treated sites – spike corrected and not torn up by truck tire. These are new emissions factors, not previously presented, and should be used when estimating initial benefits of satisfactory application of dust suppressants

Table E – Phase II treated sites – not spike corrected, and torn up by truck tire. These factors are presented only for comparison to Table F, to demonstrate the need for using spike corrected data, and should not be used in computing Valley-wide estimates.

Table F – Phase II treated sites- spike corrected and torn up by truck tire. These factors are presented for use when estimating end of design life benefits for dust suppressants after they have experienced some mechanical degradation.

Tabulated data are presented as geometric means +/- one standard deviation to illustrate the large degree of variability in the wind tunnel data and also the asymmetric nature of the wind tunnel data sets. Emissions factors for stable and unstable desert lands are presented as averages across all soil groups, and hence, have large uncertainties in each wind-speed range.

Spike correction is defined as correction of the undue influence of the "spike" in PM-10 emissions that is usually observed by the TSI Dust Trak monitor in the first one to two minutes of a wind tunnel run. If not corrected, extrapolation of the observed PM-10 mass in a 10-minute run to an hourly average PM-10 flux estimate would overestimate an hourly average PM-10 emissions factor.

A typical spike is shown in Figure 4 for a 10-minute computer run. The spike is removed from the 10-minute data by computer processing. The spike-removed data are converted to a 60-minute steady state value (ton/acre/hour). The spike data are converted to ton/acre and added only to the first hour of any erosive wind event. It is assumed that the PM-10 reservoir takes a minimum of 1 day to renew, so spikes are incorporated into PM-10 emissions estimates only for the first hour of wind events whose onsets that are separated by more than 24 hours.

Figure 4: Example of spike in 10 minute wind tunnel run – surface treated with Magnesium chloride

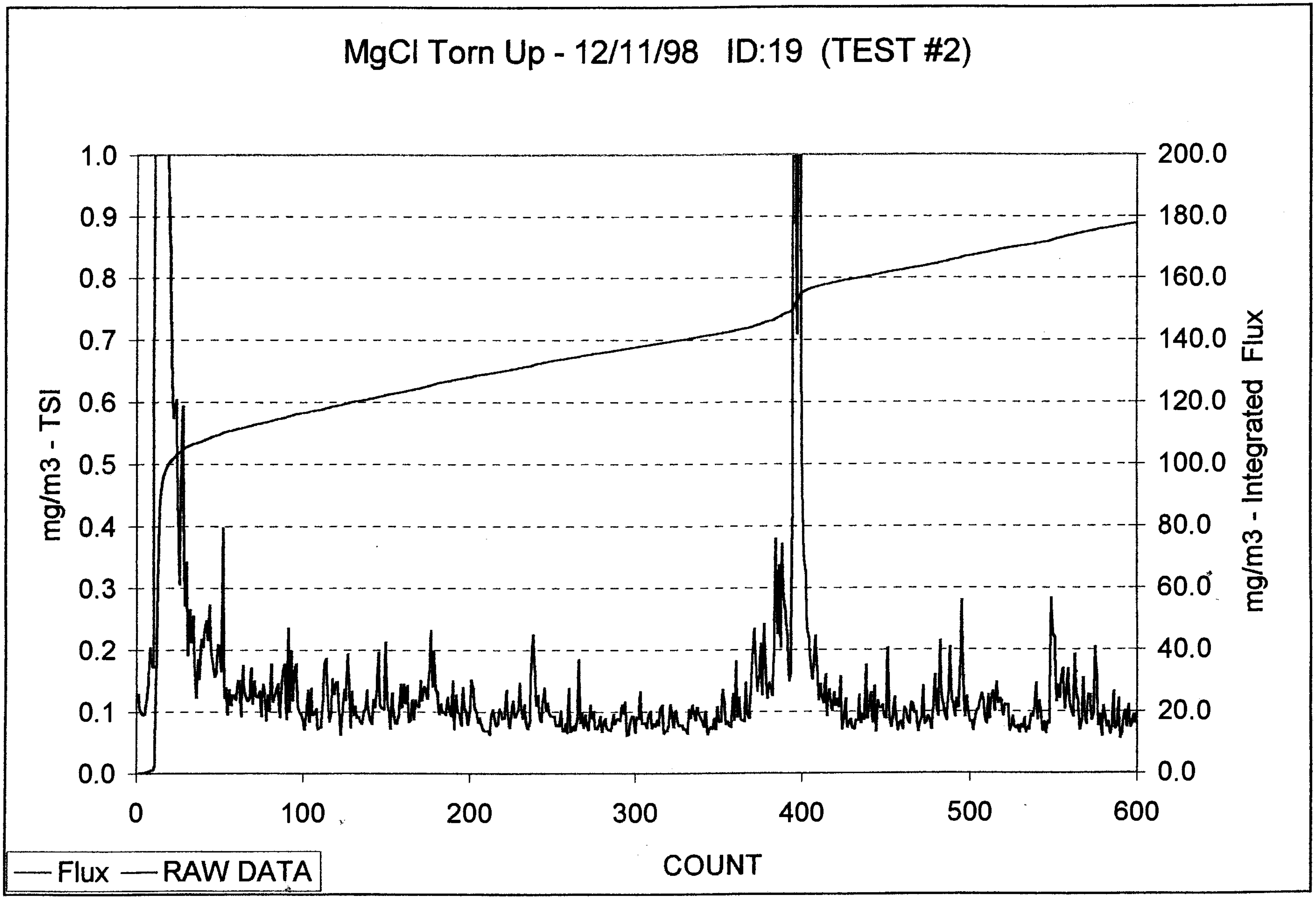


Table A CUMULATIVE RESULTS - Method B (sum individual runs then average)

Unstable sites CORRECTED FOR EFFECTS OF SPIKE

Disturbed Sites (new classification) n = 68								
Wind Speed (mph)	**Geom mean flux -1 Std. Dev (ton/acre/hr)**	**Geom mean flux (ton/acre/hr)**	**Geom mean flux +1 Std. Dev (ton/acre/hr)**	**Geom mean spike -1 Std. Dev (ton/acre)**	**Geom mean spike (ton/acre)**	**Geom mean spike +1 Std. Dev (ton/acre)**	**Number of flux Runs**	**Number of spike Runs**
10-14.9	N/A	N/A	N/A	N/A	N/A	N/A		
15-19.9	1.50E-03	4.95E-03	1.63E-02	1.47E-04	9.65E-04	6.33E-03	3	3
20-24.9	1.23E-03	5.21E-03	2.21E-02	1.14E-04	8.16E-04	5.82E-03	4	4
25-29.9	1.18E-03	6.40E-03	3.48E-02	2.80E-04	1.94E-03	1.35E-02	12	11
30-34.9	1.21E-03	4.62E-03	1.76E-02	3.43E-04	1.41E-03	5.82E-03	13	13
35-39.9	8.96E-04	7.05E-03	5.54E-02	4.37E-04	3.80E-03	3.31E-02	19	11
40-44.9	2.37E-03	1.13E-02	5.41E-02	9.40E-04	3.45E-03	1.27E-02	9	8
45-49.9	9.71E-04	7.12E-03	5.22E-02	1.43E-03	4.50E-03	1.42E-02	7	5
50-54.9	N/A	3.69E-03	N/A	N/A	1.30E-03	N/A	1	1
55-59.9								
60-64.9								
65-69.9								
total runs							68	56

Table B CUMULATIVE RESULTS - Method B (sum individual runs then average)

Stable sites CORRECTED FOR EFFECTS OF SPIKE

Undisturbed Sites (new classification) n = 169								
Wind Speed	**Geom mean flux**	**Geom mean flux**	**Geom mean flux**	**Geom mean spike**	**Geom mean spike**	**Geom mean spike**	**Number**	**Number**
(mph)	**-1 Std. Dev**		**+1 Std. Dev**	**-1 Std. Dev**		**+1 Std. Dev**	**of flux**	**of spike**
	(ton/acre/hr)	**(ton/acre/hr)**	**(ton/acre/hr)**	**(ton/acre)**	**(ton/acre)**	**(ton/acre)**	**Runs**	**Runs**
10-14.9								
15-19.9	N/A	1.95E-03	N/A	N/A	4.00E-04	N/A	1	1
20-24.9	3.16E-04	1.38E-03	6.07E-03	2.39E-05	2.12E-04	1.88E-03	4	3
25-29.9	9.46E-04	2.57E-03	7.00E-03	1.52E-04	4.90E-04	1.58E-03	11	10
30-34.9	7.81E-04	3.16E-03	1.28E-02	1.62E-04	5.88E-04	2.14E-03	23	22
35-39.9	9.17E-04	2.99E-03	9.73E-03	2.84E-04	9.24E-04	3.01E-03	28	27
40-44.9	2.08E-03	5.92E-03	1.68E-02	6.40E-04	1.70E-03	4.53E-03	34	33
45-49.9	3.02E-03	7.58E-03	1.90E-02	9.57E-04	2.20E-03	5.05E-03	30	29
50-54.9	5.94E-03	1.10E-02	2.02E-02	1.21E-03	2.58E-03	5.48E-03	22	22
55-59.9	9.03E-03	1.69E-02	3.15E-02	1.51E-03	3.32E-03	7.29E-03	12	12
60-64.9	9.99E-03	1.66E-02	2.76E-02	1.62E-03	4.03E-03	1.00E-02	4	4
65-69.9								
total runs							169	163

	Table C	STABILIZED LAND EMISSION FACTORS - averaged over 7 tested suppressants					
	treated sites	NOT CORRECTED FOR EFFECTS OF SPIKE - NOT TORN UP					
Wind Speed	**Geom mean flux**	**Geom mean flux**	**Geom mean flux**	**Geom mean spike**	**Geom mean spike**	**Geom mean spike**	**Number**
(mph)	**-1 Std. Dev.**		**+1 Std. Dev.**	**-1 Std. Dev.**		**+1 Std. Dev.**	**of runs**
	(ton/acre/hr)	**(ton/acre/hr)**	**(ton/acre/hr)**	**(ton/acre)**	**(ton/acre)**	**(ton/acre)**	
10-14.9							
15-19.9	2.14E-04	4.20E-04	8.26E-04	N/A	N/A	N/A	22
20-24.9	1.22E-04	3.42E-04	9.60E-04	N/A	N/A	N/A	36
25-29.9	5.26E-05	1.94E-04	7.15E-04	N/A	N/A	N/A	20
30-34.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35-35.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40-44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
45-49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50-54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55-59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60-64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65-69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
total runs							78

	Table D	STABILIZED LAND EMISSION FACTORS - averaged over 7 tested suppressants					
	treated sites	CORRECTED FOR EFFECTS OF SPIKE - NOT TORN UP					
Wind Speed	Geom mean flux	Geom mean flux	Geom mean flux	Geom mean spike	Geom mean spike	Geom mean spike	Number
(mph)	-1 Std. Dev.		+1 Std. Dev.	-1 Std. Dev.		+1 Std. Dev.	of runs
	(ton/acre/hr)	(ton/acre/hr)	(ton/acre/hr)	(ton/acre)	(ton/acre)	(ton/acre)	spike corrected
10-14.9							
15-19.9	1.00E-04	2.65E-04	7.04E-04	7.26E-07	5.03E-06	3.48E-05	18
20-24.9	5.24E-05	1.38E-04	3.65E-04	1.74E-06	4.59E-06	1.21E-05	32
25-29.9	1.92E-05	1.09E-04	6.19E-04	N/A	N/A	N/A	18
30-34.9	N/A	N/A	N/A	N/A	N/A	N/A	2
35-35.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40-44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
45-49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50-54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55-59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60-64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65-69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
total runs							70

	Table E	STABILIZED LAND EMISSION FACTORS - averaged over 7 tested suppressants					
	treated sites	NOT CORRECTED FOR EFFECTS OF SPIKE - TORN UP BY TRUCK TIRE					
Wind Speed (mph)	**Geom mean flux -1 Std. Dev. (ton/acre/hr)**	**Geom mean flux (ton/acre/hr)**	**Geom mean flux +1 Std. Dev. (ton/acre/hr)**	**Geom mean spike -1 Std. Dev. (ton/acre)**	**Geom mean spike (ton/acre)**	**Geom mean spike +1 Std. Dev. (ton/acre)**	**Number of runs spike corrected**
10-14.9	N/A	2.18E-03	N/A	N/A	N/A	N/A	2
15-19.9	1.69E-03	9.39E-03	5.22E-02	N/A	N/A	N/A	22
20-24.9	4.10E-04	2.17E-03	1.15E-02	N/A	N/A	N/A	58
25-29.9	2.58E-04	8.14E-04	2.57E-03	N/A	N/A	N/A	46
30-34.9	N/A	3.61E-03	N/A	N/A	N/A	N/A	2
35-35.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40-44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
45-49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50-54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55-59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60-64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65-69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
total runs							130

Table F treated sites

STABILIZED LAND EMISSION FACTORS - averaged over 7 tested suppressants

CORRECTED FOR EFFECTS OF SPIKE - TORN UP BY TRUCK TIRE

Wind Speed (mph)	Geom mean flux -1 Std. Dev. (ton/acre/hr)	Geom mean flux (ton/acre/hr)	Geom mean flux +1 Std. Dev. (ton/acre/hr)	Geom mean spike -1 Std. Dev. (ton/acre)	Geom mean spike (ton/acre)	Geom mean spike +1 Std. Dev. (ton/acre)	Number of runs spike corrected
10-14.9	N/A	1.87E-03	N/A	N/A	4.05E-03	N/A	2
15-19.9	7.20E-04	3.80E-03	2.01E-02	2.10E-05	2.67E-04	3.40E-03	22
20-24.9	1.04E-04	8.89E-04	7.60E-03	9.09E-06	5.64E-05	3.50E-04	58
25-29.9	1.01E-04	4.70E-04	2.19E-03	2.56E-06	1.63E-05	1.04E-04	46
30-34.9	N/A	3.57E-03	N/A	N/A	9.68E-06	N/A	2
35-35.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40-44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
45-49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50-54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55-59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60-64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65-69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
total runs							130

Spike corrections are significant for stable and unstable, untreated desert lands, and for torn up, treated desert lands. Spike corrections are not significant for treated, not-torn up desert lands.

The following table briefly summarizes mean spike-corrected PM-10 emissions factors for all categories, without uncertainties:

Table 5. Summary of geometric mean-spike corrected PM-10 emissions factors

Source Wind speed range (mph)	Table A Unstable land ton/acre/hr	Table B Stable land ton/acre/hr	Table D Treated not torn up ton/acre/hr	Table F Treated torn up ton/acre/hr
15-19.9	4.95x10-3	1.95x10-3	2.65x10-4	3.80x10-3
20-24.9	5.21x10-3	1.38x10-3	1.38x10-4	8.89x10-4
25-29.9	6.40x10-3	2.57x10-3	1.09x10-4	4.70x10-4
30-34.9	4.62x10-3	3.16x10-3		
35-39.9	7.05x10-3	2.99x10-3		
40-44.9	1.13x10-2	5.92x10-3		

Emissions factors reported in Tables A and B have not changed since the February 22, 2000 report, and should match the values used in the Dames and Moore microinventory. Tables A and B show the sample sizes used to compute geometric means, and also report the uncertainties of the estimates.

The following table briefly summarizes mean PM-10 emissions spikes for all categories, without uncertainties:

Table 6. Summary of geometric mean spike factors for use in emissions calculations

Source Wind speed range (mph)	Table A Unstable land ton/acre	Table B Stable land ton/acre	Table D Treated not torn up ton/acre	Table F Treated torn up ton/acre
15-19.9	9.65x10-4	4.00x10-4	5.03x10-6	2.67x10-4
20-24.9	8.16x10-4	2.14x10-4	4.59x10-6	5.64x10-5
25-29.9	1.94x10-3	4.90x10-4		1.63x10-5
30-34.9	1.41x10-3	5.88x10-4		9.68x10-6
35-39.9	3.80x10-3	9.24x10-4		
40-44.9	3.45x10-3	1.70x10-3		

The effects of removing spikes from the Phase II not torn up data was small, since the spikes themselves are of low magnitude for intact, treated surfaces (see column entry Table D in Table 6, above).

The following table compares Phase II mean not torn-up emission factors, again omitting uncertainties, for the not spike corrected and spike-corrected cases.

Table 7. Not spike-corrected and spike-corrected emissions factors for not torn up Phase II treated surfaces

Source Wind speed range (mph)	Table C Treated - not torn up not spike-corrected ton/acre/hour	Table D Treated - not torn up spike-corrected ton/acre/hour
15-19.9	4.20x10-4	2.65x10-4
20-24.9	3.42x10-4	1.38x10-4
25-29.9	1.94x10-4	1.09x10-4
30-34.9		
35-39.9		
40-44.9		

If standard deviations are considered, the differences between the factors in Tables C and D are not statistically significant

Valley-wide emissions estimates for various scenarios of stabilized land, computed and reported for Phase II not-spike corrected, not torn up emission factors (Table C, this report) in the March 28, 2000 report, have been recomputed for the spike-corrected emission factor data in Table D. The results are presented in Appendix A of this report.

The results for Valley-wide PM-10 emissions from a mixture of stable and stabilized lands using spike-corrected Phase II values differ slightly from the results reported in March. Results are summarized in Tables 8 and 9. The September 13, 2000 report column in Tables 8 and 9, using spike-corrected stabilized lands should be considered the definitive estimate for stabilized lands newly treated with dust suppressant.

Table 8 – 1999 Annual emissions estimates using revised, Phase II spike-corrected values for newly treated surfaces. September 13, 2000 data are in Appendix A of this report

Ratio stable/ stabilized	March 28, 2000 non-spike corrected not torn up tons	Sept 13, 2000 spike corrected not torn up tons
70/30	12,144	11,661
80/20	13,424	13,102
90/10	14,705	14,544

Table 9 – February 25, 1999 Design day emissions estimates using revised, Phase II spike-corrected values for newly treated surfaces. September 13, 2000 data are in Appendix A of this report

Ratio stable/ stabilized	March 28, 2000 non-spike corrected not torn up tons	Sept 13, 2000 spike corrected not torn up tons
70/30	478	457
80/20	529	516
90/10	580	583

Effects of the degradation of stabilized surface can be modeled by using spike-corrected emissions factors from Table D, for stabilized, not-torn up, and from Table F, for stabilized, torn up. The effects of degradation are shown below in Tables 10 and 11

Table 10 – 1999 Annual emissions estimates using revised, Phase II spike-corrected values for not-torn up and for torn up surfaces

Ratio stable/ stabilized	Table D spike corrected not torn up tons	Table F spike corrected torn up tons
70/30	11,661	13,600
80/20	13,102	14,395
90/10	14,544	15,190

Table 11 – February 25, 1999 Design day emissions estimates using revised, Phase II spike-corrected values for not-torn up and for torn up surfaces. Ratio

stable/ stabilized	Table D spike corrected not torn up tons	Table F spike-corrected torn up tons
70/30	457	534
80/20	516	567
90/10	583	609

IV. Field surveys to assess feasibility of using methodologies contained in the proposed Maricopa County Rule and Proposed Clark County Rule 41 for determining susceptibility of land parcels to wind erosion.

A. *Data source.* Copies of the proposed draft Maricopa County rule and the proposed Clark County Rule 41 were obtained on September 2, 1999 from Rodney Langston of Clark County Comprehensive Planning. The proposed rules are principally intended to require control measures for disturbed vacant land, and establish criteria for when a vacant land parcel requires control measures. The proposed rules also contain procedures for determining susceptibility of vacant lands to wind erosion. The proposed Clark County Rule 41 is a modification of the draft Maricopa County rule, was under consideration for adoption in Clark County.

B. *Procedure development and modification.* After initial field trials of the proposed procedures in proposed Clark County rule 41, a flow chart was developed by graduate student Sherrie Edwards to aid field crews in the rapid testing of vacant land parcels for susceptibility to wind erosion.

The flow chart, comprised of a series of if-then statements, allowed for efficient sampling of sites under consideration. In essence the flow chart guides a field inspector through the following flow of tests.

1. Using a 1-foot square sampling quadrat tossed at random into the site, perform drop ball test using a 5/8" stainless steel ball bearing from 1-foot height, and observe effects of ball impact on soil surface. The ball dimensions and drop height are specified in section 41.9.3. Repeat the test three times inside the randomly cast quadrat.
    a. If there is no damage to the soil crust, or no splashing of particles from the surface in two or more of the three samples inside the randomly-cast quadrat, the test result is classified

as a "pass", and that quadrat is classified as resistant to wind erosion.

b. If there is damage to the crust (formation of a distinct indentation), or splashing of particles from the surface, in two or more of the three samples inside the randomly-cast quadrat, then the result is classified as a "fail" inside that quadrat.

c. The quadrat is then cast into the site several (a minimum of six) more times, and the tests are repeated.

(1) If a majority of ball drop determinations in the cast quadrats are passes, then the parcel is classified as not susceptible to wind erosion. No further testing need be done if the parcel passes the ball-drop test.

(2) If a majority of ball drop determinations are "fail", then the parcel is potentially susceptible to wind erosion, and testing proceeds to the next stage.

