

Appendix B

Clark County, Nevada

High-Wind Natural Event Justification Packages

- 1. April 28, 2004**
- 2. May 11, 2004**

Appendix B

Clark County, Nevada

High-Wind Natural Event Justification Packages

1. April 28, 2004



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901**

RECEIVED
CC-DAQM

2004 AUG 23 A 11: 22

August 13, 2004

Ms. Christine Robinson, Director
Clark County Department of Air Quality
P.O. Box 551776
Las Vegas, NV 89155-1776

Re: April 28, 2004 High Wind PM10 Natural Event

Dear Ms. Robinson:

I have received and reviewed your agency's request, dated July 20, 2004, to flag one PM10 National Ambient Air Quality Standard (NAAQS) exceedance as a high wind event. The exceedance occurred on April 28, 2004 at the East Craig monitoring site.

The documentation you provided to support the flagging of this exceedance appears complete and comprehensive. We concur with your decision to flag these data as high wind natural events. I will instruct our AQS database manager, Jim Forrest, to add the appropriate flag to this exceedance day.

Please remember that Clark County Department of Air Quality will need to develop and implement a Natural Events Action Plan (NEAP) as required by EPA's Natural Events Policy ("Areas Affected by PM-10 Natural Events", Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation to Regional Air Division Directors, May 30, 1996).

If you have any questions please contact Bob Pallarino of my staff at (415) 947-4128.

Sincerely,

Sean Hogan, Acting Manager
Technical Support Office
Air Division

cc: Amy Zimpfer, EPA Region 9
Steven Barhite, EPA Region 9
Colleen Cripps, Nevada Division of Environmental Protection



Department of Air Quality Management

500 S Grand Central Pky 1st Fl • PO Box 555210 • Las Vegas NV 89155-5210
(702) 455-5942 • Fax (702) 383-9994

Christine L. Robinson, Director
Catherine MacDougall, Assistant Director • Susan Selby, Assistant Director

July 20, 2004

Mr. John Kennedy, Chief
Technical Support Office (Air-7)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: April 28, 2004 High-Wind PM₁₀ Exceedance Event

Dear Mr. Kennedy,

Pursuant to the requirements of the U. S. EPA Memorandum on *Areas Affected by PM₁₀ Natural Events* dated May 30, 1996, the Clark County Department of Air Quality and Environmental Management "flagged" April 28, 2004 PM₁₀ data for one (1) monitoring site in the Las Vegas Valley. This monitor recorded exceedance of the 24-hour PM₁₀ NAAQS on this date. After reviewing the meteorological data, site conditions, and control measures in place at the time of the exceedance, Clark County concluded that these exceedances occurred due to high-wind conditions. Attached are the data sets and findings that support this conclusion.

Please confirm flagging of the high-wind natural event data and receipt of this documentation. If you have any questions or need additional information, please contact Russell S. Merle Jr., Senior Planner, our staff natural event coordinator at (702) 455-1662 or FAX (702) 383-9994.

Sincerely,

Robert Folle
Acting Assistant Director

Enclosure

cc: Bob Pallarino, Environmental Engineer, Technical Support Office (AIR-7) U. S. EPA,
Region IX
Colleen Cripps, PhD, Bureau Chief, Nevada Division of Environmental Protection
(NDEP)

Enclosure 1

EPA Required Documentation of Natural Event

Subject: April 28, 2004 High-Wind Event in Clark County, Nevada

Clark County Department of Air Quality and Environmental Management (DAQEM) reviewed the data and findings related to the measured exceedances of the 24-Hour PM₁₀ NAAQS in the Las Vegas Valley, for April 28, 2004. Based on those data sets and findings, the DAQEM determined that a high-wind natural event caused this exceedance. Exceedance occurred at one (1) monitoring site within the Las Vegas Valley on this date. In accordance with the U. S. EPA Natural Events Policy Memorandum on “Areas Affected by PM₁₀ Natural Events” dated May 30, 1996 {Mary Nichols, Assistant Administrator for Air and Radiation (6101)}, states are responsible for establishing a clear causal relationship between the measured exceedances and the natural event. This document sets forth the relationship between the high-wind event and the exceedance that occurred on April 28, 2004.

The documentation supporting the high-wind natural event includes: meteorological data (e.g., wind speed and wind direction); hourly PM₁₀ sampled mass compared to wind data to support a source receptor relationship; precipitation data; and photographs/maps of the area showing sources of emissions. Additional information includes local news accounts of the high-wind event published by the Las Vegas Sun, and the Las Vegas Review Journal newspapers.

In the case of high-wind events where contributing sources of dust are anthropogenic, the state must document the application of the required BACM to those sources. This document outlines the required BACM for these sources and the County’s high-wind enforcement activities on the day of the high-wind event.

This documentation demonstrates that a high-wind natural event occurred on April 28, 2004. The high-wind natural event affected the specific monitoring site that recorded exceedance on that day. Exceedances of the 24-hour PM₁₀ NAAQS, because of elevated concentrations of PM₁₀ recorded at the monitoring site, were due to the emissions generated by the high-wind event.

During the month of July 2004, the DAQEM sent the air quality data affected by the high-wind natural event, to the U. S. EPA, for inclusion into the AIRS database. Clark County requested flagging of this data to indicate that a natural event (High-Wind Event) was involved. The site affected by the high-wind natural event was:

- 1) East Craig (BS) #320030020, 4701 Mitchell St., N. Las Vegas, Nevada

The BACM applicable to the one (1) exceedance site includes Sections 90, 91, 92, 93, and 94 of the Clark County Air Quality Regulations (AQRs). These regulations require stabilization of open areas and disturbed vacant lands; stabilization of unpaved roads;

stabilization of unpaved parking lots; stabilization of paved road unpaved shoulders; and use of soil specific best management practices for construction activities. On April 28, fourteen (14) compliance officers were active in the field on ten-hour staggered shifts. In addition, three (3) management and administrative support staff supported the field enforcement efforts on this day. All 14 compliance officers continued enforcement activities until approximately 5:00 P.M., depending on the location. Most of the Las Vegas Valley construction activities were concluded by 2:30 P.M. By 4:30 P.M., there was few construction sites reported as active. Inspectors made contact with 201 active construction sites. The majority of the contacts were to advise the companies of the impending high-wind event. From 4:30 PM through 10:00 PM, one standby officer was on duty. Two (2) dust complaints were called into the Standby Officer, and they were both addressed.

Many sites had shut down based on the faxed advisory (see Attachment 3) or other considerations. The total number of faxes sent for this wind event was 1269. Of the 1269 sent out, 1037 were successfully sent and 232 failed. The procedure for unsuccessful batch faxes is to review the failed faxed confirmation list provided by departmental Information Technology (IT) personnel. Most of the unsuccessful faxes are to small companies that do not have dedicated fax lines. Faxes that do not transmit to any company that has three or more active Dust Control Permits, receive a follow-up call from department compliance staff to verify the fax number for a manual resend of the fax. This is usually successful, but if not, the company's landline is called in an attempt to remedy the situation. At a minimum, the dust advisory fax is read aloud over the phone.