2. A 100 foot string count is conducted at the site to measure the frequency distribution of flat vegetation, debris and rocks larger than 1 centimeter in diameter (all classified as non-erodible elements). Note that the procedure described in the draft Maricopa County rule specifies that only flat vegetation be counted. The procedure identified in the draft Clark County rule specifies that flat vegetation, debris (such as pieces of glass) and rocks > 1 centimeter be counted. UNLV followed the draft Clark County rule, section 41.9.5.

   a. The string count was conducted by using a US Natural Resource Conservation Service soil erosion test kit containing at 50-foot string with 1 centimeter diameter plastic beads attached at 6-inch intervals along the string. Every other bead was used to conform to the 1-foot spacing specified in the Maricopa County rule. Alternate beads were marked with stripes from a permanent felt-tip marker to generate easily recognizable beads at 1-foot intervals.

   b. The 50-foot string was extended twice in the same direction to generate a 100-foot transect.

   c. Transect directions were, where possible, chosen using a table of random numbers.

   d. Any object 1-centimeter in diameter or larger underneath any portion of the bead was counted as covering the soil at that bead. The object could be a pebble, a twig, a tuft of grass, any anthropogenic trash, or an overhanging branch of a large bush.

   e. A rapid fill-in table was developed by graduate student Sherrie Edwards to ease the process of counting non-erodible elements, with + signs indicating a non-erodible element, and – signs indicating absence of non-erodible elements. After 2 counts using the 50-foot string, the number of + signs in the table was summed, and divided by 100 to give the percentage frequency of flat vegetation + non-erodible elements.

f. Interpretation of test results:
   (1) If the frequency of flat vegetation + non-erodible elements at the site exceeded 50%, the parcel was rated as stable on that transect.
   (2) If the frequency was $\leq$50%, then the threshold friction velocity test (TFV) was performed.

g. The TFV test requires sampling of the top layer of soil with a dust pan, and pouring the soil through a set of sieves, per section 41.9.4.1. Retained sieve soil volumes are measured in a 250-mL plastic graduate cylinder, and a TFV is assigned based on the predominant volume (mode) of soil retained on one of the sieves.

h. Interpretation of TFV test results:
   (1) If sieve analysis test shows TFV > 100 centimeters per second (cm/sec), then the sample is rated as "stable".
   (2) If the sieve analysis shows a TFV < 100 cm/sec, then the Rock Test is needed.
   (3) Several more samples are collected and sieved, and the majority of TFV determinations are used in determining the stability of the parcel.

i. Rock Test. The method used by UNLV does not conform to the Rock Test Method proposed in the September 2, 1999 draft of Clark County proposed rule 41 or the June draft of the proposed Maricopa County rule. In December of 1999, UNLV attempted to develop a faster, more quantitative procedure than that described in 41.9.7 of the draft Clark County Rule. The proposed UNLV test method is as follows:

j. Using a metal dustpan, sample all rocks to a depth of 1 cm from a random cast of a 1-foot square quadrat. Pour the sample through a 1-centimeter (1 cm) sieve. Pour rocks retained on the 1 cm sieve into a metal cake pan, and shake the pan gently, holding at a slight angle, to move the rocks into a single closely packed layer in one corner of the pan. Lay the pan flat and square up the rock layer with a ruler, and measure its dimensions with the ruler. Compute the area of the rock layer in square inches and divide by 144 square inches (1 square foot), and multiply by 100 to determine the percentage coverage by rocks on the tested site. Divide the percentage coverage by 2 to determine the percent frontal area occupied by rocks on that site.

k. Interpretation of test results
   (1) If rock frontal area exceeds 10%, then the site is stable.
   (2) If rock frontal area is less than 10%, then adjust the TFV using the percent frontal area per the table shown in section 41.9.4.1 in the draft Clark County rule.
   (3) If adjusted TFV exceeds 100 cm/sec, the tested site is stable
   (4) If adjusted TFV is less than 100 cm/sec, the tested site is not stable.
   (5) Repeat the rock test from several other randomly chosen sites on the parcel to determine the stability of the parcel.

C. *Results of UNLV field work.* UNLV carried out field sampling between October 1999 and March 2000, with the bulk of the sampling conducted in January and February. Where available, aerial orthophotos were used to guide the selection of field parcels and plan access to sites.

All fieldwork was performed during the near-record 140-day dry spell experienced in the Las Vegas Valley in the early winter and spring of 2000.

1. Of 69 sites studied, ball drop data are available for 60 sites. Of these 60 sites, 33 (55%) passed ball drop and 27 (45%) failed. All 27 failed sites were tested for % non-erodible elements using the string count.

2. Four parcels with no ball drop data have %non-erodible data, giving a total of 27 + 4 = 31 that can be studied for %non-erodible cover. Of these 31 sites, 16 (52%) passed the 50% non-erodible criterion, and 15 (48%) failed (had less than 50% non-erodible elements).

3. Of 15 parcels failing %non-erodible, 12 were tested for TFV (threshold friction velocity). Of these 12 sites, 8 (67%) passed the TFV criterion (TFV > 100 cm/sec) and four (33%) failed the TFV criterion (< 100 cm/sec).

4. Of 27 parcels with records that show failing ball drop, 9 passed TFV (one more parcel than in #3 because one site that passed non-erodible was also tested for TFV and passed, as we expected it to do). The actual ratio should be 8 of 27 (30%), because the one additional parcel that passed the non-erodible cover criterion wouldn't ordinarily have been tested for TFV.

5. Parcels failing all three tests were all located in just one of the three sections that have been studied on the east side of the Valley. Locations are identified in Table B-4, Field Sampling Summary.

6. After a visit to the parcel for field tests, its land area was measured on the digitized aerial orthophotos and recorded in square feet. See Table B-4, Field Sampling Summary.

7. Six of 69 visited parcels were rated as unstable (9% of total tested parcels). The land area of the unstable parcels was 870,000 ft2. The measured land area of all tested parcels was 87,000,000 ft2, and at the time of this writing the land area determinations had not been completed. The percentage land area rated as unstable in the UNLV tests was 1%. It should be noted that UNLV's site visits north of the Summerlin Parkway, US 95, Bonanza Road alignment were limited, and a definitive value for percentage unstable land by the proposed Clark County rule would require a more extensive set of field observations.

Of these 6 sites, 4 were identified by the sequence of three tests ball drop - %non-erodible - TFV). Please note that these six sites comprise 9% of tested parcels, not 9% of tested parcel area. The six disturbed parcels represent less than 1% of the land area tested by UNLV.

8. For comparison, Dames and Moore's intensive microscale study around five CCHD monitors estimated 10% to 59%% unstable, with an overall average of 15%.

9. Clark County Health District's dust inspectors (McDonnell-Canan and Wallenmeyer, personal communication 2000) gave a qualitative estimate of %unstable land from their field observations at 20%.

10. UNLV obtained a copy of Clark County Health District's dust permit database in MS-Access97 format. A query of this database showed a total of 40,243 acres permitted in Clark County sometime during 1999. The query searched for all dust permits granted for periods ranging from Jan 1, 1998 – Jan 1, 1999 to December 29, 1999 to December 29, 2000, and produced 3991 records. Some of these permits were for projects outside the BLM Land Disposal boundary. Although there is no way to tell when the construction regulated by the permits took place, if one estimates that the activity was spread uniformly through time, with a two-year time interval in Jan 1, 1998 through December 29, 1999, then the estimate of the number of acres under construction with potential to emit wind-blown dust would be 40.243 / 2 = 20, 122 acres as an average value for calendar year 1999. If all this activity took place inside the BLM boundary, this would give a potential % unstable value of 20,122 / 148,575 = 13%. Given that contractors will apply control measures, the actual number of acres from construction with potential to emit wind blown dust would be less than 20,122, so the 13% value should be considered a maximum estimate for this method.

Results from the different methods used to estimate percent unstable vacant land are summarized below in Table 12.

Table 12. Summary of Percent Unstable Vacant land estimates obtained by different methods

Source	**Method**	**Ave. value**
Clark County dust inspectors	Visual estimate	20%
Dames & Moore microinventory	Clark County rule	15%
UNLV analysis CCHD dust database	Permitted area	13%
UNLV field inspections	Clark County rule	1%*

The * indicates that land area measurements for UNLV-visited parcels are incomplete; when completed, the percent unstable area from UNLV field tests is <1%. The UNLV field visits included sites on the West site of the Valley where had been little human activity. UNLV did not sample the northern and northeastern parts of the valley with the same intensity as it sampled the south. Sampling of sites in these areas, especially in developed areas might raise UNLV's estimate.

The Dames & Moore microinventory was carried out around several monitors in the urban core of the valley, where a higher percentage of disturbed (unstable) land might be expected as a result of human activity.
Several group consultations featuring participation by Clark County Comprehensive Planning, Clark County Health District, Dames and Moore, and EPA were performed between October 1999 and July 2000 to demonstrate UNLV flow chart and proposed modifications to the rule.

V. Determination of Vegetative Densities on Vacant Lands by Examination of Aerial Photos.

A. *Data source:* In Spring 1999, Clark County conducted a complete aerial orthophoto survey of the Las Vegas Valley. An aerial orthophoto database was generated that contained images corresponding to each township, range and section (approximately 1 square mile). Photos are available in digitized format at levels of 1-foot, 2-foot and 4-foot resolution. The photo edges slightly exceeded the section boundaries.

B. *Image generation:* A set of 54 orthophotos digitized at 1-foot resolution from within the Clark County land disposal boundary was requested by UNLV from Clark County Comprehensive Planning from October 1999 through January 2000.

The aerial photos, digitized with pixel resolutions of 1 foot, were printed in large A-size format at a scale of 1 inch = 200 feet (200 linear pixels to the inch), producing images approximately 26 inches x 26 inches for a 1 square mile section. Printing, performed by Clark County Comprehensive Planning, was on a HP DesignJet 755 large-format color inkjet printer with a resolution of 600 dots per inch, giving a printer resolution of 3 dots per linear pixel (or, 9 dots per square pixel). Printer output switches were set by Majed Khater (Clark County Comp Planning, 1999-2000) to give fairly accurate color rendition and high contrast.

At 1-foot pixel resolution, objects on the order of 2 feet in diameter can be resolved with the naked eye, occupying a physical dimension on the printed photos of 0.010 inch x 0.010 inch. This dimension corresponds approximately to the canopy diameter of desert vegetation such as *Larrea divaricata*, creosote bush. Printer contrast settings were determined that allowed desert vegetation, including creosote bush and trees, to appear in contrast to the background desert soil surface.

C. *Image examination*: Each selected aerial photo was manually inspected for vegetation densities. A transparent grid, of resolution 20 squares to the linear inch (0.05 linear inch per square), 400 squares to the square inch, was overlaid on a subregion of each aerial photo, and the number of grids containing contrasting vegetation was counted. The percentage area covered by vegetation was then determined by dividing the number of vegetation grids by the total number of grids in the sampled region. This process was repeated on 10 subsections of the aerial photo, and an average percentage areal cover was computed and reported for that photo.

D. *Results of analysis:*

1. Of 54 photos examined by UNLV between November 1999 and January 2000, 52 could be analyzed for percent coverage by large shrubs and trees. Two contained terrain that was too steep to permit accurate estimation of vegetative coverage. Plants on steep slopes falling away from the camera lens will appear at a denser coverage than if they were on flat ground.
2. The raw vegetation coverages for the 52 photos inspected by UNLV is tabulated in Table B-5. A summary is shown below in Table 13:

Table 13. Frequency distribution of Vegetative cover data from Aerial Photo Analysis

% Veg cover	Frequency	Cumulative %	Indiv%
0	4	8%	8%
2	15	37%	29%
4	3	42%	6%
6	7	56%	13%
8	3	62%	6%
10	3	67%	6%
12	4	75%	8%
14	2	79%	4%
16	0	79%	0%
18	2	83%	4%
20	0	83%	0%
25	3	88%	6%
30	2	92%	4%
40	2	96%	4%
50	1	98%	2%
60	1	100%	2%

Arithmetic mean	9.7%
Geometric mean	4.6%

The vegetation distribution in the sampled photos is bimodal, with peaks at 0-2% and 4-6% vegetative coverage. It is strongly right-skewed, with a few photos showing fairly high densities. As a result, a geometric mean is a better measure of central tendency, giving a value of about 5% coverage.

E. *Sources of measurement error:*

Resolution of the photos (1 foot per pixel) is not sufficient to resolve objects smaller than two feet in diameter, so individual small plants and individual tufts of grass will not be detected by this method. Dense carpets of grass and small plants can be detected, if contrast is sufficient, and areas with developed lawns, such as golf courses, could be detected in the photos. However, light or scattered carpets of short-statured grasses, often found on desert soil surfaces, could not be detected by manual orthophoto inspection. As a result, the vegetation coverage determined by visual inspection of areal photos will tend to *underestimate* the total fraction of land area covered by vegetation compared to site visits.

Appendix A – Valley-wide emissions estimates using stabilized soil, spike-corrected emissions factors

Table A.1.1 - Correspondence of GIS Polygons to Clark County Health District Monitoring stations

Polygon	CCHD station	Site Name	Approximate crossing streets or location
1	CC	City Center	Bonanza & 7th street
2	WW	Winterwood	E Sahara & Nellis
3	SL	Shadow Lane	Alta & Shadow Ln
4	BS	Craig Road	Craig Road & I15
5	PL	S.E. Valley	W Lake Mead Drive & Van Wagenen
6	MC	East Sahara	Maycliff Storage - E Sahara & I-515
7	MS	Micro-scale	E Charleston & 28th St.
8	DM	Dime III	~1/2 mile south of Winterwood station
9	FL	East Flamingo	E Flamingo & Swenson
10	PT	Pittman	Boulder Highway & Pabco Rd
11	JD	J.D. Smith	Bruce & Tonopah
12	PM	Paul Meyer Park	W Flamingo & Tenaya
13	WJ	Walter Johnson	W Alta & Buffalo
14	GV	Green Valley	Arroyo Grande & Santiago
15	CW	Crestwood	E Charleston & 17th St
16	SA	Sunrise Acres	Sunrise Acres E.S. - Sunrise & N. Eastern
17	LO	Lone Mountain	W. Gowan and Buffalo
18	PV	Palo Verde	Palo Verde H.S. - W Alta & Hulalapai

Table 1-III 1999 PM-10 Valley-wide emissions estimate — Phase II stabilized land geometric means

Assuming fixed stable/stabilized ratio — 9/10/2000 **spike corrected, not torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	90%	10%	1.7	0.0%
2	ww	18	1,574	90%	10%	38.3	0.3%
3	sl	5	1,315	90%	10%	9.0	0.1%
4	bs	48	22,369	90%	10%	2,548.9	17.5%
5	pl	79	8,288	90%	10%	876.9	6.0%
6	mc	14	422	90%	10%	8.5	0.1%
7	ms	23	170	90%	10%	5.5	0.0%
8	dm	16	2,192	90%	10%	46.6	0.3%
9	fl	59	7,833	90%	10%	636.2	4.4%
10	pt	26	6,764	90%	10%	239.7	1.6%
11	jd	12	3,116	90%	10%	57.8	0.4%
12	pm	26	30,662	90%	10%	1,148.7	7.9%
13	wj	20	1,523	90%	10%	44.9	0.3%
14	gv	33	26,021	90%	10%	1,216.5	8.4%
15	cw	20	192	90%	10%	27.3	0.2%
16	sa	35	207	90%	10%	9.9	0.1%
17	lo	95	26,102	90%	10%	4,515.0	31.0%
18	pv	162	12,125	90%	10%	3,112.3	21.4%
	Total	694	151,189			14,543.8	100.0%

Table 2-III 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/10/2000 **spike corrected, not torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	80%	20%	1.6	0.0%
2	ww	18	1,574	80%	20%	34.5	0.3%
3	sl	5	1,315	80%	20%	8.1	0.1%
4	bs	48	22,369	80%	20%	2,284.3	17.4%
5	pl	79	8,288	80%	20%	789.5	6.0%
6	mc	14	422	80%	20%	7.7	0.1%
7	ms	23	170	80%	20%	4.9	0.0%
8	dm	16	2,192	80%	20%	41.9	0.3%
9	fl	59	7,833	80%	20%	572.6	4.4%
10	pt	26	6,764	80%	20%	215.8	1.6%
11	jd	12	3,116	80%	20%	51.9	0.4%
12	pm	26	30,662	80%	20%	1,033.4	7.9%
13	wj	20	1,523	80%	20%	40.5	0.3%
14	gv	33	26,021	80%	20%	1,094.4	8.4%
15	cw	20	192	80%	20%	26.7	0.2%
16	sa	35	207	80%	20%	8.9	0.1%
17	lo	95	26,102	80%	20%	4,086.3	31.2%
18	pv	162	12,125	80%	20%	2,799.5	21.4%
	Total	694	151,189			13,102.5	100.0%

Table 4-III 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/12/2000 **spike corrected, not torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	70%	30%	1.4	0.0%
2	ww	18	1,574	70%	30%	30.7	0.3%
3	sl	5	1,315	70%	30%	7.2	0.1%
4	bs	48	22,369	70%	30%	2,019.6	17.3%
5	pl	79	8,288	70%	30%	702.2	6.0%
6	mc	14	422	70%	30%	6.8	0.1%
7	ms	23	170	70%	30%	4.4	0.0%
8	dm	16	2,192	70%	30%	37.3	0.3%
9	fl	59	7,833	70%	30%	508.9	4.4%
10	pt	26	6,764	70%	30%	191.8	1.6%
11	jd	12	3,116	70%	30%	46.1	0.4%
12	pm	26	30,662	70%	30%	918.0	7.9%
13	wj	20	1,523	70%	30%	36.2	0.3%
14	gv	33	26,021	70%	30%	972.3	8.3%
15	cw	20	192	70%	30%	26.1	0.2%
16	sa	35	207	70%	30%	8.0	0.1%
17	lo	95	26,102	70%	30%	3,657.6	31.4%
18	pv	162	12,125	70%	30%	2,486.8	21.3%
	Total	694	151,189			11,661.2	100.0%

Table 5-III Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, not torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	90%	10%	0.0	0.0%
2	ww	1	1,574	90%	10%	2.3	0.4%
3	sl	0	1,315	90%	10%	9.0	1.5%
4	bs	2	22,369	90%	10%	60.5	10.4%
5	pl	3	8,288	90%	10%	32.8	5.6%
6	mc	2	422	90%	10%	1.7	0.3%
7	ms	4	170	90%	10%	1.1	0.2%
8	dm	1	2,192	90%	10%	3.2	0.5%
9	fl	4	7,833	90%	10%	40.8	7.0%
10	pt	3	6,764	90%	10%	26.8	4.6%
11	jd	1	3,116	90%	10%	4.5	0.8%
12	pm	4	30,662	90%	10%	225.4	38.7%
13	wj	3	1,523	90%	10%	9.3	1.6%
14	gv	0	26,021	90%	10%	0.0	0.0%
15	cw	0	192	90%	10%	0.0	0.0%
16	sa	4	207	90%	10%	1.1	0.2%
17	lo	4	26,102	90%	10%	136.1	23.4%
18	pv	3	12,125	90%	10%	28.1	4.8%
	Total	39	151,189			582.7	100.0%

Table 6-III Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, not torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	80%	20%	0.0	0.0%
2	ww	1	1,574	80%	20%	2.1	0.4%
3	sl	0	1,315	80%	20%	0.0	0.0%
4	bs	2	22,369	80%	20%	54.4	10.6%
5	pl	3	8,288	80%	20%	29.6	5.7%
6	mc	2	422	80%	20%	1.5	0.3%
7	ms	4	170	80%	20%	1.0	0.2%
8	dm	1	2,192	80%	20%	2.9	0.6%
9	fl	4	7,833	80%	20%	36.8	7.1%
10	pt	3	6,764	80%	20%	24.1	4.7%
11	jd	1	3,116	80%	20%	4.1	0.8%
12	pm	4	30,662	80%	20%	202.0	39.2%
13	wj	3	1,523	80%	20%	8.3	1.6%
14	gv	0	26,021	80%	20%	0.0	0.0%
15	cw	0	192	80%	20%	0.0	0.0%
16	sa	4	207	80%	20%	1.0	0.2%
17	lo	4	26,102	80%	20%	122.6	23.8%
18	pv	3	12,125	80%	20%	25.2	4.9%
	Total	39	151,189			515.6	100.0%

Table 7-III Design Day PM-10 Valley-wide emissions estimate
Varying stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, not torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	60%	40%	0.0	0.0%
2	ww	1	1,574	70%	30%	1.9	0.4%
3	sl	0	1,315	60%	40%	0.0	0.0%
4	bs	2	22,369	80%	20%	54.4	10.6%
5	pl	3	8,288	80%	20%	29.6	5.8%
6	mc	2	422	60%	40%	1.2	0.2%
7	ms	4	170	60%	40%	0.8	0.2%
8	dm	1	2,192	70%	30%	2.7	0.5%
9	fl	4	7,833	80%	20%	36.8	7.2%
10	pt	3	6,764	80%	20%	24.1	4.7%
11	jd	1	3,116	60%	40%	3.8	0.7%
12	pm	4	30,662	80%	20%	202.0	39.4%
13	wj	3	1,523	70%	30%	7.5	1.5%
14	gv	0	26,021	80%	20%	0.0	0.0%
15	cw	0	192	60%	40%	0.0	0.0%
16	sa	4	207	60%	40%	0.8	0.2%
17	lo	4	26,102	80%	20%	122.6	23.9%
18	pv	3	12,125	80%	20%	25.2	4.9%
	Total	39	151,189			513.4	100.0%

Table 8-III Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, not torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	70%	30%	0.0	0.0%
2	ww	1	1,574	70%	30%	1.8	0.4%
3	sl	0	1,315	70%	30%	0.0	0.0%
4	bs	2	22,369	70%	30%	48.4	10.6%
5	pl	3	8,288	70%	30%	26.3	5.7%
6	mc	2	422	70%	30%	1.3	0.3%
7	ms	4	170	70%	30%	0.9	0.2%
8	dm	1	2,192	70%	30%	2.5	0.6%
9	fl	4	7,833	70%	30%	32.7	7.2%
10	pt	3	6,764	70%	30%	21.5	4.7%
11	jd	1	3,116	70%	30%	3.6	0.8%
12	pm	4	30,662	70%	30%	178.7	39.1%
13	wj	3	1,523	70%	30%	7.4	1.6%
14	gv	0	26,021	70%	30%	0.0	0.0%
15	cw	0	192	70%	30%	0.0	0.0%
16	sa	4	207	70%	30%	0.9	0.2%
17	lo	4	26,102	70%	30%	109.1	23.9%
18	pv	3	12,125	70%	30%	22.2	4.9%
	Total	39	151,189			457.3	100.0%

Table 9-III 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/10/2000 **spike corrected, not torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	84%	16%	1.6	0.0%
2	ww	18	1,574	84%	16%	36.0	0.3%
3	sl	5	1,315	84%	16%	8.5	0.1%
4	bs	48	22,369	84%	16%	2,390.1	17.5%
5	pl	79	8,288	84%	16%	824.5	6.0%
6	mc	14	422	84%	16%	8.0	0.1%
7	ms	23	170	84%	16%	5.2	0.0%
8	dm	16	2,192	84%	16%	43.8	0.3%
9	fl	59	7,833	84%	16%	598.0	4.4%
10	pt	26	6,764	84%	16%	225.3	1.6%
11	jd	12	3,116	84%	16%	54.3	0.4%
12	pm	26	30,662	84%	16%	1,079.5	7.9%
13	wj	20	1,523	84%	16%	42.3	0.3%
14	gv	33	26,021	84%	16%	1,143.2	8.4%
15	cw	20	192	84%	16%	26.9	0.2%
16	sa	35	207	84%	16%	9.3	0.1%
17	lo	95	26,102	84%	16%	4,257.8	31.1%
18	pv	162	12,125	84%	16%	2,924.6	21.4%
	Total	694	151,189			13,679.0	100.0%