Most contractors were aware of the advisory and, based upon their Dust Control Class training, responded appropriately. There were, however, 15 Corrective Action Orders (CAO's) written for failure to employ BACM.

Compliance Section Staff conducted follow up inspections to assure compliance with Air Quality Regulations at those sites that received a CAO. DAQEM Compliance Officers issued three (3) Notices of Violation (NOV) to: 1) Perma Bilt Homes for the Russell/Ft. Apache Construction Yard #2 for fugitive dust greater than 100 yards; 2) Crossroads Development for the Maule Apartments construction site for fugitive dust greater than 100 yards, failure to employ BACM and no record of self inspection; and 3) Desert Wind Homes of Nevada II, Inc. for the Castellina construction site for fugitive dust greater than 100 yards, failure to employ BACM, water truck operator without dust class certification, no record of self inspection, no copy of Dust Control Permit on site and Dust Control Permit sign not updated. The hearing dates are pending.

The DAQEM is not aware of any other construction site operators that failed to curtail construction activities in accordance with the high-wind provisions of Section 94 of the Air Quality Regulations on this exceedance day.

Table 1 provides a summary of the Monitoring sites with data and wind speeds meeting the criteria to qualify as a high-wind event exceedance.

Table 1

High Wind Event 24-Hour PM₁₀ NAAQS Exceedance Data

Monitoring Site Location & AIRS Code	Date of High Wind Event	Measured QA/QC Concentration (µg/m³)	Wind Dir.	Max. Wind Gust (mph)
East Craig (BS) #320030020	4/28/04	177	N	44

Analysis of Data:

Data supplied as Attachment 1, include data sets for the day before the high-wind event; day of the high-wind event; and the day after the high-wind event for comparison. The data sheets clearly establish the high-wind event occurred on April 28, 2004 between the hours of approximately 6:00 AM and 10:00 PM. The wind direction was predominantly from the North, with peak gusts of 44 mph, and sustained two-minute winds of 36 mph {National Oceanic Atmospheric Administration (NOAA), data sheet – Attachment 2}. The majority of the Monitoring Station’s average hourly wind speeds shown in Attachment 1, ranged from 5.1 to 23.2 miles per hour throughout the high-wind event. Attachment 2 is the MET data sheet from the NOAA, Climatic Data Center.

Southern Nevada continues to experience extreme drought, as of April 28, 2004 the Las Vegas Valley, according to the National Weather Service records, received only 2.62 inches of measurable precipitation. The absence of moisture/precipitation increased the amount of fugitive dust generated from native desert during the high-wind event. Attachment 5 shows the monitoring site and the surrounding environment subject to the exceedances on the high-wind event day. Wind gusts exceeding the 25-mile per hour threshold, as discussed in the June 2001 PM₁₀ State Implementation Plan (SIP) for Clark County (Appendix B, Emissions Inventories, Page B-21) overwhelmed the native desert environment and stabilized vacant land areas. Attachment 4 is the Clark County Press Release sent out to the media and advisory roster. Attachments 6 and 7 are newspaper articles from the Las Vegas Sun newspaper and the Las Vegas Review Journal newspapers, which describe the high-wind effects, on the Las Vegas Valley within Clark County.

The Clark County Department of Air Quality and Environmental Management requests, based on the evidence of a high-wind natural event enclosed in this documentation; that the U. S. EPA Region IX support the flagging of the exceedances in AIRS.

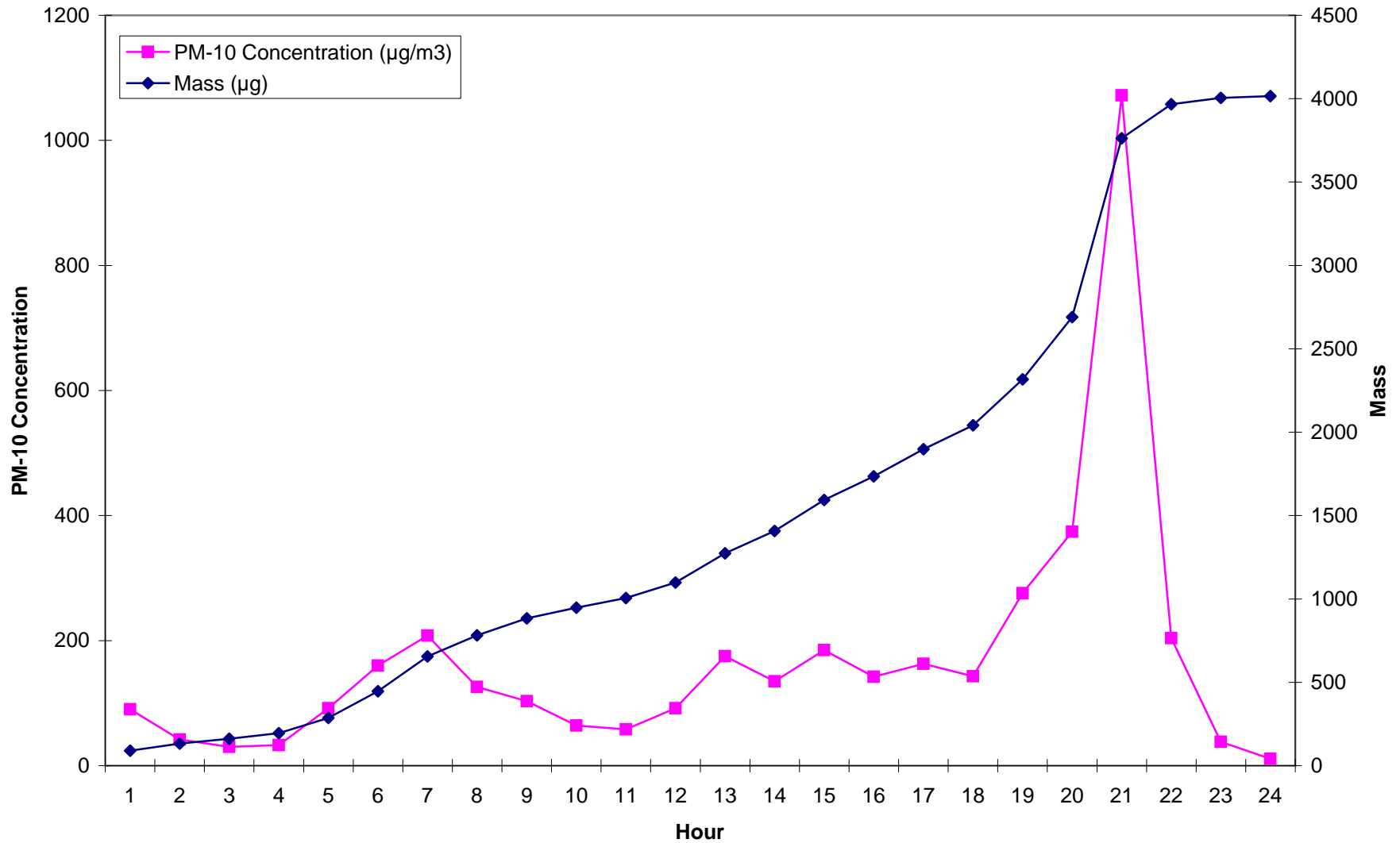
- Attachments: 1 – DAQEM Monitoring Data Sheet(s)
2 – NOAA Data Sheet(s)
3 – FAX Notice
4 – Clark County Press Release
5 - East Craig (BS) Monitoring Site

- 6 - Las Vegas Sun newspaper articles
- 7 - Las Vegas Review Journal articles

East Craig Road - 2003

Site	Month	Day	Hour	Wind Speed (MPH)	Wind Direction (0-360°)	PM-10 Concentration $\mu\text{g}/\text{M}^3$	PM-10 Mass μg
BS	4	27	1	7.4	353	47	65
BS	4	27	2	7.5	338	21	81
BS	4	27	3	7.1	341	21	106
BS	4	27	4	7.7	349	34	144
BS	4	27	5	6.3	333	45	192
BS	4	27	6	5.0	307	75	266
BS	4	27	7	5.0	341	88	359
BS	4	27	8	4.8	309	110	469
BS	4	27	9	4.7	211	66	535
BS	4	27	10	5.4	319	49	586
BS	4	27	11	6.4	104	42	629
BS	4	27	12	7.7	112	35	666
BS	4	27	13	7.4	186	36	703
BS	4	27	14	6.2	151	24	730
BS	4	27	15	6.9	269	22	752
BS	4	27	16	6.0	329	27	780
BS	4	27	17	6.7	347	26	809
BS	4	27	18	5.7	2	37	849
BS	4	27	19	5.4	320	46	897
BS	4	27	20	7.2	279	53	952
BS	4	27	21	5.8	342	51	1007
BS	4	27	22	3.7	103	71	1079
BS	4	27	23	3.3	132	87	1170
BS	4	27	24	4.1	50	90	1260
BS	4	28	1	4.1	39	90	73
BS	4	28	2	5.1	345	42	108
BS	4	28	3	5.6	333	30	139
BS	4	28	4	4.6	15	33	178
BS	4	28	5	4.9	345	92	277
BS	4	28	6	5.1	353	160	443
BS	4	28	7	5.2	317	208	647
BS	4	28	8	4.7	259	126	775
BS	4	28	9	5.4	203	103	878
BS	4	28	10	4.7	155	64	943
BS	4	28	11	7.1	294	58	1004
BS	4	28	12	16.7	215	92	1102
BS	4	28	13	19.7	233	175	1277
BS	4	28	14	21.5	238	135	1414
BS	4	28	15	23.2	234	185	1605
BS	4	28	16	22.4	243	142	1753
BS	4	28	17	23.0	244	163	1915
BS	4	28	18	20.8	262	143	2055
BS	4	28	19	20.5	312	276	740
BS	4	28	20	13.9	52	374	557
BS	4	28	21	19.0	48	1072	1605
BS	4	28	22	16.2	42	204	1802
BS	4	28	23	12.8	39	38	1842
BS	4	28	24	11.0	25	11	1854
BS	4	29	1	11.0	33	25	63
BS	4	29	2	10.4	37	8	62
BS	4	29	3	8.1	15	15	79
BS	4	29	4	9.9	36	18	100
BS	4	29	5	9.5	333	34	135
BS	4	29	6	24.1	305	79	230
BS	4	29	7	24.6	298	161	382
BS	4	29	8	22.1	308	59	441
BS	4	29	9	11.7	350	45	492
BS	4	29	10	14.9	329	39	531
BS	4	29	11	23.4	316	85	616
BS	4	29	12	19.5	307	42	662
BS	4	29	13	19.9	303	18	683
BS	4	29	14	19.6	309	21	705
BS	4	29	15	21.0	316	29	733
BS	4	29	16	18.3	326	23	758
BS	4	29	17	15.2	325	19	779
BS	4	29	18	11.6	1	9	792
BS	4	29	19	17.6	44	84	880
BS	4	29	20	14.7	36	54	932
BS	4	29	21	12.1	27	13	947
BS	4	29	22	8.1	17	10	959
BS	4	29	23	8.0	352	5	964
BS	4	29	24	5.1	328	13	978

PM-10 Concentration and Mass
Concentration for the day: 177



Mass accumulation data from concentration channel.

APRIL 2004
LOCAL CLIMATOLOGICAL DATA
 NOAA, National Climatic Data Center



LAS VEGAS, NV

MCCARRAN INTERNATIONAL APT (LAS)
 Lat: 36° 04' N Long: 115° 09' W Elev (Ground): 2127 Feet
 Time Zone: PACIFIC WBAN: 23169 ISSN #: 0198-3318