Table 10-III Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, not torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	84%	16%	0.0	0.0%
2	ww	1	1,574	84%	16%	2.1	0.4%
3	sl	0	1,315	84%	16%	0.0	0.0%
4	bs	2	22,369	84%	16%	56.9	10.4%
5	pl	3	8,288	84%	16%	38.9	7.1%
6	mc	2	422	84%	16%	1.6	0.3%
7	ms	4	170	84%	16%	1.0	0.2%
8	dm	1	2,192	84%	16%	3.0	0.5%
9	fl	4	7,833	84%	16%	38.4	7.0%
10	pt	3	6,764	84%	16%	25.2	4.6%
11	jd	1	3,116	84%	16%	4.2	0.8%
12	pm	4	30,662	84%	16%	211.4	38.7%
13	wj	3	1,523	84%	16%	8.7	1.6%
14	gv	0	26,021	84%	16%	0.0	0.0%
15	cw	0	192	84%	16%	0.0	0.0%
16	sa	4	207	84%	16%	1.0	0.2%
17	lo	4	26,102	84%	16%	128.0	23.4%
18	pv	3	12,125	84%	16%	26.4	4.8%
	Total	39	151,189			546.7	100.0%

Table 1-IV 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/10/2000 **spike corrected, torn up**

Polygon id	letter code	#hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	90%	10%	1.8	0.0%
2	ww	18	1,574	90%	10%	40.5	0.3%
3	sl	5	1,315	90%	10%	9.5	0.1%
4	bs	48	22,369	90%	10%	2,638.0	17.4%
5	pl	79	8,288	90%	10%	926.3	6.1%
6	mc	14	422	90%	10%	9.0	0.1%
7	ms	23	170	90%	10%	5.8	0.0%
8	dm	16	2,192	90%	10%	49.3	0.3%
9	fl	59	7,833	90%	10%	669.9	4.4%
10	pt	26	6,764	90%	10%	253.0	1.7%
11	jd	12	3,116	90%	10%	60.4	0.4%
12	pm	26	30,662	90%	10%	1,208.4	8.0%
13	wj	20	1,523	90%	10%	47.0	0.3%
14	gv	33	26,021	90%	10%	1,279.4	8.4%
15	cw	20	192	90%	10%	27.3	0.2%
16	sa	35	207	90%	10%	10.5	0.1%
17	lo	95	26,102	90%	10%	4,687.1	30.9%
18	pv	162	12,125	90%	10%	3,267.0	21.5%
	Total	694	151,189			15,190.0	100.0%

Table 2-IV 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/10/2000 **spike corrected, torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	80%	20%	1.7	0.0%
2	ww	18	1,574	80%	20%	38.9	0.3%
3	sl	5	1,315	80%	20%	9.1	0.1%
4	bs	48	22,369	80%	20%	2,462.4	17.1%
5	pl	79	8,288	80%	20%	888.4	6.2%
6	mc	14	422	80%	20%	8.6	0.1%
7	ms	23	170	80%	20%	5.5	0.0%
8	dm	16	2,192	80%	20%	47.3	0.3%
9	fl	59	7,833	80%	20%	639.9	4.4%
10	pt	26	6,764	80%	20%	242.3	1.7%
11	jd	12	3,116	80%	20%	57.1	0.4%
12	pm	26	30,662	80%	20%	1,152.8	8.0%
13	wj	20	1,523	80%	20%	44.7	0.3%
14	gv	33	26,021	80%	20%	1,220.2	8.5%
15	cw	20	192	80%	20%	26.7	0.2%
16	sa	35	207	80%	20%	10.0	0.1%
17	lo	95	26,102	80%	20%	4,430.5	30.8%
18	pv	162	12,125	80%	20%	3,108.9	21.6%
	Total	694	151,189			14,394.9	100.0%

Table 4-IV 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/12/2000 **spike corrected, torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	70%	30%	1.6	0.0%
2	ww	18	1,574	70%	30%	37.3	0.3%
3	sl	5	1,315	70%	30%	8.8	0.1%
4	bs	48	22,369	70%	30%	2,286.8	16.8%
5	pl	79	8,288	70%	30%	850.5	6.3%
6	mc	14	422	70%	30%	8.1	0.1%
7	ms	23	170	70%	30%	5.2	0.0%
8	dm	16	2,192	70%	30%	45.4	0.3%
9	fl	59	7,833	70%	30%	609.9	4.5%
10	pt	26	6,764	70%	30%	231.6	1.7%
11	jd	12	3,116	70%	30%	53.9	0.4%
12	pm	26	30,662	70%	30%	1,097.1	8.1%
13	wj	20	1,523	70%	30%	42.5	0.3%
14	gv	33	26,021	70%	30%	1,161.0	8.5%
15	cw	20	192	70%	30%	26.1	0.2%
16	sa	35	207	70%	30%	9.6	0.1%
17	lo	95	26,102	70%	30%	4,173.9	30.7%
18	pv	162	12,125	70%	30%	2,950.8	21.7%
	Total	694	151,189			13,599.9	100.0%

Table 5-IV Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	90%	10%	0.0	0.0%
2	ww	1	1,574	90%	10%	2.4	0.4%
3	sl	0	1,315	90%	10%	9.5	1.6%
4	bs	2	22,369	90%	10%	63.9	10.5%
5	pl	3	8,288	90%	10%	34.7	5.7%
6	mc	2	422	90%	10%	1.7	0.3%
7	ms	4	170	90%	10%	1.1	0.2%
8	dm	1	2,192	90%	10%	3.4	0.6%
9	fl	4	7,833	90%	10%	43.2	7.1%
10	pt	3	6,764	90%	10%	28.3	4.7%
11	jd	1	3,116	90%	10%	4.7	0.8%
12	pm	4	30,662	90%	10%	232.4	38.2%
13	wj	3	1,523	90%	10%	9.5	1.6%
14	gv	0	26,021	90%	10%	0.0	0.0%
15	cw	0	192	90%	10%	0.0	0.0%
16	sa	4	207	90%	10%	1.1	0.2%
17	lo	4	26,102	90%	10%	144.1	23.7%
18	pv	3	12,125	90%	10%	28.6	4.7%
	Total	39	151,189			608.7	100.0%

Table 6-IV Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	80%	20%	0.0	0.0%
2	ww	1	1,574	80%	20%	2.3	0.4%
3	sl	0	1,315	80%	20%	0.0	0.0%
4	bs	2	22,369	80%	20%	61.4	10.8%
5	pl	3	8,288	80%	20%	33.4	5.9%
6	mc	2	422	80%	20%	1.6	0.3%
7	ms	4	170	80%	20%	1.1	0.2%
8	dm	1	2,192	80%	20%	3.2	0.6%
9	fl	4	7,833	80%	20%	41.6	7.3%
10	pt	3	6,764	80%	20%	27.2	4.8%
11	jd	1	3,116	80%	20%	4.5	0.8%
12	pm	4	30,662	80%	20%	216.0	38.1%
13	wj	3	1,523	80%	20%	8.8	1.5%
14	gv	0	26,021	80%	20%	0.0	0.0%
15	cw	0	192	80%	20%	0.0	0.0%
16	sa	4	207	80%	20%	1.1	0.2%
17	lo	4	26,102	80%	20%	138.6	24.4%
18	pv	3	12,125	80%	20%	26.1	4.6%
	Total	39	151,189			566.8	100.0%

Table 7-IV Design Day PM-10 Valley-wide emissions estimate
Varying stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	60%	40%	0.0	0.0%
2	ww	1	1,574	70%	30%	1.9	0.3%
3	sl	0	1,315	60%	40%	0.0	0.0%
4	bs	2	22,369	80%	20%	61.4	10.9%
5	pl	3	8,288	80%	20%	33.4	5.9%
6	mc	2	422	60%	40%	1.2	0.2%
7	ms	4	170	60%	40%	0.8	0.1%
8	dm	1	2,192	70%	30%	2.7	0.5%
9	fl	4	7,833	80%	20%	41.6	7.4%
10	pt	3	6,764	80%	20%	27.2	4.8%
11	jd	1	3,116	60%	40%	3.8	0.7%
12	pm	4	30,662	80%	20%	216.0	38.4%
13	wj	3	1,523	70%	30%	7.5	1.3%
14	gv	0	26,021	80%	20%	0.0	0.0%
15	cw	0	192	60%	40%	0.0	0.0%
16	sa	4	207	60%	40%	0.8	0.1%
17	lo	4	26,102	80%	20%	138.6	24.6%
18	pv	3	12,125	80%	20%	26.1	4.6%
	Total	39	151,189			562.9	100.0%

Table 8-IV Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike corrected, torn-up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	70%	30%	0.0	0.0%
2	ww	1	1,574	70%	30%	2.2	0.4%
3	sl	0	1,315	70%	30%	0.0	0.0%
4	bs	2	22,369	70%	30%	58.9	11.0%
5	pl	3	8,288	70%	30%	32.0	6.0%
6	mc	2	422	70%	30%	1.5	0.3%
7	ms	4	170	70%	30%	1.0	0.2%
8	dm	1	2,192	70%	30%	3.1	0.6%
9	fl	4	7,833	70%	30%	39.9	7.5%
10	pt	3	6,764	70%	30%	26.1	4.9%
11	jd	1	3,116	70%	30%	4.3	0.8%
12	pm	4	30,662	70%	30%	199.6	37.4%
13	wj	3	1,523	70%	30%	8.0	1.5%
14	gv	0	26,021	70%	30%	0.0	0.0%
15	cw	0	192	70%	30%	0.0	0.0%
16	sa	4	207	70%	30%	1.1	0.2%
17	lo	4	26,102	70%	30%	133.0	24.9%
18	pv	3	12,125	70%	30%	23.5	4.4%
	Total	39	151,189			534.2	100.0%

Table 9-IV 1999 PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio

Phase II stabilized land geometric means
9/10/2000 **spike corrected, torn up**

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	3	318	84%	16%	1.7	0.0%
2	ww	18	1,574	84%	16%	39.5	0.3%
3	sl	5	1,315	84%	16%	9.3	0.1%
4	bs	48	22,369	84%	16%	2,532.6	17.2%
5	pl	79	8,288	84%	16%	903.6	6.1%
6	mc	14	422	84%	16%	8.7	0.1%
7	ms	23	170	84%	16%	5.6	0.0%
8	dm	16	2,192	84%	16%	48.1	0.3%
9	fl	59	7,833	84%	16%	651.9	4.4%
10	pt	26	6,764	84%	16%	246.6	1.7%
11	jd	12	3,116	84%	16%	58.4	0.4%
12	pm	26	30,662	84%	16%	1,175.0	8.0%
13	wj	20	1,523	84%	16%	45.6	0.3%
14	gv	33	26,021	84%	16%	1,243.9	8.5%
15	cw	20	192	84%	16%	26.9	0.2%
16	sa	35	207	84%	16%	10.2	0.1%
17	lo	95	26,102	84%	16%	4,533.1	30.8%
18	pv	162	12,125	84%	16%	3,172.1	21.6%
	Total	694	151,189			14,712.9	100.0%

Table 10-IV Design day PM-10 Valley-wide emissions estimate
Assuming fixed stable/stabilized ratio
25-Feb-99

Phase II stabilized land geometric means
spike-corrected, torn up

Polygon id	letter code	# hours wind >= 20 mph	rev vacant land (acres)	% stable	% stabilized	PM-10 (tons)	% of total
1	cc	0	318	84%	16%	0.0	0.0%
2	ww	1	1,574	84%	16%	2.3	0.4%
3	sl	0	1,315	84%	16%	0.0	0.0%
4	bs	2	22,369	84%	16%	62.4	10.8%
5	pl	3	8,288	84%	16%	33.9	5.8%
6	mc	2	422	84%	16%	1.7	0.3%
7	ms	4	170	84%	16%	1.1	0.2%
8	dm	1	2,192	84%	16%	3.3	0.6%
9	fl	4	7,833	84%	16%	42.2	7.3%
10	pt	3	6,764	84%	16%	27.7	4.8%
11	jd	1	3,116	84%	16%	4.6	0.8%
12	pm	4	30,662	84%	16%	222.5	38.4%
13	wj	3	1,523	84%	16%	9.1	1.6%
14	gv	0	26,021	84%	16%	0.0	0.0%
15	cw	0	192	84%	16%	0.0	0.0%
16	sa	4	207	84%	16%	1.1	0.2%
17	lo	4	26,102	84%	16%	140.8	24.3%
18	pv	3	12,125	84%	16%	27.1	4.7%
	Total	39	151,189			579.8	100.0%

Table A.2 - Polygon CCHD Station bs

Stabilized soil, spike-corrected emission factors

BS PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 4	vacant land area	22369	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		18789.96		18789.96		3579.04		3579.04	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	20	24	480	20	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
1	21	12	492	21.5	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
1	21	13	493	22.200001	1.38E-03	25.93			1.38E-04	0.49			26.42
1	21	14	494	23.200001	1.38E-03	25.93			1.38E-04	0.49			26.42
1	21	15	495	21.9	1.38E-03	25.93			1.38E-04	0.49			26.42
1	21	16	496	21.6	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	2	962	21.299999	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
2	10	7	967	20.799999	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	8	968	22.299999	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	9	969	21.700001	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	10	970	22.9	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	11	971	22.9	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	13	973	22	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	14	974	23	1.38E-03	25.93			1.38E-04	0.49			26.42
2	10	15	975	20.1	1.38E-03	25.93			1.38E-04	0.49			26.42
2	21	15	1239	20.5	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
2	25	13	1333	20.4	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
2	25	14	1334	20.1	1.38E-03	25.93			1.38E-04	0.49			26.42
3	30	13	2125	21.5	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
3	30	14	2126	21	1.38E-03	25.93			1.38E-04	0.49			26.42
3	31	14	2150	20.799999	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
3	31	15	2151	24.1	1.38E-03	25.93			1.38E-04	0.49			26.42
3	31	16	2152	31.9	3.16E-03	59.38			4.83E-04	1.73			61.10
3	31	17	2153	28	2.57E-03	48.29			1.09E-04	0.39			48.68
4	5	14	2270	21.5	1.38E-C3	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
4	5	15	2271	21.9	1.38E-03	25.93			1.38E-04	0.49			26.42
4	9	3	2355	20.799999	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
4	9	6	2358	20.200001	1.38E-03	25.93			1.38E-04	0.49			26.42
4	9	8	2360	21	1.38E-03	25.93			1.38E-04	0.49			26.42
4	12	17	2441	20.1	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
5	26	22	3502	21.1	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
7	9	22	4558	23	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
7	9	23	4559	20	1.38E-03	25.93			1.38E-04	0.49			26.42
7	14	20	4676	20.4	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
7	14	22	4678	21	1.38E-03	25.93			1.38E-04	0.49			26.42
9	18	2	6242	27.299999	2.57E-03	48.29	4.90E-04	9.21	1.09E-04	0.39	1.00E-04	0.36	58.25
9	18	3	6243	22	1.38E-03	25.93			1.38E-04	0.49			26.42

10	21	4	7036	34.599998	3.16E-03	59.38	5.88E-04	11.05	4.83E-04	1.73	1.00E-04	0.36	72.51
11	21	9	7785	20.5	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
11	21	10	7786	21.700001	1.38E-03	25.93			1.38E-04	0.49			26.42
12	1	14	8030	23.799999	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
12	1	15	8031	20.9	1.38E-03	25.93			1.38E-04	0.49			26.42
12	3	8	8072	20.700001	1.38E-03	25.93	2.12E-04	3.98	1.38E-04	0.49	4.59E-06	0.02	30.42
12	3	9	8073	21.1	1.38E-03	25.93			1.38E-04	0.49			26.42
12	7	20	8180	25.4	2.57E-02	482.90	4.90E-04	9.21	1.09E-04	0.39		0.00	492.50
12	7	22	8182	25.799999	2.57E-02	482.90			1.09E-04	0.39			483.29
12	7	23	8183	20.6	1.38E-03	25.93			1.38E-04	0.49			26.42
12	7	24	8184	21	1.38E-03	25.93			1.38E-04	0.49			26.42
Total													2390.14

Table A.3. - Polygon 1 - CCHD Station cc

Stabilized soil, spike-corrected emission factors

CC PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 1	vacant land area	317.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		266.7		266.7		50.8		50.8	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind (mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
3	31	16	2152	25.200001	2.57E-03	0.69	4.90E-04	0.13	1.09E-04	0.01		0.00	0.82
3	31	17	2153	21.5	1.38E-03	0.37			1.38E-04	0.01			0.38
12	7	20	8180	20.6	1.38E-03	0.37	2.12E-04	0.06	1.38E-04	0.01	4.59E-06	0.00	0.43
Total													1.63

Table A.4 - Polygon 15 CCHD Station cw

Stabilized soil, spike-corrected emission factors

CW PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 15	vacant land area	192	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		161.28		161.28		30.72		30.72	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind (mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
5	2	20	2924	35.900002	2.99E-03	0.48	9.24E-04	0.15	3.32E-04	0.01		0	0.64
5	2	21	2925	50	1.10E-02	1.77			6.30E-03	0.19			1.97
5	2	22	2926	50	1.10E-02	1.77			6.30E-03	0.19			1.97
5	2	23	2927	49.599998	7.58E-03	1.22			6.30E-03	0.19			1.42
5	2	24	2928	48.900002	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	1	2929	47.700001	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	2	2930	47.099998	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	3	2931	47	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	4	2932	46.099998	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	5	2933	45.799999	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	6	2934	45.799999	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	7	2935	45.900002	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	8	2936	45.5	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	9	2937	45.299999	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	10	2938	45.400002	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	11	2939	45.200001	7.58E-03	1.22			6.30E-03	0.19			1.42
5	3	12	2940	44.200001	5.92E-03	0.95			6.30E-03	0.19			1.15
5	3	13	2941	43.900002	5.92E-03	0.95			6.30E-03	0.19			1.15
5	3	14	2942	43.299999	5.92E-03	0.95			6.30E-03	0.19			1.15
5	3	15	2943	39.900002	2.99E-03	0.48			3.32E-04	0.01			0.49
Total													26.92

Table A.5 - Polygon 8 - CCHD Station dm

Stabilized soil, spike-corrected emission factors

DM PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized		
Polygon 8	vacant land area	2192	acres											
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16		
	unstable fraction	0.16		Area (acres)		1841.28		1841.28		350.72		350.72		
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike		
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total	Daily
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons	25-Feb
2	25	15	1335	20.299999	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	2.98
3	15	16	1768	21.4	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	
3	20	13	1885	20.299999	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	
3	20	14	1886	21.6	1.38E-03	2.54			1.38E-04	0.05			2.59	
3	20	15	1887	21.4	1.38E-03	2.54			1.38E-04	0.05			2.59	
3	20	16	1888	20.200001	1.38E-03	2.54			1.38E-04	0.05			2.59	
3	31	15	2151	21.200001	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	
3	31	17	2153	20.799999	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	1	2281	21.6	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	
4	6	2	2282	20.4	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	3	2283	21.1	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	4	2284	20.9	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	5	2285	22.700001	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	6	2286	22.299999	1.38E-03	2.54			1.38E-04	0.05			2.59	
4	6	7	2287	21	1.38E-03	2.54			1.38E-04	0.05			2.59	
7	27	14	4982	20.4	1.38E-03	2.54	2.12E-04	0.39	1.38E-04	0.05	4.59E-06	0.00	2.98	
Total													43.78	

Table A.6 - Polygon 9 - CCHD Station fl

Stabilized soil, spike-corrected emission factors

FL PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 9	vacant land area	7832.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		6579.3		6579.3		1253.2		1253.2	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	20	21	477	24.4	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
1	20	24	480	25.5	1.38E-03	9.08			1.09E-04	0.14			9.22
1	21	1	481	22.799999	1.38E-03	9.08			1.38E-04	0.17			9.25
1	21	12	492	22.799999	1.38E-03	9.08			1.38E-04	0.17			9.25
1	21	13	493	23.5	1.38E-03	9.08			1.38E-04	0.17			9.25
2	21	11	1235	20	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
2	21	12	1236	22.1	1.38E-03	9.08			1.38E-04	0.17			9.25
2	21	13	1237	22.1	1.38E-03	9.08			1.38E-04	0.17			9.25
2	21	14	1238	22.299999	1.38E-03	9.08			1.38E-04	0.17			9.25
2	25	9	1329	20.5	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
2	25	10	1330	23.4	1.38E-03	9.08			1.38E-04	0.17			9.25
2	25	12	1332	22.9	1.38E-03	9.08			1.38E-04	0.17			9.25
2	25	13	1333	20.6	1.38E-03	9.08			1.38E-04	0.17			9.25
3	3	24	1488	20.200001	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
3	4	1	1489	22	1.38E-03	9.08			1.38E-04	0.17			9.25
3	20	16	1888	21.6	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
3	30	11	2123	24.700001	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
3	30	12	2124	25.5	2.57E-03	16.91			1.09E-04	0.14			17.05
3	30	13	2125	24.1	1.38E-03	9.08			1.38E-04	0.17			9.25
3	30	14	2126	23.6	1.38E-03	9.08			1.38E-04	0.17			9.25
3	30	15	2127	22.6	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	2	2138	20	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	6	2142	20.5	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	8	2144	20.9	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	13	2149	26	2.57E-03	16.91			1.09E-04	0.14			17.05
3	31	14	2150	27.299999	2.57E-03	16.91			1.09E-04	0.14			17.05
3	31	15	2151	23.299999	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	16	2152	23.299999	1.38E-03	9.08			1.38E-04	0.17			9.25
3	31	17	2153	24.799999	1.38E-03	9.08			1.38E-04	0.17			9.25
4	3	17	2225	20.1	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
4	8	21	2349	21.799999	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
4	8	22	2350	20	1.38E-03	9.08			1.38E-04	0.17			9.25
4	8	23	2351	21	1.38E-03	9.08			1.38E-04	0.17			9.25
4	27	14	2798	20.200001	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
4	27	24	2808	21.1	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
4	28	14	2822	20.5	1.38E-03	9.08			1.38E-04	0.17			9.25
4	28	15	2823	20.799999	1.38E-03	9.08			1.38E-04	0.17			9.25

5	2	17	2921	20.4	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17		0.00	10.65
5	2	18	2922	24.4	1.38E-03	9.08			1.38E-04	0.17			9.25
5	2	21	2925	21.1	1.38E-03	9.08			1.38E-04	0.17			9.25
5	2	23	2927	23.6	1.38E-03	9.08			1.38E-04	0.17			9.25
5	12	24	3168	25.9	2.57E-03	16.91	2.12E-04	1.39	1.09E-04	0.14		0.00	18.44
5	13	1	3169	23.6	1.38E-03	9.08			1.38E-04	0.17			9.25
5	13	2	3170	21.799999	1.38E-03	9.08			1.38E-04	0.17			9.25
5	13	18	3186	20.4	1.38E-03	9.08			1.38E-04	0.17			9.25
5	13	19	3187	20.6	1.38E-03	9.08			1.38E-04	0.17			9.25
5	13	20	3188	22	1.38E-03	9.08			1.38E-04	0.17			9.25
5	13	21	3189	23.700001	1.38E-03	9.08			1.38E-04	0.17			9.25
5	14	18	3210	21.4	1.38E-03	9.08			1.38E-04	0.17			9.25
5	14	22	3214	23.5	1.38E-03	9.08			1.38E-04	0.17			9.25
6	2	23	3671	22	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
6	2	24	3672	23.799999	1.38E-03	9.08			1.38E-04	0.17			9.25
6	3	1	3673	22.6	1.38E-03	9.08			1.38E-04	0.17			9.25
6	3	4	3676	22.299999	1.38E-03	9.08			1.38E-04	0.17			9.25
12	2	23	8063	21.700001	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
12	3	8	8072	21.5	1.38E-03	9.08			1.38E-04	0.17			9.25
12	3	9	8073	21.700001	1.38E-03	9.08			1.38E-04	0.17			9.25
12	3	10	8074	20.5	1.38E-03	9.08			1.38E-04	0.17			9.25
12	7	20	8180	21.799999	1.38E-03	9.08	2.12E-04	1.39	1.38E-04	0.17	4.59E-06	0.01	10.65
Total													598.02

Table A.7 - Polygon 14 - CCHD Station gv

Stabilized soil, spike-corrected emission factors

GV PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 14	vacant land area	26020.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		21857.22		21857.22		4163.28		4163.28	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	20	20	476	20.1	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
1	20	21	477	23.5	1.38E-03	30.16			1.38E-04	0.57			30.74
1	21	13	493	21.9	1.38E-03	30.16			1.38E-04	0.57			30.74
1	25	14	590	20.299999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
4	8	24	2352	20.299999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
4	9	2	2354	21	1.38E-03	30.16			1.38E-04	0.57			30.74
5	2	19	2923	20.299999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
5	2	24	2928	20.799999	1.38E-03	30.16			1.38E-04	0.57			30.74
5	3	1	2929	22.700001	1.38E-03	30.16			1.38E-04	0.57			30.74
5	3	2	2930	20.200001	1.38E-03	30.16			1.38E-04	0.57			30.74
5	3	9	2937	20	1.38E-03	30.16			1.38E-04	0.57			30.74
5	3	10	2938	20.200001	1.38E-03	30.16			1.38E-04	0.57			30.74
5	3	13	2941	20.1	1.38E-03	30.16			1.38E-04	0.57			30.74
5	12	24	3168	21.6	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
5	13	1	3169	22.700001	1.38E-03	30.16			1.38E-04	0.57			30.74
5	13	2	3170	20.5	1.38E-03	30.16			1.38E-04	0.57			30.74
5	13	21	3189	25.4	2.57E-03	56.17			1.09E-04	0.45			56.63
5	14	19	3211	21.799999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
5	14	20	3212	21.6	1.38E-03	30.16			1.38E-04	0.57			30.74
6	21	12	4116	22.6	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
6	21	13	4117	20.6	1.38E-03	30.16			1.38E-04	0.57			30.74
6	21	14	4118	20.4	1.38E-03	30.16			1.38E-04	0.57			30.74
7	3	12	4404	20.299999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
7	6	20	4484	20.1	1.38E-03	30.16			1.38E-04	0.57			30.74
7	7	5	4493	22.4	1.38E-03	30.16			1.38E-04	0.57			30.74
7	27	14	4982	25.9	2.57E-03	56.17			1.09E-04	0.45			56.63
7	27	15	4983	27.4	2.57E-03	56.17			1.09E-04	0.45			56.63
7	28	18	5010	21.299999	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
8	6	9	5217	20	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
8	6	10	5218	21.200001	1.38E-03	30.16			1.38E-04	0.57			30.74
8	6	11	5219	21	1.38E-03	30.16			1.38E-04	0.57			30.74
8	6	14	5222	20.5	1.38E-03	30.16			1.38E-04	0.57			30.74
11	17	12	7692	20.9	1.38E-03	30.16	2.12E-04	4.63	1.38E-04	0.57	4.59E-06	0.02	35.39
Total													1143.19

Table A.8 - Polygon 11 - CCHD Station jd

Stabilized soil, spike-corrected emission factors

JD PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 11	vacant land area	3115.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		2617.02		2617.02		498.48		498.48	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	26	11	611	22.9	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
2	25	15	1335	24.6	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
3	30	13	2125	21.200001	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
3	31	13	2149	21.4	1.38E-03	3.61			1.38E-04	0.07			3.68
3	31	14	2150	26.1	2.57E-03	6.73			1.09E-04	0.05			6.78
3	31	15	2151	24.200001	1.38E-03	3.61			1.38E-04	0.07			3.68
3	31	16	2152	26.5	2.57E-03	6.73			1.09E-04	0.05			6.78
3	31	17	2153	23.1	1.38E-03	3.61			1.38E-04	0.07			3.68
4	12	9	2433	21.6	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
7	27	14	4982	20.299999	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
7	27	15	4983	20.4	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
12	7	20	8180	21.799999	1.38E-03	3.61	2.12E-04	0.55	1.38E-04	0.07	4.59E-06	0.00	4.24
Total													54.26

Table A.9 - Polygon 17 - CCHD Station lo

Stabilized soil, spike-corrected emission factors

LO PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 17	vacant land area	26101.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		21925.26		21925.26		4176.24		4176.24	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	8	8	176	20.5	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
1	8	9	177	21.9	1.38E-03	30.26			1.38E-04	0.58			30.83
1	8	11	179	20.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
1	8	13	181	20.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
1	8	14	182	22.4	1.38E-03	30.26			1.38E-04	0.58			30.83
1	8	15	183	20.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
1	20	20	476	25.1	2.57E-03	56.35	4.90E-04	10.74	1.09E-04	0.46		0.00	67.55
1	20	21	477	28	2.57E-03	56.35			1.09E-04	0.46			56.80
1	20	22	478	26.299999	2.57E-03	56.35			1.09E-04	0.46			56.80
1	20	23	479	23.700001	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	11	491	21.5	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	12	492	20	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	13	493	20.1	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	14	494	21.1	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	15	495	20.9	1.38E-03	30.26			1.38E-04	0.58			30.83
1	21	16	496	20.6	1.38E-03	30.26			1.38E-04	0.58			30.83
1	26	12	612	21.6	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
2	9	14	950	21	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
2	9	15	951	21.6	1.38E-03	30.26			1.38E-04	0.58			30.83
2	9	16	952	22.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	2	962	22	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	5	965	20.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	10	970	22.6	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	11	971	25.9	2.57E-03	56.35			1.09E-04	0.46			56.80
2	10	12	972	27.200001	2.57E-03	56.35			1.09E-04	0.46			56.80
2	10	13	973	24.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	15	975	22	1.38E-03	30.26			1.38E-04	0.58			30.83
2	10	16	976	21.1	1.38E-03	30.26			1.38E-04	0.58			30.83
2	19	10	1186	20.700001	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
2	19	11	1187	20.299999	1.38E-03	30.26			1.38E-04	0.58			30.83
2	19	13	1189	20.299999	1.38E-03	30.26			1.38E-04	0.58			30.83
2	21	13	1237	20.299999	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
2	21	14	1238	21.1	1.38E-03	30.26			1.38E-04	0.58			30.83
2	25	12	1332	23.9	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
2	25	13	1333	22	1.38E-03	30.26			1.38E-04	0.58			30.83
2	25	14	1334	21.6	1.38E-03	30.26			1.38E-04	0.58			30.83
2	25	15	1335	20	1.38E-03	30.26			1.38E-04	0.58			30.83

3	9	9	1617	21.700001	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
3	9	10	1618	25.799999	2.57E-03	56.35			1.09E-04	0.46			56.80
3	9	11	1619	24.6	1.38E-03	30.26			1.38E-04	0.58			30.83
3	9	12	1620	24.5	1.38E-03	30.26			1.38E-04	0.58			30.83
3	9	13	1621	22.1	1.38E-03	30.26			1.38E-04	0.58			30.83
3	9	14	1622	22	1.38E-03	30.26			1.38E-04	0.58			30.83
3	9	15	1623	20.9	1.38E-03	30.26			1.38E-04	0.58			30.83
3	15	16	1768	22	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
3	20	14	1886	20.299999	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
3	20	15	1887	22.299999	1.38E-03	30.26			1.38E-04	0.58			30.83
3	20	16	1888	20.4	1.38E-03	30.26			1.38E-04	0.58			30.83
3	30	10	2122	21.200001	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
3	30	11	2123	21.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	1	2137	22.299999	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	2	2138	24.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	3	2139	28.1	2.57E-03	56.35			1.09E-04	0.46			56.80
3	31	4	2140	27.200001	2.57E-03	56.35			1.09E-04	0.46			56.80
3	31	5	2141	25.1	2.57E-03	56.35			1.09E-04	0.46			56.80
3	31	6	2142	20.6	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	9	2145	20.799999	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	10	2146	22.1	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	11	2147	22.6	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	12	2148	23.1	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	13	2149	21.4	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	14	2150	21.4	1.38E-03	30.26			1.38E-04	0.58			30.83
3	31	16	2152	29.200001	2.57E-03	56.35			1.09E-04	0.46			56.80
3	31	17	2153	22.6	1.38E-03	30.26			1.38E-04	0.58			30.83
4	9	2	2354	21.5	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
4	9	12	2364	20.200001	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
5	3	16	2944	20.1	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
5	26	20	3500	23.6	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
5	26	21	3501	22.5	1.38E-03	30.26			1.38E-04	0.58			30.83
5	26	22	3502	21.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
7	15	21	4701	23	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
7	27	15	4983	21	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
10	15	4	6892	24.299999	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
10	16	3	6915	20.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
10	16	4	6916	22.200001	1.38E-03	30.26			1.38E-04	0.58			30.83
10	16	6	6918	20.9	1.38E-03	30.26			1.38E-04	0.58			30.83
10	16	10	6922	23.5	1.38E-03	30.26			1.38E-04	0.58			30.83
10	16	11	6923	20.4	1.38E-03	30.26			1.38E-04	0.58			30.83
10	16	12	6924	20.9	1.38E-03	30.26			1.38E-04	0.58			30.83
10	31	4	7276	80.599998	1.69E-02	370.54	3.32E-03	72.79	6.30E-03	26.31		0.00	469.64
11	14	15	7623	72.699997	1.69E-02	370.54	3.32E-03	72.79	6.30E-03	26.31		0.00	469.64

11	17	9	7689	21.6	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
12	1	14	8030	20.5	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
12	2	22	8062	23	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
12	2	23	8063	29.5	2.57E-03	56.35			1.09E-04	0.46			56.80
12	2	24	8064	22.700001	1.38E-03	30.26			1.38E-04	0.58			30.83
12	3	9	8073	23.6	1.38E-03	30.26			1.38E-04	0.58			30.83
12	7	20	8180	24.299999	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
12	7	21	8181	25.1	2.57E-03	56.35			1.09E-04	0.46			56.80
12	7	22	8182	25	2.57E-03	56.35			1.09E-04	0.46			56.80
12	7	24	8184	20.6	1.38E-03	30.26			1.38E-04	0.58			30.83
12	8	1	8185	22.299999	1.38E-03	30.26			1.38E-04	0.58			30.83
12	8	2	8186	21.700001	1.38E-03	30.26			1.38E-04	0.58			30.83
12	21	12	8508	21.299999	1.38E-03	30.26	2.12E-04	4.65	1.38E-04	0.58	4.59E-06	0.02	35.50
12	21	13	8509	21.1	1.38E-03	30.26			1.38E-04	0.58			30.83
Total													4257.80

Table A.10 - Polygon 6 CCHD Station mc

Stabilized soil, spike-corrected emission factors

MC PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 6	vacant land area	421.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		354.06		354.06		67.44		67.44	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
2	10	10	970	20.5	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
2	10	11	971	20.200001	1.38E-03	0.49			1.38E-04	0.01			0.50
2	10	14	974	20	1.38E-03	0.49			1.38E-04	0.01			0.50
2	25	14	1334	25.200001	2.57E-03	0.91	4.90E-04	0.17	1.09E-04	0.01	4.59E-06	0.00	1.09
2	25	15	1335	24.1	1.38E-03	0.49			1.38E-04	0.01			0.50
3	30	13	2125	22	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
3	30	14	2126	20.1	1.38E-03	0.49			1.38E-04	0.01			0.50
3	31	14	2150	21.9	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
3	31	15	2151	22.5	1.38E-03	0.49			1.38E-04	0.01			0.50
3	31	16	2152	24.1	1.38E-03	0.49			1.38E-04	0.01			0.50
3	31	18	2154	23.6	1.38E-03	0.49			1.38E-04	0.01			0.50
4	8	23	2351	21.5	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
9	18	2	6242	20.299999	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
12	7	20	8180	20.4	1.38E-03	0.49	2.12E-04	0.08	1.38E-04	0.01	4.59E-06	0.00	0.57
Total													8.02

Table A.11 - Polygon 7 - CCHD Station ms

Stabilized soil, spike-corrected emission factors

MS PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 7	vacant land area	169.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		142.38		142.38		27.12		27.12	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	26	11	611	23.9	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
2	25	13	1333	20.6	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
2	25	14	1334	25.5	2.57E-03	0.37			1.09E-04	0.00			0.37
2	25	15	1335	24.9	1.38E-03	0.20			1.38E-04	0.00			0.20
2	25	16	1336	21.799999	1.38E-03	0.20			1.38E-04	0.00			0.20
3	9	13	1621	20.6	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
3	9	15	1623	20	1.38E-03	0.20			1.38E-04	0.00			0.20
3	30	11	2123	22.4	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
3	30	12	2124	24	1.38E-03	0.20			1.38E-04	0.00			0.20
3	30	13	2125	25.4	2.57E-03	0.37			1.09E-04	0.00			0.37
3	30	14	2126	24.200001	1.38E-03	0.20			1.38E-04	0.00			0.20
3	30	15	2127	21.6	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	6	2142	21.799999	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	7	2143	20.200001	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	8	2144	20.1	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	9	2145	20.5	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	10	2146	21	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	13	2149	20.1	1.38E-03	0.20			1.38E-04	0.00			0.20
3	31	14	2150	22.4	1.38E-03	0.20			1.38E-04	0.00			0.20
4	27	14	2798	20.200001	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
4	27	15	2799	20.5	1.38E-03	0.20			1.38E-04	0.00			0.20
5	13	19	3187	21.6	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
5	14	20	3212	20.200001	1.38E-03	0.20	2.12E-04	0.03	1.38E-04	0.00	4.59E-06	0.00	0.23
Total													5.15

Table A.12 - Polygon 5 - CCHD Station pl

Stabilized soil, spike-corrected emission factors

PL PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 5	vacant land area	8,288	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		6961.92		6961.92		1326.08		1326.08	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind (mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	20	21	477	21.299999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
1	23	18	546	20	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
1	23	19	547	23.4	1.38E-03	9.61			1.38E-04	0.18			9.79
1	23	20	548	21.9	1.38E-03	9.61			1.38E-04	0.18			9.79
1	23	21	549	22.1	1.38E-03	9.61			1.38E-04	0.18			9.79
1	23	22	550	21.5	1.38E-03	9.61			1.38E-04	0.18			9.79
1	23	23	551	20.6	1.38E-03	9.61			1.38E-04	0.18			9.79
1	25	15	591	21.6	1.38E-03	9.61			1.38E-04	0.18			9.79
2	9	7	943	20.1	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
2	9	8	944	22.1	1.38E-03	9.61			1.38E-04	0.18			9.79
2	9	9	945	22.9	1.38E-03	9.61			1.38E-04	0.18			9.79
2	9	10	946	21.700001	1.38E-03	9.61			1.38E-04	0.18			9.79
2	9	24	960	23.6	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	1	961	21.4	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	2	962	21.6	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	8	968	20.9	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	9	969	22.9	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	10	970	22.799999	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	11	971	22.5	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	12	972	24	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	13	973	22.4	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	14	974	23.6	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	15	975	24.1	1.38E-03	9.61			1.38E-04	0.18			9.79
2	10	16	976	20.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
2	21	19	1243	20.299999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
2	21	20	1244	21.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
2	21	21	1245	20.1	1.38E-03	9.61			1.38E-04	0.18			9.79
2	25	12	1332	21.9	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
2	25	13	1333	22.4	1.38E-03	9.61			1.38E-04	0.18			9.79
2	25	14	1334	20.700001	1.38E-03	9.61			1.38E-04	0.18			9.79
3	3	19	1483	20	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
3	9	14	1622	22.1	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
3	20	13	1885	20.6	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
3	20	14	1886	22	1.38E-03	9.61			1.38E-04	0.18			9.79
3	20	15	1887	22.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
3	30	11	2123	20.200001	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
3	30	13	2125	22.299999	1.38E-03	9.61			1.38E-04	0.18			9.79

3	30	14	2126	20.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
3	31	12	2148	21.200001	1.38E-03	9.61			1.38E-04	0.18			9.79
3	31	13	2149	21.700001	1.38E-03	9.61			1.38E-04	0.18			9.79
3	31	15	2151	20.1	1.38E-03	9.61			1.38E-04	0.18			9.79
3	31	17	2153	22.4	1.38E-03	9.61			1.38E-04	0.18			9.79
4	5	13	2269	21.299999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
4	5	14	2270	23.6	1.38E-03	9.61			1.38E-04	0.18			9.79
4	5	15	2271	23.4	1.38E-03	9.61			1.38E-04	0.18			9.79
4	5	16	2272	22.700001	1.38E-03	9.61			1.38E-04	0.18			9.79
4	5	17	2273	21.5	1.38E-03	9.61			1.38E-04	0.18			9.79
4	5	18	2274	20.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
4	6	15	2295	20	1.38E-03	9.61			1.38E-04	0.18			9.79
4	8	24	2352	20.299999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
4	9	1	2353	20.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
4	9	8	2360	21.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
4	9	9	2361	21.799999	1.38E-03	9.61			1.38E-04	0.18			9.79
4	9	10	2362	21	1.38E-03	9.61			1.38E-04	0.18			9.79
5	3	1	2929	20.799999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
5	14	19	3211	20.700001	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
7	6	20	4484	21.299999	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
7	7	1	4489	20.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
7	7	5	4493	20.5	1.38E-03	9.61			1.38E-04	0.18			9.79
7	27	14	4982	28.6	2.57E-03	17.89	4.90E-04	3.41	1.09E-04	0.14	4.59E-06	0.01	21.45
7	27	15	4983	28.200001	2.57E-03	17.89			1.09E-04	0.14			18.04
7	27	16	4984	20.6	1.38E-03	9.61			1.38E-04	0.18			9.79
7	28	17	5009	20	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
7	28	18	5010	20.4	1.38E-03	9.61			1.38E-04	0.18			9.79
7	28	19	5011	20.4	1.38E-03	9.61			1.38E-04	0.18			9.79
10	6	20	6692	20.5	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
10	16	10	6922	20.700001	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
10	16	11	6923	21.5	1.38E-03	9.61			1.38E-04	0.18			9.79
10	16	13	6925	21.299999	1.38E-03	9.61			1.38E-04	0.18			9.79
10	16	14	6926	20.200001	1.38E-03	9.61			1.38E-04	0.18			9.79
10	16	18	6930	20.1	1.38E-03	9.61			1.38E-04	0.18			9.79
10	16	19	6931	21.200001	1.38E-03	9.61			1.38E-04	0.18			9.79
11	21	18	7794	22	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
12	1	14	8030	21.4	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
12	3	7	8071	20.200001	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
12	3	12	8076	22.4	1.38E-03	9.61			1.38E-04	0.18			9.79
12	3	13	8077	20.9	1.38E-03	9.61			1.38E-04	0.18			9.79
12	7	20	8180	21.700001	1.38E-03	9.61	2.12E-04	1.48	1.38E-04	0.18	4.59E-06	0.01	11.27
12	7	23	8183	21	1.38E-03	9.61			1.38E-04	0.18			9.79
Total													824.48

Table A.13 - Polygon 12 - CCHD Station pm

Stabilized soil, spike-corrected emission factors

PM PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 12	vacant land area	30662	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		25756.08		25756.08		4905.92		4905.92	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	8	6	174	20.299999	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
1	21	11	491	23.1	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
1	21	12	492	24.200001	1.38E-03	35.54			1.38E-04	0.68			36.22
1	21	13	493	22.299999	1.38E-03	35.54			1.38E-04	0.68			36.22
1	21	14	494	22.299999	1.38E-03	35.54			1.38E-04	0.68			36.22
1	21	15	495	20	1.38E-03	35.54			1.38E-04	0.68			36.22
2	9	22	958	20.299999	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
2	25	10	1330	22.9	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
2	25	11	1331	26	2.57E-03	66.19			1.09E-04	0.53			66.73
2	25	12	1332	29.4	2.57E-03	66.19			1.09E-04	0.53			66.73
2	25	13	1333	22.1	1.38E-03	35.54			1.38E-04	0.68			36.22
3	3	22	1486	23.5	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
3	9	14	1622	21.299999	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
3	20	14	1886	20.1	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
3	20	15	1887	22.4	1.38E-03	35.54			1.38E-04	0.68			36.22
3	20	16	1888	21.1	1.38E-03	35.54			1.38E-04	0.68			36.22
3	30	12	2124	20.6	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
3	31	10	2146	20	1.38E-03	35.54			1.38E-04	0.68			36.22
3	31	13	2149	20.9	1.38E-03	35.54			1.38E-04	0.68			36.22
3	31	14	2150	23.6	1.38E-03	35.54			1.38E-04	0.68			36.22
4	8	23	2351	21.1	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
4	28	12	2820	20.9	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
5	3	14	2942	20.200001	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
5	14	19	3211	22.1	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
5	26	20	3500	21.5	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
12	7	20	8180	22.200001	1.38E-03	35.54	2.12E-04	5.46	1.38E-04	0.68	4.59E-06	0.02	41.70
Total													1079.50