APRIL 2004
LAS VEGAS, NV

DATE	TEMPERATURE F				DEG DAYS BASE 65	WEATHER	SNOW/ICE ON GROUND				PRECIPITATION (INCHES)				PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES																								
	MAXIMUM	MINIMUM	AVERAGE	DEF FROM NORMAL			AVERAGE DWP PT	AVERAGE WET BULB	HEATING	COOLING	0400 LST	1000 LST	2400 LST	2400 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESURGENT SPEED	RES DIR	AVERAGE SPEED	DIR	MAXIMUM 5-SEC 2-MIN	DIR	DATE																
01	78	57	68	6	35	51	7	8	9						27.42	29.63	10.5	17	18	19	20	21	22	23	24																
02	59	51	55*	-8	51	52	10	0	3	RA					27.51	29.75	2.6	32	6.5	23	32	20	33	02																	
03	61	50	56	-7	48	51	9	0	0	RA BR					27.67	29.94	0.2	19	3.5	25	09	22	08	03																	
04	71	53	62	-1	47	54	3	0	0	RA					27.67	29.93	1.0	21	3.3	12	06	10	08	04																	
05	77	54	66	3	51	57	0	1	1						27.61	29.85	0.5	22	5.0	15	24	13	24	05																	
06	80	58	69	6	43	55	0	4	2						27.58	29.81	5.2	22	9.4	30	33	23	33	06																	
07	75	59	67	3	44	55	0	2	0	TSRA RA					27.62	29.86	3.2	06	5.5	18	02	15	03	07																	
08	78	61	70	6	50	57	0	5	0						27.61	29.84	3.2	01	7.0	33	35	29	02	08																	
09	82	57	70	5	46	57	0	5	0						27.64	29.88	1.7	30	5.0	21	35	16	34	09																	
10	73	60	67	2	31	50	0	2	6						27.69	29.93	11.6	05	12.7	32	04	28	03	10																	
11	74	58	66	1	25	47	0	1	3						27.75	30.00	4.8	03	9.2	31	04	24	03	11																	
12	83	53	68	3	35	52	0	7	0						27.71	29.95	2.1	17	6.1	23	07	17	08	12																	
13	85	53	72	7	30	51	0	7	0						27.63	29.87	6.6	21	8.4	30	23	23	23	13																	
14	79	60	70	4	35	52	0	5	0						27.59	29.81	10.9	21	11.7	37	27	22	19	14																	
15	81	60	71	5	34	53	0	6	6						27.57	29.80	12.1	20	12.7	28	21	22	22	15																	
16	80	61	71	5	37	53	0	6	6						27.57	29.80	11.0	21	11.7	25	22	21	19	16																	
17	73	52	63	-3	38	50	2	0	0	RA					27.50	29.74	13.4	22	14.9	37	24	29	23	17																	
18	70	49*	60	-6	35	48	5	0	0						27.75	30.01	6.1	17	8.9	23	22	16	20	18																	
19	72	57	65	-1	32	49	0	0	0						27.72	29.97	9.2	22	10.8	28	25	23	26	19																	
20	80	55	68	1	33	51	0	3	3						27.67	29.91	4.7	21	6.6	23	20	16	20	20																	
21	82	58	70	2	26	50	0	5	0						27.47	29.69	6.3	23	11.4	31	34	23	33	21																	
22	74	57	66	-2	33	50	0	1	1						27.59	29.82	16.9	35	18.0	44	34	35	32	22																	
23	79	63	71	3	27	50	0	6	6						27.70	29.94	8.1	36	11.7	30	06	23	34	23																	
24	83	58	71	3	32	52	0	6	6						27.69	29.93	1.4	18	3.9	12	11	9	28	24																	
25	86	60	73	4	31	53	0	8	8						27.78	30.02	1.7	03	5.7	20	01	16	03	25																	
26	90	62	76	7	29	53	0	11	11						27.85	30.09	1.0	02	5.6	17	04	14	07	26																	
27	94*	63	79*	10	34	56	0	14	14						27.68	29.90	3.7	20	5.0	20	26	15	27	27																	
28	92	64	78	9	35	56	0	13	13						27.33	29.52	5.7	25	15.7	44	36	36	35	28																	
29	73	59	66	-3	23	46	0	1	1						27.54	29.76	16.2	36	17.9	43	34	36*	34	29																	
30	80	57	69	-1	34	51	0	4	4						27.75	30.00	5.8	35	9.0	26	34	20	34	30																	
TOTALS	78.1	57.5	67.8	36.1	52.1	1.0	4.1	1.0	4.1	<	MONTHLY AVERAGES	TOTALS	>	0.92	27.63	29.87	1.7	26	9.2	<	MONTHLY AVERAGES																				
														SEASON TO DATE		GREATEST 24-HR PRECIPITATION:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:		GREATEST 24-HR SNOWFALL:					
														TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE		TOTAL DEPARTURE			
														1996		1996		1996		1996		1996		1996		1996		1996		1996		1996		1996		1996		1996		1996	
														-227		-227		-227		-227		-227		-227		-227		-227		-227		-227		-227		-227		-227		-227	
														24		24		24		24		24		24		24		24		24		24		24		24		24		24	
														1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22		1.22	
														29		29		29		29		29		29		29		29		29		29		29		29		29		29	
														-54		-54		-54		-54		-54		-54		-54		-54		-54		-54		-54		-54		-54		-54	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6		3.6	
														1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8		1.8	
														57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8		57.8	
														0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
														3.6		3.6		3.6		3.6		3.																			

HOURLY PRECIPITATION | **LAS VEGAS, NV**
 (WATER EQUIVALENT IN INCHES) | **APRIL 2004** LAS WBAN # 23169

DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST Water Equiv.									
	1	2	3	4	5	6	7	8	9	10	11	12				13	14	15	16	17	18	19	20	21
01	0.01	0.06	0.03	0.02	0.04	0.10	0.07	0.02	0.03	T	0.04	0.06	0.02	0.02	0.02	0.07	0.04	T	T	T	T	T	T	T
02		T																						
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

Date and time are not entered for TRACE amounts.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurrence if more than one)
 T = Trace precipitation amount
 + = also occurs on earlier date
 FG+ = Heavy fog, visibility .25 miles or less
 BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1971 – 2000

WEATHER NOTATIONS

QUALIFIER	PRECIPITATION	WEATHER PHENOMENA	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC in the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
 '+', ' ' = Heavy ' ' = Moderate ' ' = Light

LAS VEGAS, NV APRIL 2004

Ceiliometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceiliometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)	
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM	
01						10.00	10.00	
02						3.00	10.00	
03						2.50	10.00	
04						10.00	10.00	
05						10.00	10.00	
06						10.00	10.00	
07						10.00	10.00	
08						10.00	10.00	
09						10.00	10.00	
10						10.00	10.00	
11						10.00	10.00	
12						10.00	10.00	
13						10.00	10.00	
14						10.00	10.00	
15						10.00	10.00	
16						10.00	10.00	
17						10.00	10.00	
18						10.00	10.00	
19						10.00	10.00	
20						10.00	10.00	
21						10.00	10.00	
22						8.00	10.00	
23						10.00	10.00	
24						10.00	10.00	
25						10.00	10.00	
26						10.00	10.00	
27						10.00	10.00	
28						5.00	10.00	
29						10.00	10.00	
30						10.00	10.00	
MONTHLY AVGS						9.33	10.00	
SUNSHINE (MINUTES)								
Total: Possible: Percent Possible:								
NUMBER OF DAYS WITH:								
SKY CONDITION								
CLR PTLY CLDY CLOUDY MISSING								
30								
MINIMUM VISIBILITY (MILES)								
<=0.25 <=3.0 >=7.0								
0 1 27								