Table A.14 - Polygon 10 - CCHD Station pt

Stabilized soil, spike-corrected emission factors

PT PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 10	vacant land area	6763.5	acres											
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		5681.34		5681.34		1082.16		1082.16	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
2	9	24	960	21.1	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
2	10	2	962	20.700001	1.38E-03	7.84			1.38E-04	0.15			7.99
2	25	12	1332	23	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
2	25	13	1333	23.299999	1.38E-03	7.84			1.38E-04	0.15			7.99
2	25	14	1334	23.299999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	3	19	1483	20.200001	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
3	9	13	1621	20	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
3	9	14	1622	24.200001	1.38E-03	7.84			1.38E-04	0.15			7.99
3	9	15	1623	22.6	1.38E-03	7.84			1.38E-04	0.15			7.99
3	30	11	2123	22	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
3	30	12	2124	22.799999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	30	13	2125	23.799999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	30	15	2127	21.1	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	9	2145	20.799999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	11	2147	20.799999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	12	2148	22.799999	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	13	2149	25.200001	2.57E-03	14.60			1.09E-04	0.12			14.72
3	31	14	2150	23.4	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	15	2151	24.200001	1.38E-03	7.84			1.38E-04	0.15			7.99
3	31	16	2152	20.1	1.38E-03	7.84			1.38E-04	0.15			7.99
4	9	1	2353	20	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
4	9	2	2354	20.700001	1.38E-03	7.84			1.38E-04	0.15			7.99
5	13	21	3189	21.799999	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
5	14	19	3211	20.9	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
7	27	14	4982	23.6	1.38E-03	7.84	2.12E-04	1.20	1.38E-04	0.15	4.59E-06	0.00	9.20
7	27	15	4983	23	1.38E-03	7.84			1.38E-04	0.15			7.99
Total													225.34

6	21	13	4117	21.1	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
6	25	15	4215	20.1	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
6	25	16	4216	21.1	1.38E-03	14.06			1.38E-04	0.27			14.32
6	25	20	4220	21.9	1.38E-03	14.06			1.38E-04	0.27			14.32
7	3	14	4406	20	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
7	15	21	4701	24	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
7	27	15	4983	20.799999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
8	30	14	5798	20	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
10	16	11	6923	20.200001	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
10	29	4	7228	21.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
11	8	8	7472	20.4	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
11	8	9	7473	23.4	1.38E-03	14.06			1.38E-04	0.27			14.32
11	8	10	7474	21.799999	1.38E-03	14.06			1.38E-04	0.27			14.32
11	8	12	7476	21.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
11	8	14	7478	22.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
11	17	5	7685	22.4	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
11	17	6	7686	28.5	2.57E-03	26.18			1.09E-04	0.21			26.39
11	17	7	7687	25.1	2.57E-03	26.18			1.09E-04	0.21			26.39
11	17	8	7688	29.4	2.57E-03	26.18			1.09E-04	0.21			26.39
11	17	9	7689	30.1	3.16E-03	32.18			4.83E-04	0.94			33.12
11	17	10	7690	31.799999	3.16E-03	32.18			4.83E-04	0.94			33.12
11	17	11	7691	29.5	2.57E-03	26.18			1.09E-04	0.21			26.39
11	17	12	7692	23.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
11	17	13	7693	22	1.38E-03	14.06			1.38E-04	0.27			14.32
12	1	6	8022	21.799999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
12	2	23	8063	21.1	1.38E-03	14.06			1.38E-04	0.27			14.32
12	2	24	8064	25.9	2.57E-03	26.18			1.09E-04	0.21			26.39
12	3	1	8065	25.200001	2.57E-03	26.18			1.09E-04	0.21			26.39
12	3	9	8073	22.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
12	3	13	8077	22	1.38E-03	14.06			1.38E-04	0.27			14.32
12	3	14	8078	22.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
12	3	15	8079	20.6	1.38E-03	14.06			1.38E-04	0.27			14.32
12	7	20	8180	27.4	2.57E-03	26.18	4.90E-04	4.99	1.09E-04	0.21		0.00	31.38
12	7	21	8181	26.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
12	7	22	8182	21.9	1.38E-03	14.06			1.38E-04	0.27			14.32
12	8	1	8185	31.299999	3.16E-03	32.18			1.09E-04	0.21			32.40
12	8	2	8186	22.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
Total													2924.64

3	31	21	2157	21	1.38E-03	14.06			1.38E-04	0.27			14.32
4	3	14	2222	20.4	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
4	3	15	2223	21.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	3	17	2225	22.6	1.38E-03	14.06			1.38E-04	0.27			14.32
4	8	15	2343	23.4	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
4	8	16	2344	21.5	1.38E-03	14.06			1.38E-04	0.27			14.32
4	8	21	2349	25.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	8	22	2350	28.700001	2.57E-03	26.18			1.09E-04	0.21			26.39
4	8	23	2351	24.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	9	2	2354	23.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	9	12	2364	21.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	14	5	2477	22.1	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
4	26	23	2783	23.5	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
4	26	24	2784	34.5	3.16E-03	32.18			4.83E-04	0.94			33.12
4	27	1	2785	21.799999	1.38E-03	14.06			1.38E-04	0.27			14.32
4	27	18	2802	22.1	1.38E-03	14.06			1.38E-04	0.27			14.32
4	27	19	2803	25.299999	2.57E-03	26.18			1.09E-04	0.21			26.39
4	27	20	2804	23	1.38E-03	14.06			1.38E-04	0.27			14.32
4	27	21	2805	20.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
4	28	13	2821	20	1.38E-03	14.06			1.38E-04	0.27			14.32
5	2	17	2921	21.799999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
5	3	14	2942	22.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
5	3	15	2943	21.9	1.38E-03	14.06			1.38E-04	0.27			14.32
5	3	16	2944	22.1	1.38E-03	14.06			1.38E-04	0.27			14.32
5	12	22	3166	26	2.57E-03	26.18	4.90E-04	4.99	1.09E-04	0.21		0.00	31.38
5	12	23	3167	23.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
5	12	24	3168	23.4	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	2	3170	20.4	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	3	3171	22.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	15	3183	20	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	16	3184	21.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	17	3185	23.1	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	21	3189	23.1	1.38E-03	14.06			1.38E-04	0.27			14.32
5	13	22	3190	21.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
5	14	16	3208	20.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
5	14	17	3209	21.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
5	14	18	3210	25.5	2.57E-03	26.18			1.09E-04	0.21			26.39
5	14	19	3211	26.9	2.57E-03	26.18			1.09E-04	0.21			26.39
5	14	20	3212	20.4	1.38E-03	14.06			1.38E-04	0.27			14.32
5	26	20	3500	22.6	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
5	26	21	3501	23.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
5	26	22	3502	20.4	1.38E-03	14.06			1.38E-04	0.27			14.32
6	2	21	3669	22.200001	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
6	16	14	3998	20.9	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49

2	25	10	1330	24.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
2	25	12	1332	27	2.57E-03	26.18			1.09E-04	0.21			26.39
3	3	12	1476	21.4	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	3	13	1477	22	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	14	1478	23	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	15	1479	21.5	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	16	1480	23.5	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	17	1481	23.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	18	1482	25.299999	2.57E-03	26.18			1.09E-04	0.21			26.39
3	3	19	1483	26.200001	2.57E-03	26.18			1.09E-04	0.21			26.39
3	3	20	1484	21.6	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	23	1487	22.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	3	24	1488	22.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	8	23	1607	20.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	8	24	1608	20.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	1	1609	22.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	2	1610	24	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	3	1611	22.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	4	1612	21.9	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	14	1622	21.4	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	15	1623	23.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	9	16	1624	20.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	15	16	1768	20.1	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	20	13	1885	21.200001	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	20	14	1886	23.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	15	1887	23.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	16	1888	21.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	17	1889	20.9	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	18	1890	21.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	19	1891	22	1.38E-03	14.06			1.38E-04	0.27			14.32
3	20	20	1892	22.5	1.38E-03	14.06			1.38E-04	0.27			14.32
3	21	16	1912	20.9	1.38E-03	14.06			1.38E-04	0.27			14.32
3	23	5	1949	20.9	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	23	6	1950	22.799999	1.38E-03	14.06			1.38E-04	0.27			14.32
3	23	8	1952	20.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	30	9	2121	22.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
3	30	10	2122	24.9	1.38E-03	14.06			1.38E-04	0.27			14.32
3	30	11	2123	27.200001	2.57E-03	26.18			1.09E-04	0.21			26.39
3	30	12	2124	26.700001	2.57E-03	26.18			1.09E-04	0.21			26.39
3	30	13	2125	21.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
3	31	12	2148	25.799999	2.57E-03	26.18			1.09E-04	0.21			26.39
3	31	13	2149	29.4	2.57E-03	26.18			1.09E-04	0.21			26.39
3	31	14	2150	35.799999	2.99E-03	30.45			3.32E-04	0.64			31.10
3	31	15	2151	31.299999	3.16E-03	32.18			4.83E-04	0.94			33.12

Table A.15 - Polygon 18 - CCHD Station pv

Stabilized soil, spike-corrected emission factors

PV PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 18	vacant land area	12125	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		10185		10185		1940		1940	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind (mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	8	9	177	22.700001	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
1	8	10	178	20.9	1.38E-03	14.06			1.38E-04	0.27			14.32
1	8	14	182	21.4	1.38E-03	14.06			1.38E-04	0.27			14.32
1	8	15	183	21	1.38E-03	14.06			1.38E-04	0.27			14.32
1	20	4	460	21.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
1	20	9	465	22.1	1.38E-03	14.06			1.38E-04	0.27			14.32
1	20	10	466	22.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
1	20	17	473	20.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
1	20	18	474	24.6	2.57E-03	26.18			1.38E-04	0.27			26.44
1	20	19	475	28.1	2.57E-03	26.18			1.09E-04	0.21			26.39
1	20	20	476	30	3.16E-03	32.18			1.09E-04	0.21			32.40
1	20	21	477	26.299999	2.57E-03	26.18			1.09E-04	0.21			26.39
1	20	22	478	31.5	3.16E-03	32.18			4.83E-04	0.94			33.12
1	20	23	479	32.099998	3.16E-03	32.18			4.83E-04	0.94			33.12
1	20	24	480	24.5	1.38E-03	14.06			1.38E-04	0.27			14.32
1	21	1	481	29.5	2.57E-03	26.18			1.09E-04	0.21			26.39
1	21	2	482	32.900002	3.16E-03	32.18			4.83E-04	0.94			33.12
1	21	3	483	27.6	2.57E-03	26.18			1.09E-04	0.21			26.39
1	21	15	495	20.6	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
2	9	13	949	20.5	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
2	9	14	950	20.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
2	9	15	951	24.700001	1.38E-03	14.06			1.38E-04	0.27			14.32
2	9	16	952	23.6	1.38E-03	14.06			1.38E-04	0.27			14.32
2	9	21	957	20.299999	1.38E-03	14.06			1.38E-04	0.27			14.32
2	9	22	958	26.4	2.57E-03	26.18			1.38E-04	0.27			26.44
2	9	23	959	22.9	1.38E-03	14.06			1.38E-04	0.27			14.32
2	10	5	965	21.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
2	10	11	971	21.5	1.38E-03	14.06			1.38E-04	0.27			14.32
2	10	12	972	36	2.99E-03	30.45			3.32E-04	0.64			31.10
2	10	13	973	22.799999	1.38E-03	14.06			1.38E-04	0.27			14.32
2	21	11	1235	20.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49
2	21	12	1236	24	1.38E-03	14.06			1.38E-04	0.27			14.32
2	21	13	1237	23.200001	1.38E-03	14.06			1.38E-04	0.27			14.32
2	21	14	1238	25	2.57E-03	26.18			1.09E-04	0.21			26.39
2	21	15	1239	23.9	1.38E-03	14.06			1.38E-04	0.27			14.32
2	21	16	1240	25.6	2.57E-03	26.18			1.09E-04	0.21			26.39
2	25	9	1329	22.299999	1.38E-03	14.06	2.12E-04	2.16	1.38E-04	0.27	4.59E-06	0.01	16.49

Table A.16 - Polygon 16 - CCHD Station sa

SA PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 16	vacant land area	207	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		173.88		173.88		33.12		33.12	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	21	12	492	22.799999	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
1	21	13	493	21.200001	1.38E-03	0.24			1.38E-04	0.00			0.24
1	21	14	494	21.6	1.38E-03	0.24			1.38E-04	0.00			0.24
1	21	15	495	22.200001	1.38E-03	0.24			1.38E-04	0.00			0.24
1	21	16	496	20.299999	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	9	969	21	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
2	10	10	970	22.1	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	11	971	22.1	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	12	972	21.4	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	13	973	21.799999	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	14	974	20.9	1.38E-03	0.24			1.38E-04	0.00			0.24
2	10	15	975	20.700001	1.38E-03	0.24			1.38E-04	0.00			0.24
2	25	12	1332	20.299999	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
2	25	13	1333	21.700001	1.38E-03	0.24			1.38E-04	0.00			0.24
2	25	14	1334	21.5	1.38E-03	0.24			1.38E-04	0.00			0.24
2	25	15	1335	22.299999	1.38E-03	0.24			1.38E-04	0.00			0.24
3	31	13	2149	20.700001	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
3	31	14	2150	23.6	1.38E-03	0.24			1.38E-04	0.00			0.24
3	31	15	2151	23.200001	1.38E-03	0.24			1.38E-04	0.00			0.24
3	31	16	2152	29.6	2.57E-03	0.45			1.09E-04	0.00			0.45
3	31	17	2153	26.200001	2.57E-03	0.45			1.09E-04	0.00			0.45
5	26	21	3501	20	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
5	26	22	3502	21.5	1.38E-03	0.24			1.38E-04	0.00			0.24
7	14	20	4676	20.6	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
9	18	2	6242	22	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
12	1	14	8030	20.9	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
12	1	15	8031	20.700001	1.38E-03	0.24			1.38E-04	0.00			0.24
12	3	1	8065	21.6	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
12	3	3	8067	20.1	1.38E-03	0.24			1.38E-04	0.00			0.24
12	3	8	8072	21.299999	1.38E-03	0.24			1.38E-04	0.00			0.24
12	3	9	8073	21.6	1.38E-03	0.24			1.38E-04	0.00			0.24
12	3	10	8074	21.200001	1.38E-03	0.24			1.38E-04	0.00			0.24
12	7	20	8180	24.799999	1.38E-03	0.24	2.12E-04	0.04	1.38E-04	0.00	4.59E-06	0.00	0.28
12	7	21	8181	20	1.38E-03	0.24			1.38E-04	0.00			0.24
12	7	22	8182	22.4	1.38E-03	0.24			1.38E-04	0.00			0.24
Total													9.34

Table A.17 - Polygon 3 - CCHD Station sl

Stabilized soil, spike-corrected emission factors

SL PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 3	vacant land area	1315	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		1104.6		1104.6		210.4		210.4	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
3	31	13	2149	20.799999	1.38E-03	1.52	2.12E-04	0.23	1.38E-04	0.03	4.59E-06	0.00	1.79
3	31	16	2152	23.700001	1.38E-03	1.52			1.38E-04	0.03			1.55
3	31	17	2153	21.6	1.38E-03	1.52			1.38E-04	0.03			1.55
6	3	5	3677	21.1	1.38E-03	1.52	2.12E-04	0.23	1.38E-04	0.03	4.59E-06	0.00	1.79
12	7	20	8180	20.1	1.38E-03	1.52	2.12E-04	0.23	1.38E-04	0.03	4.59E-06	0.00	1.79
Total													8.47

Table A.18 - Polygon 13 - CCHD Station wj

Stabilized soil, spike-corrected emission factors

WJ PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 13	vacant land area	1522.5	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		1278.9		1278.9		243.6		243.6	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	21	12	492	20.799999	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
2	9	16	952	20.799999	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
2	21	14	1238	20.200001	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
2	25	11	1331	20.9	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
2	25	12	1332	29.700001	2.57E-03	3.29			1.09E-04	0.03			3.31
2	25	13	1333	25.799999	2.57E-03	3.29			1.09E-04	0.03			3.31
3	9	13	1621	23.799999	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
3	9	14	1622	23.200001	1.38E-03	1.76			1.38E-04	0.03			1.80
3	20	15	1887	20.700001	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
3	31	10	2146	21.5	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
3	31	14	2150	21.5	1.38E-03	1.76			1.38E-04	0.03			1.80
3	31	16	2152	21.5	1.38E-03	1.76			1.38E-04	0.03			1.80
3	31	17	2153	22	1.38E-03	1.76			1.38E-04	0.03			1.80
10	16	10	6922	20.299999	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
12	3	1	8065	20.299999	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
12	7	20	8180	21.200001	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
12	7	21	8181	21.5	1.38E-03	1.76			1.38E-04	0.03			1.80
12	7	22	8182	22	1.38E-03	1.76			1.38E-04	0.03			1.80
12	8	1	8185	20	1.38E-03	1.76			1.38E-04	0.03			1.80
12	21	13	8509	20.9	1.38E-03	1.76	2.12E-04	0.27	1.38E-04	0.03	1.09E-04	0.03	2.10
Total													42.27

Table A.19 - Polygon 2 - CCHD Station ww

Stabilized soil, spike-corrected emission factors

WW PM-10	1999				Stable	Stable	Stable	Stable	Stabilized	Stabilized	Stabilized	Stabilized	
Polygon 2	vacant land area	1574	acres										
Excel 5.0	stable fraction	0.84		fraction		0.84		0.84		0.16		0.16	
	unstable fraction	0.16		Area (acres)		1322.16		1322.16		251.84		251.84	
					Steady	Steady	Spike	Spike	Steady	Steady	Spike	Spike	
					Factor	Emission	Factor	Emission	Factor	Emission	Factor	Emission	Total
Month	Day	Hour	Cum_hour	wind_(mph)	(ton/ac/hr)	ton	(ton/ac)	ton	(ton/ac/hr)	ton	(ton/ac)	ton	tons
1	21	1	481	20.4	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03		0.00	2.14
1	26	11	611	20.9	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
2	9	23	959	21.299999	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
2	25	15	1335	21.6	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
3	9	14	1622	21	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
3	20	14	1886	21	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
3	30	13	2125	21.1	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
3	30	14	2126	20.1	1.38E-03	1.82			1.38E-04	0.03			1.86
3	31	14	2150	21.1	1.38E-03	1.82			1.38E-04	0.03			1.86
3	31	15	2151	24.6	1.38E-03	1.82			1.38E-04	0.03			1.86
3	31	16	2152	20.9	1.38E-03	1.82			1.38E-04	0.03			1.86
3	31	17	2153	21.4	1.38E-03	1.82			1.38E-04	0.03			1.86
4	5	13	2269	21.299999	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
4	5	14	2270	21.9	1.38E-03	1.82			1.38E-04	0.03			1.86
4	5	17	2273	20.799999	1.38E-03	1.82			1.38E-04	0.03			1.86
4	5	18	2274	20.799999	1.38E-03	1.82			1.38E-04	0.03			1.86
4	8	23	2351	21.6	1.38E-03	1.82	2.12E-04	0.28	1.38E-04	0.03	4.59E-06	0.00	2.14
4	8	24	2352	21	1.38E-03	1.82			1.38E-04	0.03			1.86
Total													36.00

Table B-1

Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
1	123	18	655	29-Nov-99
2	123	19	681	29-Nov-99
3	123	20	655	29-Nov-99
4	123	21	657	29-Nov-99
5	123	22	188	29-Nov-99
6	123	23	1	29-Nov-99
7	123	26	82	29-Nov-99
8	123	27	572	29-Nov-99
9	123	28	476	29-Nov-99
10	123	29	413	29-Nov-99
11	123	30	620	29-Nov-99
12	123	31	438	29-Nov-99
13	123	32	435	29-Nov-99
14	123	33	575	29-Nov-99
15	123	34	459	29-Nov-99
16	123	35	296	29-Nov-99
17	124	6	315	29-Nov-99
18	124	7	645	29-Nov-99
19	124	13	626	29-Nov-99
20	124	14	627	29-Nov-99
21	124	15	639	29-Nov-99
22	124	16	633	29-Nov-99
23	124	17	646	29-Nov-99
24	124	18	647	29-Nov-99
25	124	19	632	29-Nov-99
26	124	20	646	29-Nov-99
27	124	21	647	29-Nov-99
28	124	22	646	29-Nov-99
29	124	23	612	29-Nov-99
30	124	24	645	29-Nov-99
31	124	25	560	29-Nov-99
32	124	26	558	29-Nov-99
33	124	27	449	29-Nov-99
34	124	28	131	29-Nov-99
35	124	29	471	29-Nov-99
36	124	30	608	29-Nov-99
37	124	31	288	29-Nov-99
38	124	32	239	29-Nov-99
39	124	33	330	29-Nov-99
40	124	34	181	29-Nov-99
41	124	35	485	29-Nov-99
42	124	36	239	29-Nov-99
43	125	1	286	29-Nov-99
44	125	2	613	29-Nov-99
45	125	3	596	29-Nov-99
46	125	4	308	29-Nov-99
47	125	5	496	29-Nov-99
48	125	6	603	29-Nov-99
49	125	7	610	29-Nov-99
50	125	8	301	29-Nov-99

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Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
51	125	9	516	29-Nov-99
52	125	10	598	29-Nov-99
53	125	11	518	29-Nov-99
54	125	12	527	29-Nov-99
55	125	13	504	29-Nov-99
56	125	14	341	29-Nov-99
57	125	15	259	29-Nov-99
58	125	16	237	29-Nov-99
59	125	17	505	29-Nov-99
60	125	18	623	29-Nov-99
61	125	19	593	29-Nov-99
62	125	20	565	29-Nov-99
63	125	21	321	29-Nov-99
64	125	22	220	29-Nov-99
65	125	23	278	29-Nov-99
66	125	24	448	29-Nov-99
67	125	25	258	29-Nov-99
68	125	26	282	29-Nov-99
69	125	27	157	29-Nov-99
70	125	28	398	29-Nov-99
71	125	29	297	29-Nov-99
72	125	30	412	29-Nov-99
73	125	31	518	29-Nov-99
74	125	32	286	29-Nov-99
75	125	33	93	29-Nov-99
76	125	34	101	29-Nov-99
77	125	35	108	29-Nov-99
78	125	36	39	29-Nov-99
79	126	1	533	29-Nov-99
80	126	2	525	29-Nov-99
81	126	3	573	29-Nov-99
82	126	10	289	29-Nov-99
83	126	12	667	29-Nov-99
84	126	13	661	29-Nov-99
85	126	24	649	29-Nov-99
86	126	25	564	29-Nov-99
87	126	23	529	29-Nov-99
88	137	1	673	29-Nov-99
89	137	12	529	29-Nov-99
90	137	13	51	29-Nov-99
91	137	14	57	29-Nov-99
92	137	15	335	29-Nov-99
93	137	20	477	29-Nov-99
94	137	21	632	29-Nov-99
95	137	22	654	29-Nov-99
96	137	23	435	29-Nov-99
97	137	24	18	29-Nov-99
98	137	25	36	29-Nov-99
99	137	26	490	29-Nov-99
100	137	27	653	29-Nov-99

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Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
101	137	28	629	29-Nov-99
102	137	29	638	29-Nov-99
103	137	33	684	29-Nov-99
104	137	34	682	29-Nov-99
105	137	35	590	29-Nov-99
106	137	36	162	29-Nov-99
107	138	1	100	29-Nov-99
108	138	2	175	29-Nov-99
109	138	3	141	29-Nov-99
110	138	4	187	29-Nov-99
111	138	5	506	29-Nov-99
112	138	6	405	29-Nov-99
113	138	7	260	29-Nov-99
114	138	8	184	29-Nov-99
115	138	9	147	29-Nov-99
116	138	10	160	29-Nov-99
117	138	11	23	29-Nov-99
118	138	12	71	29-Nov-99
119	138	13	116	29-Nov-99
120	138	14	52	29-Nov-99
121	138	15	171	29-Nov-99
122	138	16	63	29-Nov-99
123	138	17	3	29-Nov-99
124	138	18	5	29-Nov-99
125	138	19	96	29-Nov-99
126	138	20	46	29-Nov-99
127	138	21	47	29-Nov-99
128	138	22	87	29-Nov-99
129	138	23	42	29-Nov-99
130	138	24	16	29-Nov-99
131	138	26	13	29-Nov-99
132	138	27	92	29-Nov-99
133	138	28	216	29-Nov-99
134	138	29	175	29-Nov-99
135	138	30	68	29-Nov-99
136	138	31	169	29-Nov-99
137	138	32	197	29-Nov-99
138	138	33	11	29-Nov-99
139	138	35	9	29-Nov-99
140	138	36	8	29-Nov-99
141	139	1	325	29-Nov-99
142	139	2	287	29-Nov-99
143	139	3	206	29-Nov-99
144	139	4	529	29-Nov-99
145	139	5	240	29-Nov-99
146	139	6	107	29-Nov-99
147	139	7	275	29-Nov-99
148	139	8	206	29-Nov-99
149	139	9	199	29-Nov-99
150	139	10	397	29-Nov-99

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Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
151	139	11	170	29-Nov-99
152	139	12	327	29-Nov-99
153	139	13	78	29-Nov-99
154	139	14	88	29-Nov-99
155	139	15	154	29-Nov-99
156	139	16	212	29-Nov-99
157	139	17	520	29-Nov-99
158	139	18	369	29-Nov-99
159	139	19	109	29-Nov-99
160	139	20	198	29-Nov-99
161	139	21	149	29-Nov-99
162	139	22	67	29-Nov-99
163	139	23	80	29-Nov-99
164	139	24	10	29-Nov-99
165	139	25	71	29-Nov-99
166	139	26	23	29-Nov-99
167	139	27	63	29-Nov-99
168	139	28	59	29-Nov-99
169	139	29	55	29-Nov-99
170	139	30	7	29-Nov-99
171	139	31	8	29-Nov-99
172	139	32	22	29-Nov-99
173	139	33	191	29-Nov-99
174	139	34	58	29-Nov-99
175	139	35	25	29-Nov-99
176	139	36	50	29-Nov-99
177	140	2	335	29-Nov-99
178	140	4	119	29-Nov-99
179	140	5	297	29-Nov-99
180	140	6	219	29-Nov-99
181	140	7	168	29-Nov-99
182	140	8	223	29-Nov-99
183	140	10	315	29-Nov-99
184	140	11	330	29-Nov-99
185	140	14	350	29-Nov-99
186	140	15	284	29-Nov-99
187	140	16	343	29-Nov-99
188	140	17	322	29-Nov-99
189	140	18	214	29-Nov-99
190	140	19	123	29-Nov-99
191	140	20	193	29-Nov-99
192	140	21	110	29-Nov-99
193	140	22	87	29-Nov-99
194	140	23	29	29-Nov-99
195	140	26	95	29-Nov-99
196	140	27	179	29-Nov-99
197	140	28	48	29-Nov-99
198	140	29	81	29-Nov-99
199	140	30	60	29-Nov-99
200	140	31	56	29-Nov-99

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Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
201	140	32	22	29-Nov-99
202	140	33	44	29-Nov-99
203	140	34	178	29-Nov-99
204	140	35	49	29-Nov-99
205	160	26	563	29-Nov-99
206	160	27	652	29-Nov-99
207	160	31	631	29-Nov-99
208	160	32	626	29-Nov-99
209	160	33	607	29-Nov-99
210	160	34	226	29-Nov-99
211	160	35	3	29-Nov-99
212	161	2	258	29-Nov-99
213	161	3	135	29-Nov-99
214	161	4	29	29-Nov-99
215	161	5	44	29-Nov-99
216	161	6	6	29-Nov-99
217	161	7	67	29-Nov-99
218	161	8	68	29-Nov-99
219	161	9	45	29-Nov-99
220	161	10	169	29-Nov-99
221	161	11	28	29-Nov-99
222	161	14	321	29-Nov-99
223	161	15	290	29-Nov-99
224	161	16	108	29-Nov-99
225	161	17	34	29-Nov-99
226	161	18	26	29-Nov-99
227	161	19	28	29-Nov-99
228	161	20	11	29-Nov-99
229	161	21	130	29-Nov-99
230	161	22	4	29-Nov-99
231	161	23	227	29-Nov-99
232	161	25	493	29-Nov-99
233	161	26	440	29-Nov-99
234	161	27	287	29-Nov-99
235	161	28	141	29-Nov-99
236	161	29	51	29-Nov-99
237	161	30	36	29-Nov-99
238	161	31	190	29-Nov-99
239	161	32	107	29-Nov-99
240	161	33	116	29-Nov-99
241	161	34	495	29-Nov-99
242	161	35	208	29-Nov-99
243	161	36	398	29-Nov-99
244	162	1	37	29-Nov-99
245	162	2	11	29-Nov-99
246	162	3	5	29-Nov-99
247	162	4	13	29-Nov-99
248	162	5	5	29-Nov-99
249	162	6	10	29-Nov-99
250	162	7	11	29-Nov-99

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Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
251	162	8	8	29-Nov-99
252	162	9	76	29-Nov-99
253	162	10	34	29-Nov-99
254	162	11	15	29-Nov-99
255	162	12	16	29-Nov-99
256	162	13	74	29-Nov-99
257	162	14	8	29-Nov-99
258	162	15	86	29-Nov-99
259	162	16	83	29-Nov-99
260	162	17	68	29-Nov-99
261	162	18	2	29-Nov-99
262	162	19	97	29-Nov-99
263	162	20	63	29-Nov-99
264	162	21	65	29-Nov-99
265	162	22	76	29-Nov-99
266	162	23	5	29-Nov-99
267	162	24	39	29-Nov-99
268	162	25	26	29-Nov-99
269	162	26	47	29-Nov-99
270	162	27	53	29-Nov-99
271	162	28	386	29-Nov-99
272	162	29	185	29-Nov-99
273	162	30	133	29-Nov-99
274	162	31	452	29-Nov-99
275	162	32	298	29-Nov-99
276	162	33	359	29-Nov-99
277	162	34	465	29-Nov-99
278	162	35	358	29-Nov-99
279	162	36	125	29-Nov-99
280	163	1	33	29-Nov-99
281	163	2	85	29-Nov-99
282	163	3	115	29-Nov-99
283	163	4	130	29-Nov-99
284	163	5	45	29-Nov-99
285	163	6	52	29-Nov-99
286	163	7	3	29-Nov-99
287	163	8	15	29-Nov-99
288	163	9	250	29-Nov-99
289	163	10	117	29-Nov-99
290	163	11	71	29-Nov-99
291	163	12	65	29-Nov-99
292	163	13	39	29-Nov-99
293	163	14	11	29-Nov-99
294	163	15	135	29-Nov-99
295	163	16	186	29-Nov-99
296	163	17	125	29-Nov-99
297	163	18	192	29-Nov-99
298	163	19	523	29-Nov-99
299	163	20	296	29-Nov-99
300	163	21	129	29-Nov-99

Table B-1

Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
301	163	22	16	29-Nov-99
302	163	23	8	29-Nov-99
303	163	24	97	29-Nov-99
304	163	25	206	29-Nov-99
305	163	26	131	29-Nov-99
306	163	27	174	29-Nov-99
307	163	28	257	29-Nov-99
308	163	29	561	29-Nov-99
309	163	30	617	29-Nov-99
310	163	31	650	29-Nov-99
311	163	32	624	29-Nov-99
312	163	33	556	29-Nov-99
313	163	34	528	29-Nov-99
314	163	35	527	29-Nov-99
315	163	36	426	29-Nov-99
316	164	1	567	29-Nov-99
317	164	2	543	29-Nov-99
318	164	3	62	29-Nov-99
319	164	11	425	29-Nov-99
320	164	12	211	29-Nov-99
321	164	13	615	29-Nov-99
322	164	14	700	29-Nov-99
323	164	23	620	29-Nov-99
324	164	24	561	29-Nov-99
325	164	25	647	29-Nov-99
326	164	26	637	29-Nov-99
327	164	36	654	29-Nov-99
328	175	1	318	29-Nov-99
329	176	1	587	29-Nov-99
330	176	2	615	29-Nov-99
331	176	3	618	29-Nov-99
332	176	4	645	29-Nov-99
333	176	5	641	29-Nov-99
334	176	6	650	29-Nov-99
335	176	7	679	29-Nov-99
336	176	8	382	29-Nov-99
337	176	9	648	29-Nov-99
338	176	10	609	29-Nov-99
339	176	11	497	29-Nov-99
340	176	12	611	29-Nov-99
341	176	13	523	29-Nov-99
342	176	14	568	29-Nov-99
343	176	15	541	29-Nov-99
344	176	16	501	29-Nov-99
345	176	17	563	29-Nov-99
346	176	18	643	29-Nov-99
347	176	19	585	29-Nov-99
348	176	20	585	29-Nov-99
349	176	21	573	29-Nov-99
350	176	22	244	29-Nov-99

Table B-1

Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
351	176	23	433	29-Nov-99
352	176	24	483	29-Nov-99
353	176	25	543	29-Nov-99
354	176	26	634	29-Nov-99
355	176	27	604	29-Nov-99
356	176	28	626	29-Nov-99
357	176	29	612	29-Nov-99
358	176	30	320	29-Nov-99
359	176	34	601	29-Nov-99
360	176	35	461	29-Nov-99
361	176	36	626	29-Nov-99
362	177	1	151	29-Nov-99
363	177	2	169	29-Nov-99
364	177	3	88	29-Nov-99
365	177	4	315	29-Nov-99
366	177	5	330	29-Nov-99
367	177	6	360	29-Nov-99
368	177	7	456	29-Nov-99
369	177	8	366	29-Nov-99
370	177	9	205	29-Nov-99
371	177	10	163	29-Nov-99
372	177	11	123	29-Nov-99
373	177	12	111	29-Nov-99
374	177	13	29	29-Nov-99
375	177	14	373	29-Nov-99
376	177	15	87	29-Nov-99
377	177	16	273	29-Nov-99
378	177	17	316	29-Nov-99
379	177	18	549	29-Nov-99
380	177	19	6	29-Nov-99
381	177	20	316	29-Nov-99
382	177	21	276	29-Nov-99
383	177	22	198	29-Nov-99
384	177	23	199	29-Nov-99
385	177	24	318	29-Nov-99
386	177	25	352	29-Nov-99
387	177	26	386	29-Nov-99
388	177	27	312	29-Nov-99
389	177	28	398	29-Nov-99
390	177	29	509	29-Nov-99
391	177	30	613	29-Nov-99
392	177	31	637	29-Nov-99
393	177	32	543	29-Nov-99
394	177	33	384	29-Nov-99
395	177	34	610	29-Nov-99
396	177	35	502	29-Nov-99
397	177	36	360	29-Nov-99
398	178	1	107	29-Nov-99
399	178	2	286	29-Nov-99
400	178	3	213	29-Nov-99

Table B-1

Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
401	178	4	172	29-Nov-99
402	178	5	50	29-Nov-99
403	178	6	84	29-Nov-99
404	178	7	5	29-Nov-99
405	178	8	12	29-Nov-99
406	178	9	64	29-Nov-99
407	178	10	100	29-Nov-99
408	178	11	446	29-Nov-99
409	178	12	486	29-Nov-99
410	178	13	305	29-Nov-99
411	178	14	284	29-Nov-99
412	178	15	339	29-Nov-99
413	178	16	290	29-Nov-99
414	178	17	19	29-Nov-99
415	178	18	18	29-Nov-99
416	178	19	145	29-Nov-99
417	178	20	103	29-Nov-99
418	178	21	223	29-Nov-99
419	178	22	502	29-Nov-99
420	178	23	253	29-Nov-99
421	178	24	313	29-Nov-99
422	178	25	572	29-Nov-99
423	178	26	633	29-Nov-99
424	178	27	623	29-Nov-99
425	178	28	471	29-Nov-99
426	178	29	107	29-Nov-99
427	178	30	351	29-Nov-99
428	178	31	318	29-Nov-99
429	178	32	605	29-Nov-99
430	178	33	636	29-Nov-99
431	179	4	319	29-Nov-99
432	179	5	520	29-Nov-99
433	179	6	631	29-Nov-99
434	179	7	460	29-Nov-99
435	179	8	121	29-Nov-99
436	179	9	334	29-Nov-99
437	179	16	531	29-Nov-99
438	179	17	121	29-Nov-99
439	179	18	100	29-Nov-99
440	179	19	49	29-Nov-99
441	179	20	126	29-Nov-99
442	179	21	199	29-Nov-99
443	179	27	73	29-Nov-99
444	179	28	310	29-Nov-99
445	179	29	65	29-Nov-99
446	179	30	92	29-Nov-99
447	179	31	493	29-Nov-99
448	179	32	516	29-Nov-99
449	179	33	309	29-Nov-99
450	179	34	402	29-Nov-99

Table B-1

Clark County Assessor Data
Vacant parcels by Section 1/2 acre and greater

ID	Book	Section	Total Acres	Run date
451	189	3	252	29-Nov-99
452	190	5	605	29-Nov-99
453	190	6	262	29-Nov-99
454	190	7	290	29-Nov-99
455	190	8	595	29-Nov-99
456	190	17	287	29-Nov-99
457	190	18	634	29-Nov-99
458	190	19	333	29-Nov-99
459	190	20	35	29-Nov-99
460	191	1	303	29-Nov-99
461	191	2	179	29-Nov-99
462	191	3	459	29-Nov-99
463	191	4	555	29-Nov-99
464	191	5	537	29-Nov-99
465	191	6	633	29-Nov-99
466	191	8	510	29-Nov-99
467	191	9	546	29-Nov-99
468	191	10	588	29-Nov-99
469	191	11	608	29-Nov-99
470	191	12	275	29-Nov-99
471	191	13	648	29-Nov-99
472	191	14	651	29-Nov-99
473	191	15	634	29-Nov-99
474	191	16	631	29-Nov-99
475	191	17	530	29-Nov-99
476	191	20	593	29-Nov-99
477	191	21	644	29-Nov-99
478	191	22	621	29-Nov-99
479	191	23	629	29-Nov-99
480	191	24	675	29-Nov-99
Total			148,575	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
277	1	139	21	149	
296	1	139	22	67	
331	1	139	26	23	
309	1	139	27	63	
310	1	139	28	59	
349	1	139	33	191	
348	1	139	34	58	
347	1	139	35	25	635
247	2	140	13	0	
253	2	140	14	350	
256	2	140	15	284	
298	2	140	20	193	
279	2	140	21	110	
263	2	140	22	87	
261	2	140	23	29	
257	2	140	24	0	
299	2	140	25	0	
300	2	140	26	95	
301	2	140	27	179	
302	2	140	28	48	
303	2	140	29	81	
340	2	140	32	22	
337	2	140	33	44	
338	2	140	34	178	
339	2	140	35	49	
335	2	140	36	0	
381	2	161	1	0	
383	2	161	2	258	
382	2	161	3	135	
384	2	161	4	29	
385	2	161	5	44	
432	2	161	8	68	
431	2	161	9	45	
429	2	161	10	169	2,497
283	3	138	24	16	
316	3	138	25	0	
353	3	138	36	8	
224	3	139	7	275	
227	3	139	8	206	
235	3	139	17	520	
236	3	139	18	369	
271	3	139	19	109	
270	3	139	20	198	
276	3	139	21	149	
311	3	139	28	59	
312	3	139	29	55	
313	3	139	30	7	
352	3	139	31	8	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates

Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
351	3	139	32	22	
350	3	139	33	191	
356	3	139	34	58	
394	3	162	3	5	
395	3	162	4	13	
396	3	162	5	5	
397	3	162	6	10	
443	3	162	7	11	
440	3	162	8	8	
441	3	162	9	76	
442	3	162	10	34	
398	3	163	1	33	
444	3	163	12	65	2,510
5	4	123	1	0	
6	4	123	2	0	
2	4	123	3	0	
3	4	123	4	0	
4	4	123	5	0	
7	4	123	6	0	
32	4	123	7	0	
29	4	123	8	0	
27	4	123	9	0	
28	4	123	10	0	
31	4	123	11	0	
30	4	123	12	0	
56	4	123	13	0	
55	4	123	14	0	
53	4	123	15	0	
52	4	123	16	0	
54	4	123	17	0	
57	4	123	18	655	
83	4	123	19	681	
78	4	123	20	655	
79	4	123	21	657	
82	4	123	22	188	
80	4	123	23	1	
81	4	123	24	0	
108	4	123	25	0	
109	4	123	26	82	
107	4	123	27	572	
106	4	123	28	476	
110	4	123	29	413	
111	4	123	30	620	
138	4	123	31	438	
137	4	123	32	435	
134	4	123	33	575	
135	4	123	34	459	
136	4	123	35	296	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
133	4	123	36	0	
8	4	124	1	0	
9	4	124	2	0	
10	4	124	3	0	
12	4	124	4	0	
11	4	124	5	0	
13	4	124	6	315	
38	4	124	7	645	
37	4	124	8	0	
36	4	124	9	0	
34	4	124	10	0	
35	4	124	11	0	
33	4	124	12	0	
58	4	124	13	626	
59	4	124	14	627	
61	4	124	15	639	
60	4	124	16	633	
62	4	124	17	646	
65	4	124	18	647	
91	4	124	19	632	
88	4	124	20	646	
86	4	124	21	647	
87	4	124	22	646	
85	4	124	23	612	
84	4	124	24	645	
112	4	124	25	560	
113	4	124	26	558	
116	4	124	27	449	
115	4	124	28	131	
114	4	124	29	471	
145	4	124	32	239	
143	4	124	33	330	
144	4	124	34	181	
140	4	124	35	485	
139	4	124	36	239	
166	4	139	1	325	
167	4	139	2	287	
168	4	139	3	206	
169	4	139	4	529	
174	4	139	5	240	
198	4	139	10	397	
197	4	139	11	170	
195	4	139	12	327	
229	4	139	13	78	
162	4	140	1	0	
161	4	140	2	335	
160	4	140	3	0	
163	4	140	4	119	