OBSERVATIONS AT 3-HOURLY INTERVALS | **LAS VEGAS, NV**
LAS
APRIL 2004

WBAN # 23169

HOUR (LST)	SKY COVER	CEILING	OBSERVATION	TIME (LST)	EFF CLD AMT	SATELLITE	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES.HG)		SEA LEVEL	
									DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION	STATION	SEA LEVEL		
SUNRISE: 0509																		
01	SCT	NC	10.00	01	10.00	01	10.00	0509	26	46	25	7	20	27.67	29.91	01	BKN	250
04	SCT	NC	10.00	04	10.00	04	10.00	0509	27	46	26	0	00	27.67	29.91	04	BKN	250
07	CLR	NC	10.00	07	10.00	07	10.00	0509	35	49	35	0	00	27.71	29.95	07	SCT	NC
10	CLR	NC	10.00	10	10.00	10	10.00	0509	35	55	22	6	VR	27.71	29.94	10	SCT	NC
13	FEW	NC	10.00	13	10.00	13	10.00	0509	28	55	13	10	18	27.62	29.85	13	SCT	NC
16	FEW	NC	10.00	16	10.00	16	10.00	0509	28	55	13	15	23	27.56	29.78	16	SCT	NC
19	CLR	NC	10.00	19	10.00	19	10.00	0509	28	52	18	8	21	27.55	29.78	19	SCT	NC
22	CLR	NC	10.00	22	10.00	22	10.00	0509	26	49	19	10	21	27.59	29.82	22	SCT	NC
SUNRISE: 0508																		
01	CLR	NC	10.00	01	10.00	01	10.00	0508	36	50	34	10	18	27.60	29.82	01	SCT	NC
04	BKN	250	10.00	04	10.00	04	10.00	0508	35	49	35	16	20	27.58	29.81	04	SCT	NC
07	BKN	220	10.00	07	10.00	07	10.00	0508	36	50	37	13	20	27.62	29.85	07	BKN	220
10	FEW	NC	10.00	10	10.00	10	10.00	0508	32	43	25	12	19	27.63	29.85	10	OVC	220
13	FEW	NC	10.00	13	10.00	13	10.00	0508	33	54	20	14	20	27.57	29.80	13	BKN	220
16	BKN	250	10.00	16	10.00	16	10.00	0508	35	56	20	20	25	27.54	29.77	16	BKN	220
19	BKN	250	10.00	19	10.00	19	10.00	0508	35	54	23	6	19	27.56	29.79	19	BKN	200
22	SCT	NC	10.00	22	10.00	22	10.00	0508	38	52	35	8	20	27.60	29.82	22	BKN	200
SUNRISE: 0507																		
01	SCT	NC	10.00	01	10.00	01	10.00	0507	35	50	33	14	19	27.59	29.82	01	FEW	NC
04	SCT	NC	10.00	04	10.00	04	10.00	0507	30	47	30	14	19	27.59	29.82	04	FEW	NC
07	CLR	NC	10.00	07	10.00	07	10.00	0507	35	50	33	14	19	27.61	29.84	07	CLR	NC
10	CLR	NC	10.00	10	10.00	10	10.00	0507	30	52	20	18	20	27.61	29.84	10	CLR	NC
13	CLR	NC	10.00	13	10.00	13	10.00	0507	26	54	13	15	20	27.56	29.78	13	CLR	NC
16	FEW	NC	10.00	16	10.00	16	10.00	0507	37	57	21	12	21	27.53	29.75	16	CLR	NC
19	FEW	NC	10.00	19	10.00	19	10.00	0507	37	55	25	6	22	27.51	29.74	19	CLR	NC
22	FEW	NC	10.00	22	10.00	22	10.00	0507	42	55	37	6	22	27.57	29.80	22	CLR	NC
SUNRISE: 0505																		
01	CLR	NC	10.00	01	10.00	01	10.00	0505	37	51	34	18	24	27.58	29.80	01	CLR	NC
04	FEW	NC	10.00	04	10.00	04	10.00	0505	36	50	37	9	21	27.60	29.83	04	FEW	NC
07	BKN	250	10.00	07	10.00	07	10.00	0505	38	51	38	13	18	27.64	29.87	07	SCT	NC
10	BKN	250	10.00	10	10.00	10	10.00	0505	37	54	28	17	19	27.63	29.86	10	FEW	NC
13	BKN	250	10.00	13	10.00	13	10.00	0505	35	56	21	16	20	27.58	29.80	13	SCT	NC
16	BKN	250	10.00	16	10.00	16	10.00	0505	36	56	21	15	22	27.51	29.74	16	SCT	NC
19	FEW	NC	10.00	19	10.00	19	10.00	0505	36	54	26	5	24	27.50	29.73	19	FEW	NC
22	SCT	NC	10.00	22	10.00	22	10.00	0505	38	52	33	10	22	27.51	29.73	22	CLR	NC
SUNRISE: 0504																		
01	SCT	NC	10.00	01	10.00	01	10.00	0504	41	52	45	16	22	27.51	29.73	01	FEW	NC
04	FEW	NC	10.00	04	10.00	04	10.00	0504	40	49	49	3	10	27.49	29.71	04	CLR	NC
07	SCT	NC	10.00	07	10.00	07	10.00	0504	40	50	46	12	18	27.52	29.75	07	FEW	NC
10	SCT	NC	10.00	10	10.00	10	10.00	0504	38	52	33	18	20	27.52	29.75	10	FEW	NC
13	BKN	250	10.00	13	10.00	13	10.00	0504	32	52	23	14	23	27.48	29.70	13	FEW	NC
16	BKN	080	10.00	16	10.00	16	10.00	0504	41	52	43	17	25	27.48	29.71	16	FEW	NC
19	BKN	070	10.00	19	10.00	19	10.00	0504	39	48	53	20	22	27.49	29.73	19	FEW	NC
22	BKN	100	10.00	22	10.00	22	10.00	0504	39	47	57	15	22	27.53	29.78	22	CLR	NC
SUNRISE: 0503																		
01	BKN	100	10.00	01	10.00	01	10.00	0503	35	45	51	14	21	27.63	29.87	01	CLR	NC
04	FEW	NC	10.00	04	10.00	04	10.00	0503	35	44	54	9	18	27.69	29.95	04	CLR	NC
07	FEW	NC	10.00	07	10.00	07	10.00	0503	36	45	52	12	19	27.79	30.07	07	FEW	NC
10	SCT	NC	10.00	10	10.00	10	10.00	0503	36	48	41	9	19	27.85	30.13	10	CLR	NC
13	SCT	NC	10.00	13	10.00	13	10.00	0503	34	50	31	12	04	27.79	30.06	13	FEW	NC
16	BKN	250	10.00	16	10.00	16	10.00	0503	38	51	28	9	08	27.73	29.99	16	FEW	NC
19	SCT	NC	10.00	19	10.00	19	10.00	0503	35	51	32	10	15	27.71	29.97	19	CLR	NC
22	SCT	NC	10.00	22	10.00	22	10.00	0503	36	49	38	6	20	27.73	29.99	22	CLR	NC