Table B-2 | Grid cells within or touched by each Theissen polygon | Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
164	4	140	5	297	
165	4	140	6	219	
194	4	140	7	168	
193	4	140	8	223	
191	4	140	9	0	
192	4	140	10	315	
190	4	140	11	330	
189	4	140	12	0	
220	4	140	13	0	
221	4	140	14	350	
223	4	140	15	284	
225	4	140	16	343	
226	4	140	17	322	
228	4	140	18	214	
260	4	140	20	193	
258	4	140	21	110	
259	4	140	22	87	25,920
714	5	178	11	446	
712	5	178	12	486	
717	5	178	13	305	
718	5	178	14	284	
737	5	178	15	339	
755	5	178	22	502	
754	5	178	23	253	
753	5	178	24	313	
786	5	178	25	572	
787	5	178	26	633	
788	5	178	27	623	
837	5	178	33	636	
822	5	178	34	0	
821	5	178	35	0	
820	5	178	36	0	
711	5	179	7	460	
708	5	179	8	121	
706	5	179	9	334	
705	5	179	10	0	
704	5	179	11	0	
703	5	179	12	0	
707	5	179	13	0	
709	5	179	14	0	
710	5	179	15	0	
713	5	179	16	531	
715	5	179	17	121	
716	5	179	18	100	
752	5	179	19	49	
751	5	179	20	126	
750	5	179	21	199	
749	5	179	22	0	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
748	5	179	23	0	
747	5	179	24	0	
780	5	179	25	0	
781	5	179	26	0	
782	5	179	27	73	
783	5	179	28	310	
784	5	179	29	65	
785	5	179	30	92	
819	5	179	31	493	
818	5	179	32	516	
817	5	179	33	309	
816	5	179	34	402	
815	5	179	35	0	
814	5	179	36	0	
849	5	189	1	0	
850	5	189	2	0	
851	5	189	3	252	
852	5	189	4	0	
853	5	189	5	0	
854	5	189	6	0	
874	5	189	7	0	
873	5	189	8	0	
872	5	189	9	0	
871	5	189	10	0	
870	5	189	11	0	
869	5	189	12	0	
889	5	189	13	0	
890	5	189	14	0	
891	5	189	15	0	
892	5	189	16	0	
894	5	189	17	0	
895	5	189	18	0	
914	5	189	19	0	
913	5	189	20	0	
912	5	189	21	0	
911	5	189	22	0	
910	5	189	23	0	
909	5	189	24	0	
928	5	189	25	0	
929	5	189	26	0	
930	5	189	27	0	
931	5	189	28	0	
932	5	189	29	0	
933	5	189	30	0	
953	5	189	31	0	
952	5	189	32	0	
951	5	189	33	0	
950	5	189	34	0	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
949	5	189	35	0	
948	5	189	36	0	
855	5	190	1	0	
856	5	190	2	0	
857	5	190	3	0	
858	5	190	4	0	
893	5	190	8	595	
878	5	190	9	0	
877	5	190	10	0	
876	5	190	11	0	
875	5	190	12	0	
896	5	190	13	0	
897	5	190	14	0	
898	5	190	15	0	
899	5	190	16	0	
900	5	190	17	287	
921	5	190	20	35	
918	5	190	21	0	
917	5	190	22	0	
916	5	190	23	0	
915	5	190	24	0	
934	5	190	25	0	
935	5	190	26	0	
936	5	190	27	0	
937	5	190	28	0	
938	5	190	29	0	
947	5	190	30	0	
959	5	190	31	0	
958	5	190	32	0	
957	5	190	33	0	
956	5	190	34	0	
955	5	190	35	0	
954	5	190	36	0	10,862
330	6	140	29	81	
365	6	140	31	56	
341	6	140	32	22	
386	6	161	5	44	
387	6	161	6	6	
434	6	161	7	67	
433	6	161	8	68	
485	6	161	17	34	
486	6	161	18	26	
526	6	161	19	28	
527	6	161	20	11	
564	6	161	29	51	
565	6	161	30	36	
425	6	162	1	37	
435	6	162	12	16	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
487	6	162	13	74	
528	6	162	24	39	
569	6	162	25	26	722
370	7	139	36	50	
326	7	140	29	81	
334	7	140	30	60	
343	7	140	31	56	
342	7	140	32	22	
388	7	161	6	6	
389	7	162	1	37	
411	7	162	2	11	
436	7	162	12	16	339
371	8	140	36	0	
373	8	160	1	0	
374	8	160	2	0	
375	8	160	3	0	
376	8	160	4	0	
378	8	160	5	0	
379	8	160	6	0	
424	8	160	7	0	
423	8	160	8	0	
422	8	160	9	0	
421	8	160	10	0	
417	8	160	11	0	
418	8	160	12	0	
473	8	160	15	0	
474	8	160	16	0	
476	8	160	17	0	
478	8	160	18	0	
519	8	160	19	0	
518	8	160	20	0	
380	8	161	1	0	
404	8	161	2	258	
416	8	161	3	135	
469	8	161	8	68	
452	8	161	9	45	
428	8	161	10	169	
427	8	161	11	28	
426	8	161	12	0	
479	8	161	13	0	
480	8	161	14	321	
482	8	161	15	290	
483	8	161	16	108	
484	8	161	17	34	
525	8	161	20	11	
523	8	161	21	130	
522	8	161	22	4	
521	8	161	23	227	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
520	8	161	24	0	
559	8	161	25	493	
560	8	161	26	440	
561	8	161	27	287	
562	8	161	28	141	
563	8	161	29	51	
582	8	161	30	36	3,276
466	9	162	7	11	
464	9	162	8	8	
463	9	162	9	76	
462	9	162	10	34	
515	9	162	13	74	
496	9	162	14	8	
491	9	162	15	86	
494	9	162	16	83	
493	9	162	17	68	
492	9	162	18	2	
533	9	162	19	97	
531	9	162	20	63	
532	9	162	21	65	
534	9	162	22	76	
530	9	162	23	5	
529	9	162	24	39	
572	9	162	25	26	
566	9	162	26	47	
567	9	162	27	53	
570	9	162	28	386	
571	9	162	29	185	
573	9	162	30	133	
614	9	162	31	452	
615	9	162	32	298	
613	9	162	33	359	
612	9	162	34	465	
611	9	162	35	358	
608	9	162	36	125	
467	9	163	12	65	
495	9	163	13	39	
535	9	163	24	97	
647	9	177	2	169	
648	9	177	3	88	
649	9	177	4	315	
651	9	177	5	330	
650	9	177	6	360	
685	9	177	7	456	
686	9	177	8	366	
684	9	177	9	205	
682	9	177	10	163	
679	9	177	11	123	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
727	9	177	15	87	
728	9	177	16	273	
730	9	177	17	316	
729	9	177	18	549	
765	9	177	19	600	
764	9	177	20	316	
763	9	177	21	276	
797	9	177	28	398	
796	9	177	29	509	
799	9	177	30	613	
833	9	177	31	637	
832	9	177	32	542	11,574
408	10	160	1	0	
458	10	160	10	0	
420	10	160	11	0	
419	10	160	12	0	
471	10	160	13	0	
470	10	160	14	0	
472	10	160	15	0	
477	10	160	16	0	
510	10	160	17	0	
524	10	160	19	0	
516	10	160	20	0	
514	10	160	21	0	
513	10	160	22	0	
511	10	160	23	0	
512	10	160	24	0	
552	10	160	25	0	
551	10	160	26	563	
553	10	160	27	652	
554	10	160	28	0	
555	10	160	29	0	
556	10	160	30	0	
601	10	160	31	631	
599	10	160	32	626	
598	10	160	33	307	
597	10	160	34	226	
596	10	160	35	3	
595	10	160	36	0	
549	10	161	24	0	
558	10	161	25	493	
568	10	161	26	440	
593	10	161	27	287	
603	10	161	35	208	
602	10	161	36	398	
637	10	178	1	107	
638	10	178	2	286	
674	10	178	11	446	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
672	10	178	12	486	
631	10	179	1	0	
632	10	179	2	0	
633	10	179	3	0	
634	10	179	4	319	
635	10	179	5	520	
636	10	179	6	631	
673	10	179	7	460	
671	10	179	8	121	
670	10	179	9	334	
669	10	179	10	0	
668	10	179	11	0	
667	10	179	12	0	8,544
196	11	139	3	206	
187	11	139	4	529	
186	11	139	5	240	
219	11	139	7	275	
205	11	139	8	206	
202	11	139	9	199	
199	11	139	10	397	
217	11	139	11	170	
222	11	139	12	327	
230	11	139	13	78	
231	11	139	14	88	
232	11	139	15	154	
233	11	139	16	212	
234	11	139	17	520	
269	11	139	20	198	
268	11	139	21	149	
267	11	139	22	67	
266	11	139	23	80	
265	11	139	24	10	
307	11	139	25	71	
306	11	139	26	23	
308	11	139	27	63	
255	11	140	17	322	
252	11	140	18	214	
264	11	140	19	123	
262	11	140	20	193	
281	11	140	21	110	
304	11	140	29	81	
305	11	140	30	60	5,365
550	12	162	19	97	
574	12	162	30	133	
616	12	162	31	452	
481	12	163	7	3	
475	12	163	8	15	
468	12	163	9	250	

Table B-2 | Grid cells within or touched by each Theissen polygon | Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
465	12	163	10	117	
461	12	163	11	71	
460	12	163	12	65	
497	12	163	13	39	
499	12	163	14	11	
498	12	163	15	135	
504	12	163	16	186	
502	12	163	17	125	
503	12	163	18	192	
541	12	163	19	523	
540	12	163	20	296	
539	12	163	21	129	
538	12	163	22	16	
537	12	163	23	8	
536	12	163	24	97	
575	12	163	25	206	
576	12	163	26	131	
577	12	163	27	174	
579	12	163	28	257	
578	12	163	29	561	
580	12	163	30	617	
622	12	163	31	650	
620	12	163	32	624	
621	12	163	33	556	
619	12	163	34	528	
618	12	163	35	527	
617	12	163	36	426	
517	12	164	13	615	
557	12	164	23	620	
542	12	164	24	561	
581	12	164	25	647	
585	12	164	26	637	
600	12	164	27	0	
630	12	164	33	0	
628	12	164	34	0	
627	12	164	35	0	
623	12	164	36	654	
661	12	175	1	318	
662	12	175	2	0	
665	12	175	3	0	
664	12	175	4	0	
666	12	175	5	0	
702	12	175	7	0	
698	12	175	8	0	
697	12	175	9	0	
696	12	175	10	0	
695	12	175	11	0	
694	12	175	12	0	

Table B-2 | Grid cells within or touched by each Theissen polygon | Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
739	12	175	13	0	
740	12	175	14	0	
742	12	175	15	0	
741	12	175	16	0	
743	12	175	17	0	
744	12	175	18	0	
778	12	175	19	0	
779	12	175	20	0	
776	12	175	21	0	
777	12	175	22	0	
774	12	175	23	0	
775	12	175	24	0	
811	12	175	25	0	
810	12	175	26	0	
809	12	175	27	0	
808	12	175	28	0	
812	12	175	29	0	
813	12	175	30	0	
847	12	175	31	0	
846	12	175	32	0	
845	12	175	33	0	
844	12	175	34	0	
842	12	175	35	0	
843	12	175	36	0	
653	12	176	1	587	
654	12	176	2	615	
655	12	176	3	618	
656	12	176	4	645	
657	12	176	5	641	
658	12	176	6	650	
693	12	176	7	679	
692	12	176	8	382	
691	12	176	9	648	
690	12	176	10	609	
689	12	176	11	497	
688	12	176	12	611	
732	12	176	13	523	
733	12	176	14	568	
734	12	176	15	541	
735	12	176	16	501	
736	12	176	17	563	
738	12	176	18	643	
773	12	176	19	585	
772	12	176	20	585	
771	12	176	21	573	
770	12	176	22	244	
769	12	176	23	433	
768	12	176	24	483	

Table B-2 | Grid cells within or touched by each Theissen polygon | Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
801	12	176	25	543	
802	12	176	26	634	
803	12	176	27	604	
805	12	176	28	626	
806	12	176	29	612	
807	12	176	30	320	
841	12	176	31	0	
840	12	176	32	0	
839	12	176	33	0	
838	12	176	34	601	
836	12	176	35	461	
835	12	176	36	626	
652	12	177	6	360	
687	12	177	7	456	
731	12	177	18	549	
767	12	177	19	600	
800	12	177	30	613	
834	12	177	31	637	
868	12	191	6	633	
888	12	191	7	0	34,568
297	13	138	20	46	
294	13	138	21	47	
293	13	138	22	87	
292	13	138	23	42	
291	13	138	24	16	
314	13	138	25	0	
315	13	138	26	13	
317	13	138	27	92	
318	13	138	28	216	
319	13	138	29	175	
359	13	138	30	68	
363	13	138	31	169	
360	13	138	32	197	
358	13	138	33	11	
357	13	138	34	0	
355	13	138	35	9	
354	13	138	36	8	
399	13	163	1	33	
400	13	163	2	85	
401	13	163	3	115	
402	13	163	4	130	
403	13	163	5	45	
430	13	163	6	52	
448	13	163	7	3	
449	13	163	8	15	
451	13	163	9	250	
447	13	163	10	117	
446	13	163	11	71	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates

Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
445	13	163	12	65	2,177
592	14	161	27	287	
591	14	161	28	141	
590	14	161	29	51	
589	14	161	30	36	
607	14	161	31	190	
610	14	161	32	107	
605	14	161	33	116	
604	14	161	34	495	
609	14	161	35	208	
594	14	162	25	26	
645	14	162	35	358	
606	14	162	36	125	
642	14	177	1	151	
646	14	177	2	169	
699	14	177	10	163	
677	14	177	11	123	
680	14	177	12	111	
723	14	177	13	29	
726	14	177	14	373	
725	14	177	15	87	
746	14	177	16	273	
766	14	177	21	276	
761	14	177	22	198	
762	14	177	23	199	
760	14	177	24	318	
793	14	177	25	352	
794	14	177	26	386	
795	14	177	27	312	
798	14	177	28	398	
804	14	177	29	509	
848	14	177	31	637	
831	14	177	32	542	
830	14	177	33	384	
829	14	177	34	610	
828	14	177	35	502	
827	14	177	36	360	
639	14	178	2	286	
640	14	178	3	213	
641	14	178	4	172	
644	14	178	5	50	
643	14	178	6	84	
681	14	178	7	5	
683	14	178	8	12	
678	14	178	9	64	
676	14	178	10	100	
675	14	178	11	446	
719	14	178	14	284	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
720	14	178	15	339	
721	14	178	16	290	
724	14	178	17	19	
722	14	178	18	18	
758	14	178	19	145	
759	14	178	20	103	
757	14	178	21	223	
756	14	178	22	502	
789	14	178	27	623	
790	14	178	28	471	
792	14	178	29	107	
791	14	178	30	351	
826	14	178	31	318	
825	14	178	32	605	
824	14	178	33	636	
823	14	178	34	0	
859	14	190	4	0	
860	14	190	5	605	
861	14	190	6	262	
881	14	190	7	290	
880	14	190	8	595	
879	14	190	9	0	
901	14	190	17	287	
903	14	190	18	634	
920	14	190	19	333	
922	14	190	20	35	
939	14	190	29	0	
940	14	190	30	0	
960	14	190	31	0	
862	14	191	1	303	
863	14	191	2	179	
864	14	191	3	459	
865	14	191	4	555	
866	14	191	5	537	
867	14	191	6	633	
887	14	191	7	0	
886	14	191	8	510	
884	14	191	9	546	
885	14	191	10	588	
883	14	191	11	608	
882	14	191	12	275	
902	14	191	13	648	
904	14	191	14	651	
906	14	191	15	634	
905	14	191	16	631	
907	14	191	17	530	
908	14	191	18	0	
927	14	191	19	0	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates

Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
926	14	191	20	593	
924	14	191	21	644	
925	14	191	22	621	
923	14	191	23	629	
919	14	191	24	675	
943	14	191	25	0	
942	14	191	26	0	
941	14	191	27	0	
944	14	191	28	0	
946	14	191	29	0	
945	14	191	30	0	
966	14	191	31	0	
965	14	191	32	0	
963	14	191	33	0	
964	14	191	34	0	
962	14	191	35	0	
961	14	191	36	0	30,558
377	15	139	34	58	
372	15	139	35	25	
413	15	162	1	37	
392	15	162	2	11	
393	15	162	3	5	
439	15	162	10	34	
438	15	162	11	15	
437	15	162	12	16	
488	15	162	13	74	
489	15	162	14	8	
490	15	162	15	86	369
333	16	139	25	71	
336	16	139	26	23	
345	16	139	35	25	
346	16	139	36	50	
328	16	140	29	81	
332	16	140	30	60	
344	16	140	31	56	
390	16	162	1	37	
391	16	162	2	11	414
14	17	124	6	315	
39	17	124	7	645	
64	17	124	18	647	
90	17	124	19	632	
104	17	124	20	646	
121	17	124	29	471	
120	17	124	30	608	
149	17	124	31	288	
148	17	124	32	239	
15	17	125	1	286	
16	17	125	2	613	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
17	17	125	3	596	
18	17	125	4	308	
19	17	125	5	496	
20	17	125	6	603	
45	17	125	7	610	
44	17	125	8	301	
43	17	125	9	516	
41	17	125	10	598	
42	17	125	11	518	
40	17	125	12	527	
63	17	125	13	504	
70	17	125	14	341	
71	17	125	15	259	
67	17	125	16	237	
66	17	125	17	505	
68	17	125	18	623	
94	17	125	19	593	
92	17	125	20	565	
93	17	125	21	321	
97	17	125	22	220	
96	17	125	23	278	
89	17	125	24	448	
119	17	125	25	258	
125	17	125	26	282	
118	17	125	27	157	
117	17	125	28	398	
122	17	125	29	297	
123	17	125	30	412	
151	17	125	31	518	
147	17	125	32	286	
146	17	125	33	93	
141	17	125	34	101	
142	17	125	35	108	
150	17	125	36	39	
21	17	126	1	533	
22	17	126	2	525	
23	17	126	3	573	
24	17	126	4	0	
25	17	126	5	0	
26	17	126	6	0	
51	17	126	7	0	
50	17	126	8	0	
49	17	126	9	0	
47	17	126	10	289	
48	17	126	11	0	
46	17	126	12	667	
69	17	126	13	661	
72	17	126	14	0	

Table B-2

Grid cells within or touched by each Theissen polygon
Wind station number = Theissen polygon number

Includes duplicates

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
74	17	126	15	0	
73	17	126	16	0	
75	17	126	17	0	
76	17	126	18	0	
102	17	126	19	0	
101	17	126	20	0	
99	17	126	21	0	
100	17	126	22	0	
98	17	126	23	0	
95	17	126	24	649	
124	17	126	25	564	
126	17	126	26	0	
127	17	126	27	0	
128	17	126	28	0	
129	17	126	29	0	
155	17	126	33	0	
154	17	126	34	0	
153	17	126	35	0	
152	17	126	36	529	
179	17	137	1	673	
180	17	137	2	0	
181	17	137	3	0	
213	17	137	11	0	
210	17	137	12	529	
244	17	137	13	51	
178	17	138	1	100	
171	17	138	2	175	
170	17	138	3	141	
173	17	138	4	187	
172	17	138	5	506	
177	17	138	6	405	
207	17	138	7	260	
200	17	138	8	184	
201	17	138	9	147	
203	17	138	10	160	
204	17	138	11	23	
209	17	138	12	71	
242	17	138	13	116	
238	17	138	14	52	
237	17	138	15	171	
241	17	138	16	63	
240	17	138	17	3	
243	17	138	18	5	
282	17	138	19	96	
280	17	138	20	46	
278	17	138	21	47	
272	17	138	22	87	
273	17	138	23	42	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
274	17	138	24	16	
175	17	139	5	240	
176	17	139	6	107	
208	17	139	7	275	
206	17	139	8	206	
239	17	139	18	369	
275	17	139	19	109	28,958
77	18	126	18	0	
103	18	126	19	0	
105	18	126	20	0	
132	18	126	28	0	
130	18	126	29	0	
131	18	126	30	0	
158	18	126	31	0	
157	18	126	32	0	
156	18	126	33	0	
159	18	126	34	0	
188	18	137	2	0	
182	18	137	3	0	
183	18	137	4	0	
184	18	137	5	0	
185	18	137	6	0	
214	18	137	7	0	
215	18	137	8	0	
216	18	137	9	0	
211	18	137	10	0	
212	18	137	11	0	
218	18	137	12	529	
245	18	137	13	51	
246	18	137	14	570	
248	18	137	15	335	
249	18	137	16	0	
251	18	137	17	0	
250	18	137	18	0	
290	18	137	19	0	
289	18	137	20	477	
288	18	137	21	632	
287	18	137	22	654	
286	18	137	23	435	
285	18	137	24	18	
320	18	137	25	36	
323	18	137	26	490	
324	18	137	27	653	
325	18	137	28	629	
327	18	137	29	638	
329	18	137	30	0	
369	18	137	31	0	
368	18	137	32	0	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
367	18	137	33	684	
366	18	137	34	682	
364	18	137	35	590	
361	18	137	36	162	
254	18	138	18	5	
284	18	138	19	96	
295	18	138	20	46	
322	18	138	29	175	
321	18	138	30	68	
362	18	138	31	169	
405	18	163	5	45	
406	18	163	6	52	
450	18	163	7	3	
505	18	163	18	192	
407	18	164	1	567	
409	18	164	2	543	
410	18	164	3	62	
412	18	164	4	0	
414	18	164	5	0	
415	18	164	6	0	
459	18	164	7	0	
457	18	164	8	0	
456	18	164	9	0	
455	18	164	10	0	
454	18	164	11	425	
453	18	164	12	211	
506	18	164	13	615	
501	18	164	14	700	
500	18	164	15	0	
507	18	164	16	0	
508	18	164	17	0	
509	18	164	18	0	
548	18	164	19	0	
543	18	164	20	0	
544	18	164	21	0	
545	18	164	22	0	
546	18	164	23	620	
547	18	164	24	561	
586	18	164	26	637	
587	18	164	27	0	
584	18	164	28	0	
583	18	164	29	0	
588	18	164	30	0	
624	18	164	31	0	
625	18	164	32	0	
626	18	164	33	0	
629	18	164	34	0	
663	18	175	4	0	

Table B-2 Grid cells within or touched by each Theissen polygon Includes duplicates
Wind station number = Theissen polygon number

Record Id#	wind station number	BOOK	SECTION	vacant area (acres)	total vacant area (acres)
660	18	175	5	0	
659	18	175	6	0	
701	18	175	7	0	
700	18	175	8	0	
745	18	175	18	0	14,057

Total area, including duplicate sections 183,345 183,345

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
1	226	139	22	67		
1	227	139	21	149		
1	248	139	26	23		
1	250	139	27	63		
1	251	139	28	59		
1	272	139	35	25		
1	274	139	34	58		
1	275	139	33	191	635	318
2	195	140	14	350		
2	196	140	15	284		
2	219	140	21	110		
2	220	140	22	87		
2	221	140	20	193		
2	246	140	29	81		
2	270	140	32	22		
2	297	161	3	135		
2	298	161	2	258		
2	300	161	5	44		
2	328	161	10	169		
2	329	161	9	45		
2	330	161	8	68	1846	923
3	184	139	8	206		
3	186	139	7	275		
3	204	139	17	520		
3	205	139	18	369		
3	227	139	21	149		
3	228	139	20	198		
3	229	139	19	109		
3	232	138	24	16		
3	251	139	28	59		
3	274	139	34	58		
3	275	139	33	191		
3	278	138	36	8		
3	304	162	3	5		
3	308	163	1	33		
3	334	162	10	34		
3	335	162	8	8		
3	336	162	9	76		
3	337	162	7	11		
3	338	163	12	65	2390	1195
4	13	124	6	315		
4	37	124	7	645		
4	62	124	18	647		
4	84	124	20	646		
4	86	124	19	632		
4	106	124	29	471		
4	134	124	32	239		
4	154	139	3	206		
4	155	139	4	529		
4	160	139	5	240		
4	176	139	12	327		