LAS VEGAS, NV
APRIL 2004 LAS WBAN # 23169

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATellite		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND			PRESSURE (INCHES.HG)	
			OBSERVATION TIME (LST)	EFF CLD AMT Okias			DRY BULB	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0454														
APR 25 SUNSET: 1822														
01	CLR NC				10.00		65	30	48	27	5	24	27.69	29.93
04	CLR NC				10.00		62	31	47	31	7	25	27.76	29.99
07	CLR NC				10.00		68	31	50	25	5	04	27.82	30.06
10	CLR NC				10.00		79	30	54	17	12	03	27.83	30.08
13	CLR NC				10.00		84	31	57	15	3	VR	27.79	30.02
16	CLR NC				10.00		85	30	57	14	9	05	27.74	29.98
19	CLR NC				10.00		82	30	56	15	7	09	27.77	30.00
22	CLR NC				10.00		73	35	54	25	0	00	27.80	30.05
SUNRISE: 0453														
APR 26 SUNSET: 1823														
01	CLR NC				10.00		68	31	50	25	3	20	27.83	30.07
04	CLR NC				10.00		66	30	49	26	3	24	27.87	30.11
07	CLR NC				10.00		68	30	50	24	3	VR	27.93	30.17
10	CLR NC				10.00		81	26	54	13	7	08	27.92	30.16
13	CLR NC				10.00		87	29	57	12	7	VR	27.87	30.10
16	FEW NC				10.00		89	30	58	12	7	03	27.79	30.02
19	CLR NC				10.00		84	29	56	13	7	01	27.78	30.01
22	CLR NC				10.00		74	30	52	20	3	28	27.81	30.04
SUNRISE: 0452														
APR 27 SUNSET: 1824														
01	CLR NC				10.00		69	31	48	17	6	19	27.80	30.03
04	CLR NC				10.00		64	26	47	24	3	26	27.79	30.03
07	CLR NC				10.00		72	29	51	20	3	16	27.82	30.06
10	FEW NC				10.00		90	39	61	17	7	16	27.70	29.93
13	FEW NC				10.00		93	45	64	19	9	20	27.58	29.80
16	FEW NC				10.00		86	40	60	20	8	25	27.54	29.75
19	FEW NC				10.00		81	39	58	22	8	24	27.53	29.73
22	CLR NC				10.00									
SUNRISE: 0451														
APR 28 SUNSET: 1825														
01	CLR NC				10.00		77	25	52	14	7	19	27.48	29.67
04	CLR NC				10.00		75	26	51	16	10	20	27.43	29.62
07	FEW NC				10.00		75	28	52	18	6	31	27.42	29.61
10	CLR NC				10.00		87	35	59	16	16	20	27.36	29.55
13	FEW NC				10.00		91	37	61	15	28	24	27.26	29.43
16	SCT NC				10.00		92	42	63	18	25	23	27.14	29.31
19	SCT NC				6.00	HZ BLDU	80	41	58	25	21	34	27.19	29.37
22	FEW NC				10.00		68	36	52	31	17	03	27.38	29.58
SUNRISE: 0449														
APR 29 SUNSET: 1826														
01	FEW NC				10.00		63	18	44	17	15	04	27.41	29.61
04	BKN 120				10.00		62	19	44	17	17	34	27.44	29.64
07	FEW NC				10.00		60	23	44	24	24	35	27.48	29.69
10	FEW NC				10.00		65	21	46	19	21	34	27.54	29.78
13	FEW NC				10.00		70	21	48	16	16	35	27.53	29.77
16	FEW NC				10.00		72	21	49	15	20	35	27.50	29.73
19	BKN 100				10.00		68	25	48	20	20	04	27.58	29.83
22	FEW NC				10.00		63	27	46	26	13	36	27.69	29.94
SUNRISE: 0448														
APR 30 SUNSET: 1827														
01	CLR NC				10.00		60	27	45	28	17	35	27.72	29.97
04	CLR NC				10.00		59	26	44	28	10	35	27.74	29.99
07	CLR NC				10.00		61	27	46	27	18	34	27.80	30.06
10	CLR NC				10.00		68	32	50	26	10	36	27.79	30.05
13	CLR NC				10.00		74	35	54	24	10	06	27.76	30.00
16	CLR NC				10.00		79	37	57	22	5	VR	27.70	29.94
19	CLR NC				10.00		77	39	57	26	3	18	27.71	29.95
22	CLR NC				10.00		70	39	54	32	3	23	27.76	30.01

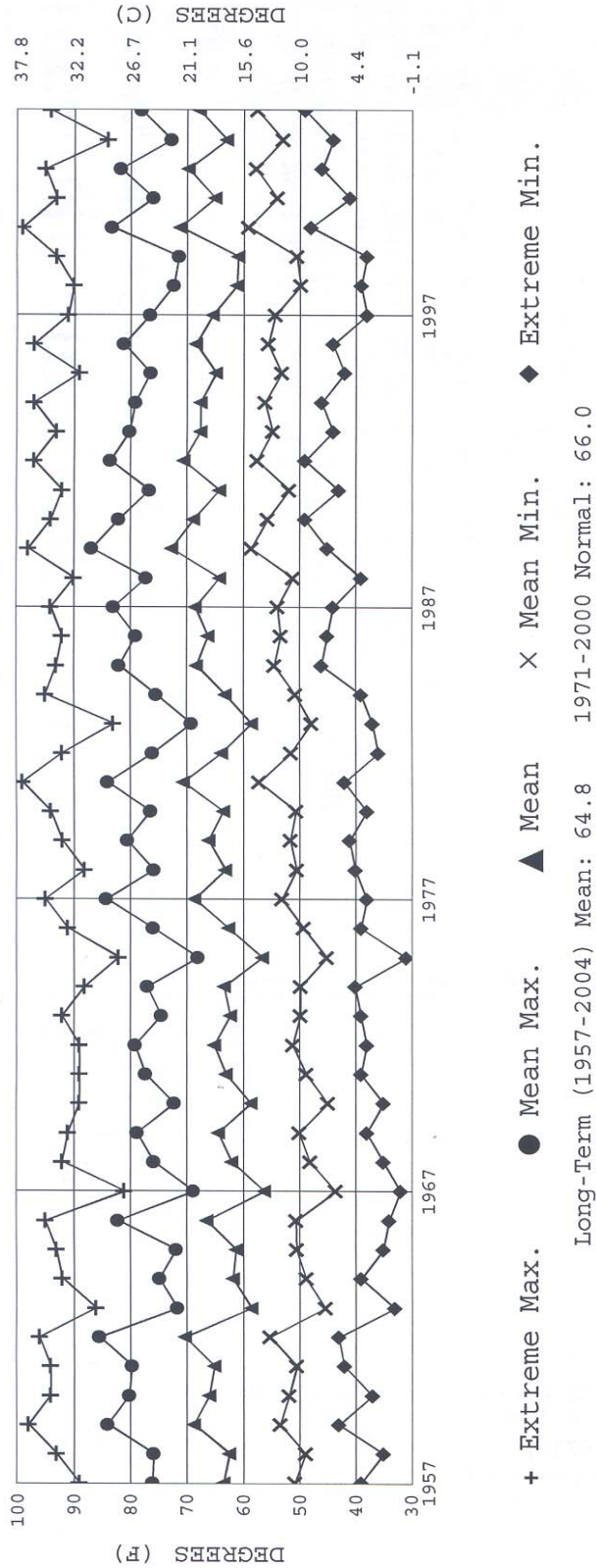
3-HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, W = Vertical Visibility = 8/8. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. & = Original observation contained additional weather elements. See page 3 for additional notes.