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station #	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
4	177	139	11	170		
4	178	139	10	397		
4	195	140	14	350		
4	196	140	15	284		
4	198	140	17	322		
4	199	140	18	214		
4	200	139	13	78		
4	219	140	21	110		
4	220	140	22	87		
4	221	140	20	193	7102	3551
5	503	179	9	334		
5	504	179	8	121		
5	505	178	12	486		
5	506	179	7	460		
5	507	178	11	446		
5	537	178	14	284		
5	538	178	15	339		
5	568	178	22	502		
5	598	178	27	623		
5	629	178	33	636		
5	678	190	8	595		
5	696	190	17	287		
5	716	190	20	35	5148	2574
6	246	140	29	81		
6	270	140	32	22		
6	271	140	31	56		
6	300	161	5	44		
6	301	161	6	6		
6	302	162	1	37		
6	330	161	8	68		
6	332	162	12	16		
6	360	161	17	34		
6	362	162	13	74		
6	390	161	20	11		
6	392	162	24	39		
6	420	161	29	51		
6	421	161	30	36		
6	424	162	25	26	601	301
7	246	140	29	81		
7	247	140	30	60		
7	270	140	32	22		
7	271	140	31	56		
7	273	139	36	50		
7	301	161	6	6		
7	302	162	1	37		
7	303	162	2	11		
7	332	162	12	16	339	170
8	297	161	3	135		
8	298	161	2	258		
8	328	161	10	169		
8	329	161	9	45		

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
8	330	161	8	68		
8	360	161	17	34		
8	390	161	20	11		
8	416	161	25	493		
8	417	161	26	440		
8	418	161	27	287		
8	419	161	28	141		
8	420	161	29	51		
8	421	161	30	36	2168	1084
9	334	162	10	34		
9	335	162	8	8		
9	336	162	9	76		
9	337	162	7	11		
9	338	163	12	65		
9	362	162	13	74		
9	363	162	14	8		
9	364	162	15	86		
9	368	163	13	39		
9	392	162	24	39		
9	396	162	19	97		
9	398	163	24	97		
9	424	162	25	26		
9	427	162	30	133		
9	450	162	36	125		
9	453	162	35	358		
9	456	162	31	452		
9	483	177	2	169		
9	486	177	6	360		
9	509	177	11	123		
9	513	177	10	163		
9	516	177	7	456		
9	543	177	15	87		
9	545	177	16	273		
9	546	177	18	549		
9	575	177	21	276		
9	577	177	19	600		
9	605	177	29	509		
9	606	177	28	398		
9	607	177	30	613		
9	636	177	32	542		
9	637	177	31	637	7483	3742
10	416	161	25	493		
10	417	161	26	440		
10	418	161	27	287		
10	447	161	35	208		
10	477	178	2	286		
10	503	179	9	334		
10	504	179	8	121		
10	505	178	12	486		
10	506	179	7	460		
10	507	178	11	446	3561	1781

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
11	154	139	3	206		
11	155	139	4	529		
11	160	139	5	240		
11	176	139	12	327		
11	177	139	11	170		
11	178	139	10	397		
11	184	139	8	206		
11	186	139	7	275		
11	198	140	17	322		
11	199	140	18	214		
11	200	139	13	78		
11	204	139	17	520		
11	219	140	21	110		
11	221	140	20	193		
11	226	139	22	67		
11	227	139	21	149		
11	228	139	20	198		
11	246	140	29	81		
11	247	140	30	60		
11	248	139	26	23		
11	249	139	25	71		
11	250	139	27	63	4499	2250
12	338	163	12	65		
12	339	163	11	71		
12	340	163	10	117		
12	341	163	7	3		
12	342	163	8	15		
12	343	163	9	250		
12	368	163	13	39		
12	374	163	18	192		
12	376	164	13	615		
12	396	162	19	97		
12	398	163	24	97		
12	404	164	24	561		
12	408	164	23	620		
12	427	162	30	133		
12	437	164	26	637		
12	456	162	31	452		
12	486	177	6	360		
12	516	177	7	456		
12	546	177	18	549		
12	577	177	19	600		
12	607	177	30	613		
12	637	177	31	637		
12	667	191	6	633	7812	3906
13	230	138	22	87		
13	231	138	23	42		
13	232	138	24	16		
13	233	138	21	47		
13	234	138	20	46		
13	258	138	29	175		

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station #	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
13	260	138	30	68		
13	278	138	36	8		
13	284	138	31	169		
13	308	163	1	33		
13	312	163	5	45		
13	313	163	6	52		
13	338	163	12	65		
13	339	163	11	71		
13	340	163	10	117		
13	341	163	7	3		
13	342	163	8	15		
13	343	163	9	250	1309	655
14	418	161	27	287		
14	419	161	28	141		
14	420	161	29	51		
14	421	161	30	36		
14	424	162	25	26		
14	447	161	35	208		
14	450	162	36	125		
14	453	162	35	358		
14	477	178	2	286		
14	483	177	2	169		
14	507	178	11	446		
14	509	177	11	123		
14	513	177	10	163		
14	537	178	14	284		
14	538	178	15	339		
14	543	177	15	87		
14	545	177	16	273		
14	568	178	22	502		
14	575	177	21	276		
14	598	178	27	623		
14	605	177	29	509		
14	606	177	28	398		
14	629	178	33	636		
14	636	177	32	542		
14	637	177	31	637		
14	667	191	6	633		
14	678	190	8	595		
14	696	190	17	287		
14	716	190	20	35	9075	4538
15	272	139	35	25		
15	274	139	34	58		
15	302	162	1	37		
15	303	162	2	11		
15	304	162	3	5		

Duplicate grid cells in each Theissen polygon (wind station) - based on study area# assigned to more than one Theissen polygon (wind station)

Table B-3

wind station	STUDYAREA# (unique)	BOOK	SECTION	vacant area (acres)	total duplicate area	correction
15	332	162	12	16		
15	334	162	10	34		
15	362	162	13	74		
15	363	162	14	8		
15	364	162	15	86	354	177
16	246	140	29	81		
16	247	140	30	60		
16	248	139	26	23		
16	249	139	25	71		
16	271	140	31	56		
16	272	139	35	25		
16	273	139	36	50		
16	302	162	1	37		
16	303	162	2	11	414	207
17	13	124	6	315		
17	37	124	7	645		
17	62	124	18	647		
17	84	124	20	646		
17	86	124	19	632		
17	106	124	29	471		
17	134	124	32	239		
17	160	139	5	240		
17	184	139	8	206		
17	186	139	7	275		
17	188	137	12	529		
17	205	139	18	369		
17	211	138	18	5		
17	212	137	13	51		
17	229	139	19	109		
17	230	138	22	87		
17	231	138	23	42		
17	232	138	24	16		
17	233	138	21	47		
17	234	138	20	46		
17	235	138	19	96	5713	2857
18	188	137	12	529		
18	211	138	18	5		
18	212	137	13	51		
18	234	138	20	46		
18	235	138	19	96		
18	258	138	29	175		
18	260	138	30	68		
18	284	138	31	169		
18	312	163	5	45		
18	313	163	6	52		
18	341	163	7	3		
18	374	163	18	192		
18	376	164	13	615		
18	404	164	24	561		
18	408	164	23	620		
18	437	164	26	637	3864	1932

Table B-4

Field sampling summary

	General comments
	Following the proposed Clark County rule section 41.7.2.2, the
	Ball drop -> % nonerodible -> TFV test sequence is heirarchical.
	A 999 code indicates that a test was not needed and not performed
	because of an earlier result in the heirarchy.
	In some cases, the tests were performed even when not needed.
Ball drop	If Ball drop = pass (P), then a visible crust is present, the site is stable (0) and %non-erodible, TFV
	tests are not needed and usually not performed
Flat veg	If Ball drop = fail (F), then do count of % flat vegetation & non-erodible elements, per section 41.9.5
	page 41-15. This method counts both flat vegetation and other non-erodible elements
	If % flat + non-erodible > 50% then site is stable, and TFV test is not
	usually performed
	If % non-erodible <= 50%, then do TFV test by sieving to determine
	mode of soil particle size distribution & compute TFV in cm/sec
TFV	The TFV test is carried out per section 41.9.4.1, pp 41-12 and 41-13,
	If sieve analysis test shows TFV > 100 cm/sec, then site is stable
	If sieve analysis test shows TFV <= 100 cm/sec, then
	run Rock Test
Rock Test	Rock Test Method
	The method used by UNLV does not conform to 41.9.7 Rock Test
	Method in proposed Clark County rule 41. UNLV attempted to
	develop a faster, more quantitative procedure than 41.9.7
	UNLV sampled all rocks to depth of 1 cm from a random cast
	of the 1 square foot quadrat
	Rocks were poured into a 1 cm sieve, and rocks not passing
	1 cm sieve were poured into a cake pan, and shaken into
	a single layer in one corner to determine areal coverage of
	rock elements. Dimensions of rock layer were measured with
	a ruler, and the area calculated, then divided by two to compute
	frontal area of the rocks. The frontal area was then divided by the area sampled
	by the dust pan (generally 1 square foot) to get the % area.
	If % rock frontal area exceeds 10% then site is stable.
adjust TFV	If rock frontal area is less than 10%, then adjust TFV using
	the percent frontal area result per 41.9.4.1 Table 2
	If adjusted TFV > 100 cm/sec, site is stable
	If adjusted TFV < 100 cm/sec, site is unstable

Table B-4

Field sampling summary

BOOK #	LOCATION	TOWNSHIP	RANGE	SECTION	AREA (ft^2)	BALL DROP (P/F)	% FLAT VEG+NONEROD	TFV (cm/s)	UNSTABLE (yes=1, no=0)
140	Bonanza Rd/Fogg	20 S	62 E	34	67,500	F	60.6	76.7	0
140	Spanish Dr./Clayton (East End)	20 S	62 E	34	186,000	F	37	30	1
140	Spanish Dr./Clayton (West End)	20 S	62 E	34	225,000	F	14.5	30	1
140	Stewart Ave/Fogg	20 S	62 E	34	41,250	F	25.6	76.7	0
140	Mabel/Fogg (A)	20 S	62 E	34	240,625	F	49.3	30	1
140	Mabel/Fogg (B)	20 S	62 E	34	68,750	F	23	30	1
140	Mabel/Fogg (C)	20 S	62 E	34	151,250	F	17.5	53.3	0
140	Mabel/Fogg (D)	20 S	62 E	34	89,375	N/A	27	999	1
140	Mabel/Beesley	20 S	62 E	34	60,000	F	46.3	30	1
140	Sunrise Mt. Drive	20 S	62 E	34	250,000	P	23	999	0
164	Havenwood/Town Center Dr.(SW)	21 S	59 E	12		F	86	999	0
164	Havenwood Development (cons)	21 S	59 E	12		N/A	76	999	0
164	Town Cntr btwn. Havenwood Desert Primrose Ln	21 S	59 E	12		F	55.5	999	0
164	Havenwood/Town Center Dr. (SE)	21 S	59 E	12		F	78.5	999	0
162	McLeod/McCong	21 S	61 E	25		P	999	999	0
162	McCong/Harrison	21 S	61 E	25		F	30.7	116.1	0
162	Reno/Harrison	21 S	61 E	25		F	40	117.9	0
162	West of Oak off of Russell	21 S	61 E	25		F	53	999	0
162	Shamrock/Pecos	21 S	61 E	25		F	16.5	60	0
162	I-15/Post Rd.	21 S	61 E	32	360,000	F	42.3	159	0
162	Russell Rd./Polaris	21 S	61 E	32	1,125,000	P	60	999	0
162	West Sunset/Polaris	21 S	61 E	32	174,000	P	999	999	0
162	West Sunset/Crystal*	21 S	61 E	32	195,000	N/A	999	999	N/R
162	Russell Rd btwn. I-15 and LV Blvd	21 S	61 E	32	6,600,000	N/A	999	999	N/R
162	West Sunset btwn. LV Blvd and Windy Rd.	21 S	61 E	32	350,000	N/A	999	999	N/R
162	Post/Crystal	21 S	61 E	32	195,000	P	999	999	0
177	Las Vegas Blvd./Warm Springs Rd.	22 S	61 E	8	8,820,000	F	55.5	999	0
177	Blue Diamond Rd/Industrial	22 S	61 E	8	750,000	F	51.3	999	0
177	Valley View/Eldorado	22 S	61 E	8	445,500	F	49.5	999	0
177	Windmill/LV Blvd *	22 S	61 E	8	2,310,000	N/A	999	999	N/R
161	Galleria Dr./Russell Rd	21 S	62 E	33	285,000	P	999	999	0
161	Patrick Ln/Galleria Dr. (A)	21 S	62 E	33	307,500	F	18.3	117.99	0
161	Patrick Ln/Galleria Dr. (B)	21 S	62 E	33	343,313	P	999	999	0
161	Russell off of US 95 Hwy. (C)	21 S	62 E	33	680,000	F	63.5	999	0
161	Russell off of US 95 Hwy. (D)	21 S	62 E	33	840,000	F	49	62.67	0
161	Patrick Ln./Stephanie	21 S	62 E	33	38,063	F	50.6	999	0
162	Pecos/Oquendo	21 S	61 E	36	37,500	P	999	999	0
162	McCleod/Harrison	21 S	61 E	36	136,250	P	999	999	0
162	McCleod/Post	21 S	61 E	36	265,000	N/A	999	999	999
162	Patrick Ln./Oquendo	21 S	61 E	36	877,500	P	999	999	0
162	Patrick Ln off of Eastern	21 S	61 E	36	384,688	P	999	999	0
139	Walnut/Craig Rd. (1)	20 S	61 E	1		P	999	999	0
139	Washburn/Pecos	20 S	61 E	1		P	999	999	0
139	Walnut/Craig Rd. (2)	20 S	61 E	1		P	999	999	0
139	Craig Rd/Statz	20 S	61 E	1		P	999	999	0
170	Lake Mead/Mohave (South Lot)	22 S	63 E	5		F	76	999	0
170	Lake Mead/Mohave (North Lot)	22 S	63 E	5		F	74	999	0
162	Decatur/Beltway(1)	21 S	61 E	31		P	999	999	0
162	Decatur/Beltway (2)	21 S	61 E	31		P	999	999	0
162	Decatur/Sunset (A)	21 S	61 E	31	709,938	P	999	999	0
162	Decatur/Sunset (B)	21 S	61 E	31		P	999	999	0
162	Arville/Sunset (A)	21 S	61 E	31	338,000	F	53.5	999	0
162	Arville/Sunset (B)	21 S	61 E	31		P	999	999	0
162	Hinson/Industrial Park	21 S	61 E	31		P	999	999	0
124	Willus/Ann	19 S	61 E	30		F	50.3	999	0

Table B-4

Field sampling summary

BOOK #	LOCATION	TOWNSHIP	RANGE	SECTION	AREA (ft^2)	BALL DROP (P/F)	% FLAT VEG+NONEROD	TFV (cm/s)	UNSTABLE (yes=1, no=0)
124	Decatur/Ranch House	19 S	61 E	30		P	999	999	0
124	Decatur/Centennial Pkwy	19 S	61 E	30		N/A	55.7	999	0
124	Willus/Ranch House	19 S	61 E	30		P	999	999	0
124	Willus/Ranch House (C)	19 S	61 E	30		N/A	53.3	999	0
125	Grand Canyon/Bath (A)	19 S	60 E	19		P	102	999	0
138	Fort Apache/Lone Mountain	20 S	60 E	5		P	84	999	0
138	Bonita Vista/Stange	20 S	60 E	5		P	70	999	0
140	Cheyenne/Lamb	20 S	62 E	17		P	999	999	0
140	Alto/Nellis	20 S	62 E	17		P	999	999	0
140	Lamont/Carey	20 S	62 E	17		P	999	999	0
140	Lamb/Carey	20 S	62 E	17		P	999	999	0
139	Lone Mountain/Clayton	20 S	61 E	5		P	999	999	0
139	Craig/Ruselier	20 S	61 E	5		P	999	999	0
139	Simmons/Lone Mountain	20 S	61 E	5		P	999	999	0

Table B-4

Field sampling summary

BOOK #	LOCATION	PHOTO VEG Cover (%)	VISUAL (yes=1, no=0)	Notes
140	Bonanza Rd/Fogg	5.7		
140	Spanish Dr./Clayton (East End)	5.7		
140	Spanish Dr./Clayton (West End)	5.7		
140	Stewart Ave/Fogg	5.7		
140	Mabel/Fogg (A)	5.7		
140	Mabel/Fogg (B)	5.7		
140	Mabel/Fogg (C)	5.7		
140	Mabel/Fogg (D)	5.7		N/A = ball drop test difficult to interpret
140	Mabel/Beesley	5.7		
140	Sunrise Mt. Drive	5.7		
164	Havenwood/Town Center Dr.(SW)	1.1		
164	Havenwood Development (cons)	1.1		N/A = ball drop test difficult to interpret
164	Town Cntr btwn. Havenwood Desert Primrose Ln	1.1		
164	Havenwood/Town Center Dr. (SE)	1.1		
162	McLeod/McCong	23.8		
162	McCong/Harrison	23.8		
162	Reno/Harrison	23.8		
162	West of Oak off of Russell	23.8		
162	Shamrock/Pecos	23.8		
162	I-15/Post Rd.	3.4		
162	Russell Rd./Polaris	3.4		
162	West Sunset/Polaris	3.4		Completely Bladed/Active Construction
162	West Sunset/Crystal*	3.4	0	
162	Russell Rd btwn. I-15 and LV Blvd	3.4		Active Construction/Completely Bladed/No Access/Area Approximated
162	West Sunset btwn. LV Blvd and Windy Rd.	999	0	Area approximated/Gravel Lot/Visual Pass
162	Post/Crystal	3.4		
177	Las Vegas Blvd./Warm Springs Rd.			Small portion of Area Sampled/Total Area Uniform
177	Blue Diamond Rd/Industrial			
177	Valley View/Eldorado			Small Area Sampled/Total Area Uniform
177	Windmill/LV Blvd *		0	Total Area Uniform/Visual Pass
161	Galleria Dr./Russell Rd	5.6		Small Area Sampled/Total Area Uniform
161	Patrick Ln/Galleria Dr. (A)	5.6		Dumping found in small areas
161	Patrick Ln/Galleria Dr. (B)	5.6		
161	Russell off of US 95 Hwy. (C)	5.6		
161	Russell off of US 95 Hwy. (D)	5.6		
161	Patrick Ln./Stephanie	5.6		Large portion of area covered by dumping
162	Pecos/Oquendo	16.2		
162	McCleod/Harrison	16.2		Active dumping taking place in small section of area
162	McCleod/Post	16.2	0	Highly vegetative area-visual pass
162	Patrick Ln./Oquendo	16.2		
162	Patrick Ln off of Eastern	16.2		
139	Walnut/Craig Rd. (1)			
139	Washburn/Pecos			
139	Walnut/Craig Rd. (2)			
139	Craig Rd/Statz			
170	Lake Mead/Mohave (South Lot)			
170	Lake Mead/Mohave (North Lot)			
162	Decatur/Beltway(1)	28.9		

Table B-4

Field sampling summary

BOOK #	LOCATION	PHOTO VEG Cover (%)	VISUAL (yes=1, no=0)	Notes
162	Decatur/Beltway (2)	28.9		
162	Decatur/Sunset (A)	28.9		
162	Decatur/Sunset (B)	28.9		
162	Arville/Sunset (A)	28.9		
162	Arville/Sunset (B)	28.9		
162	Hinson/Industrial Park	28.9		
124	Willus/Ann			
124	Decatur/Ranch House			
124	Decatur/Centennial Pkwy			
124	Willus/Ranch House			
124	Willus/Ranch House (C)			
125	Grand Canyon/Bath (A)			
138	Fort Apache/Lone Mountain			
138	Bonita Vista/Stange			
140	Cheyenne/Lamb			
140	Alto/Nellis			
140	Lamont/Carey			
140	Lamb/Carey			
139	Lone Mountain/Clayton			
139	Craig/Ruselier			
139	Simmons/Lone Mountain			

Table B-5

Orthophotos examined manually for vegetative coverage				
book	township, S	range, E	section	percent coverage
139	20	61	33	3.9
139	20	61	34	1.7
140	20	62	33	1.7
140	20	62	34	5.7
140	20	62	35	1.3
160	21	63	33	9.8
161	21	62	10	12.7
161	21	62	16	41.4
161	21	62	23	26.6
161	21	62	26	39.6
161	21	62	27	12.8
161	21	62	31	11.1
161	21	62	32	11.6
161	21	62	33	5.6
161	21	62	34	4.5
161	21	62	35	9.0
161	21	62	36	30.1
162	21	61	3	10.5
162	21	61	7	21.6
162	21	61	8	9.2
162	21	61	10	51.2
162	21	61	15	5.6
162	21	61	21	7.8
162	21	61	23	12.0
162	21	61	25	23.8
162	21	61	26	7.0
162	21	61	27	5.9
162	21	61	29	17.5
162	21	61	30	4.6
162	21	61	31	28.9
162	21	61	32	3.4
162	21	61	33	1.2
162	21	61	34	1.7
162	21	61	35	1.8
162	21	61	36	16.2
163	21	60	3	0.0
163	21	60	4	0.2
163	21	60	9	1.0
163	21	60	17	0.0
163	21	60	18	0.0
163	21	60	20	0.0
163	21	60	21	0.8
163	21	60	25	0.9
163	21	60	28	23.1
164	21	59	11	3.8
164	21	59	12	1.1
164	21	59	30	NA
176	22	60	10	1.3
176	22	60	11	1.5

Table B-5

Orthophotos examined manually for vegetative coverage				
book	township, S	range, E	section	percent coverage
176	22	60	27	1.4
178	22	62	32	0.3
178	22	62	33	NA
179	22	63	5	4.3
179	22	63	6	7.3
minimum				0.0
arith mean				9.73
standard dev				11.78
maximum				51.20
geom mean - 1 std dev				0.95
geom mean				4.64
geom mean + 1 std dev				22.66
number of sections exceeding 20% coverage				9
number of sections analyzed				52