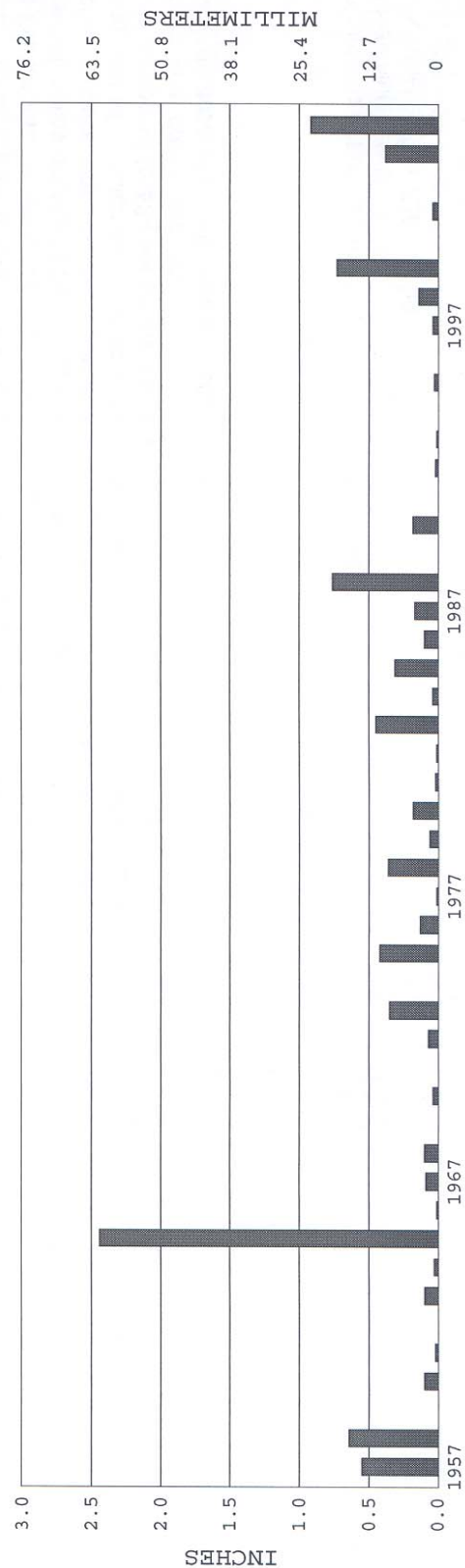
SUMMARY BY HOUR

HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES.HG)		WIND SPEED (MPH)	WIND DIRECTION
							STATION	SEA LEVEL		
01		63	35	35	50	40	27.63	29.86	9	3 22
02		62	35	35	49	41	27.63	29.86	8	2 24
03		61	35	35	49	42	27.63	29.86	7	2 22
04		60	35	35	48	44	27.63	29.87	7	3 24
05		59	35	35	48	45	27.64	29.88	8	2 28
06		60	36	36	48	45	27.66	29.90	8	2 25
07		62	36	36	49	41	27.67	29.91	9	1 29
08		65	36	36	51	38	27.68	29.92	9	1 36
09		68	35	34	52	34	27.68	29.92	11	2 1
10		70	36	35	53	33	27.68	29.92	11	2 34
11		72	35	35	53	30	27.67	29.91	10	1 8
12		73	35	35	54	28	27.65	29.88	9	1 25
13		75	35	34	54	26	27.62	29.86	9	2 20
14		76	36	35	55	26	27.60	29.83	9	2 26
15		76	36	35	55	26	27.58	29.81	9	2 22
16		77	36	35	56	26	27.57	29.80	10	2 24
17		76	36	35	55	27	27.57	29.81	11	3 24
18		74	37	35	53	30	27.57	29.81	9	2 21
19		72	37	34	51	31	27.58	29.82	9	2 21
20		70	38	35	53	35	27.60	29.84	8	3 23
21		68	38	35	52	37	27.62	29.86	7	3 24
22		66	39	35	52	40	27.63	29.86	10	0 25
23		65	37	35	51	40	27.64	29.87	10	0 26
24		64	36	36	50	39	27.64	29.87	10	0 23

LAS VEGAS, NV APRIL TEMPERATURES



LAS VEGAS, NV APRIL PRECIPITATION



Long-Term (1957-2004) Mean Monthly Total: 0.21 1971-2000 Normal: 0.15



APRIL 2004
LAS VEGAS, NV

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost is \$29 for online delivery (including back issues) compared to \$34 for offline delivery.** To order this and other subscriptions online with your credit card, go to:
www.ncdc.noaa.gov and choose subscriptions.

We welcome your questions or comments, please contact us at
Toll Free Number (866) 742-3322 (voice)
Fax Number : (304) 726-4409
TDD : 828-271-4010
or Email : ncdc.info@noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

United States
Department of Commerce

National Oceanic and
Atmospheric Administration

National Environmental Satellite
Data, and Information Service

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

OFFICIAL BUSINESS, PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19

344772004233
CLARK COUNTY DEPT AIR QUALITY MNGT
FEM DURSINMI
PO BOX 5571776
LAS VEGAS NV 89155

2004 JUN 14 A 11:33

RECEIVED
CC-DAQM

Attachment 3: High Wind Notice to Dust Permit Holders



HIGH WIND NOTICE
Attention Dust Control Permit Holders
Contractors and Stationary Sources

The National Weather Service has forecast strong sustained winds in excess of 25 mph with higher gust for Wednesday, April 28, 2004.

The Department of Air Quality and Environmental Management (DAQEM) directs each permittee to immediately their site and employ Best Available Control Measures (BACM) to stabilize all disturbed soils to reduce wind blowing dust. Permittees with multiple sites should contact each site Superintendent to ensure compliance with the DAQEM Air Quality Regulations.

DAQEM Compliance Officers will inspect construction and stationary source sites during the wind episode and any observed air quality violation will receive a Notice of Violation (NOV).

Please direct questions about this Wind Advisory to a DAQEM Compliance Supervisor at 702-455-5942.



Attachment 4 News Release

Public Communications ■ 500 S. Grand Central Parkway, 6th Fl., Las Vegas, NV 89155-1111 ■ Fax: (702) 455-3558

Contact: **Stacey Welling**
Sr. Public Information Officer

Phone: **(702) 455-3546**
Cell: **(702) 378-8970**
E-mail: stac@co.clark.nv.us

For Immediate Release

Tuesday, April 27, 2004

Air Quality Advisory Issued For Wednesday Strong Winds Predicted Wednesday Afternoon, Evening

With strong winds expected in Southern Nevada on **Wednesday**, Clark County Air Quality and Clark County Health District officials are advising residents and operators of local construction sites to brace for blowing dust and higher levels of PM₁₀.

The Las Vegas office of the National Weather Service expects sustained winds of 25 to 35 miles an hour with possible gusts of 60 miles per hour by Wednesday afternoon. The winds are expected to last into the evening. Dry, windy conditions tend to make the valley's PM₁₀ problems worse. PM₁₀ stands for particulate matter, primarily dust, 10 microns or less. It's a type of inhalable air pollution that aggravates respiratory diseases such as bronchitis or asthma.

Clark County Air Quality and Health District officials say: "***Under air quality advisory conditions, airborne dust may reach unhealthy levels. Children, seniors and people with chronic respiratory problems are urged to stay indoors. All residents should limit outdoor exercise***".

Air Quality officials also are asking construction site operators to take steps to check and stabilize their property for blowing dust and debris as required by local air quality regulations.

The Las Vegas Valley currently does not meet the federal 24-hour air quality standard for PM₁₀. Air Quality officials have implemented several measures to improve local air quality, including a 24-hour dust complaint hotline. Call 385-DUST (3878) to report excessive amounts of blowing dust. Officials also recommend the following tips to keep dust down:

- Drive slowly on unpaved roads.
- Don't take short cuts across vacant lots.
- Reduce wood-burning.
- Ride off-road vehicles outside the urban areas of the Las Vegas Valley.
- For information about current air quality conditions, visit the monitoring section of Air Quality's website via www.accessclarkcounty.com.

###

News release also available on the Internet at www.accessclarkcounty.com

[Clark County Board of Commissioners](http://www.accessclarkcounty.com)

Chip Maxfield, Chairman ■ Myrna Williams, Vice-Chair ■ Yvonne Atkinson Gates ■ Mary Kincaid-Chauncey ■ Lynette Boggs McDonald ■ Rory Reid ■ Bruce L. Woodbury / Thom Reilly, County Manager

Attachment 5



East Craig Road (BS) Monitoring Site

Attachment 5



East Craig Road (BS) Monitoring Site #320030020

Attachment 5



East Craig Road (BS) Monitoring Site #320030020

Attachment 6: Las Vegas Sun Newspaper Article

Return to the [referring page](#).

Las Vegas SUN

April 28, 2004

Winds prompt air quality warning

By Mary Manning

<manning@lasvegassun.com>

LAS VEGAS SUN

The Clark County Air Quality Division has issued an air quality advisory for residents with health problems to expect high winds to kick up dust today.

Children, senior citizens and people with chronic respiratory problems are urged to stay indoors, and all residents should limit outdoor exercise.

County officials also asked those in charge of construction sites to control blowing dust and debris as required by local air quality regulations.

The National Weather Service issued a high wind advisory overnight for all of Southern Nevada because a strong cold weather front was expected to move into the area, Weather Service meteorologist Brian Fuis said.

Winds between 30 mph and 40 mph were expected this afternoon with gusts up to 60 mph or more, Fuis said.

The winds are expected to last through the night, switching from a southwest to a northwest flow on Thursday.

"This system is more consistent with an early spring windstorm," Fuis said.

March and most of April were unremarkable as far as winds, he said.

No rain is expected in the Las Vegas Valley. Most of the showers are expected to stay to the north.

A drop in daytime temperature will be noticeable on Thursday, forecasters said.

After a high of 94 degrees on Tuesday, and the low 90s expected today, Thursday's high is expected in the low 80s.

For more information about current air quality conditions, visit the monitoring section of Air Quality's Web site: www.accessclarkcounty.com.

Attachment 6: Las Vegas Sun Newspaper Article

Dry, windy conditions tend to worsen the valley's dust pollution problems, county spokeswoman Stacey Welling said.

The Las Vegas Valley currently does not meet the federal 24-hour air quality limit for dust, Welling said.

To report excessive amounts of dust, there is a 24-hour dust complaint hotline. Call 385-DUST (3878) to report excessive amounts of dust.

County officials also recommended these tips to keep dust down:

- Drive slowly on unpaved roads.
- Don't take shortcuts across vacant lots.
- Reduce wood burning.
- Ride off-road vehicles outside the urban areas of the valley.

Return to the [referring page](#).
[Las Vegas SUN main page](#)

Questions or problems? [Click here](#).

All contents copyright 2004 Las Vegas SUN, Inc.

Search today's edition

>> [Advanced Search](#)

Recent Editions

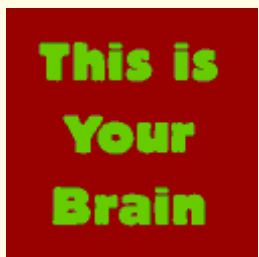
[T](#) [W](#) [Th](#) [F](#) [S](#) [Su](#) [M](#)

>> [Complete Archive](#)

NEWS

[Today's Headlines](#)

- [Obituaries](#)
- [Judging the Judges](#)
- [Binion Murder](#)
- [River Run Riot](#)
- [Election 2004](#)
- [Political Corruption: Galardi Investigation](#)
- [Opinion Polls](#)
- [Road Construction](#)
- [Yucca Mountain](#)
- [Operation Iraqi Freedom](#)
- [E-briefing](#)



Thursday, April 29, 2004
 Copyright © Las Vegas Review-Journal

PHOTO: Hold On To Your Hats



Diana and Bobby Boone of Tucson, Ariz., brace against the wind as they pass blown-over news racks Wednesday on the Strip near Sahara Avenue. Gusts reached 40 mph at McCarran International Airport, and winds knocked out power at some locations. The wind kicked up dust that prompted the county to issue an air quality advisory. The winds will tail off today, while high temperatures drop into the low 70s.

Photo by [K.M. Cannon](#).

Advertisement

Find Answers to all your LEGAL QUESTIONS

Featured Jobs

receiving and shipping
 Carson city, NV
 EDS export Post
 Communicate
 Agency EDS export
 Post communic

Medical
 Las Vegas, NV
 Fremont Medical Center

Technical Customer Service Reps
 Las Vegas, NV
 Client Logic

Seeking Top Producing Phone Sales Professionals
 Las Vegas, NV
 Hilton Grand

CHANNEL DIRECTORY

- ▶ [Arts & Entertainment](#)
- ▶ [Auto Guide](#)
- ▶ [Books](#)
- ▶ [Casinos & Hotels](#)
- ▶ [Community](#)
- ▶ [E-forums](#)
- ▶ [Employment](#)
- ▶ [Food & Dining](#)
- ▶ [Fun & Games](#)
- ▶ [Health & Fitness](#)
- ▶ [Home & Garden](#)
- ▶ [Legal Center](#)
- ▶ [Money](#)
- ▶ [Obituaries](#)
- ▶ [Personals](#)
- ▶ [Real Estate](#)
- ▶ [Recreation](#)

- ▶
- ▶ **Relocation**
- ▶ **Shopping & Coupons**
- ▶ **Technology**
- ▶ **Traffic & Transportation**
- ▶ **Travel**
- ▶ **Weather**
- ▶ **Weddings**
- ▶ **About the site**

Contact the R-J

- [Subscribe](#)
- [Report a delivery problem](#)
- [Put the paper on hold](#)
- [Advertise with us](#)
- [Report a news tip/press release](#)
- [Send a letter to the editor](#)
- [Print the announcement forms](#)
- [Jobs at the R-J](#)



[Nevada News](#) | [Sports](#) | [Business](#) | [Living](#) | [Opinion](#) | [Neon](#) | [Classifieds](#)
[Current Edition](#) | [Archive](#) | [Search](#) | [Print Edition](#) | [Online Edition](#)
[Contact the R-J](#) | [HOME](#)

Copyright © Las Vegas Review-Journal, 1997 - 2003
[Stephens Media Group Privacy Statement](#)

lasvegas.com

Appendix B

Clark County, Nevada

High-Wind Natural Event Justification Packages

2. May 11, 2004



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

RECEIVED
CC-DAQM

August 13, 2004

2004 AUG 23 A 11: 21

Ms. Christine Robinson, Director
Clark County Department of Air Quality
P.O. Box 551776
Las Vegas, NV 89155-1776

Re: May 11, 2004 High Wind PM10 Natural Event

Dear Ms. Robinson:

I have received and reviewed your agency's request, dated July 29, 2004, to flag one PM10 National Ambient Air Quality Standard (NAAQS) exceedance as a high wind event. The exceedance occurred on April 28, 2004 at the East Craig monitoring site.

The documentation you provided to support the flagging of this exceedance appears complete and comprehensive. We concur with your decision to flag these data as high wind natural events. I will instruct our AQS database manager, Jim Forrest, to add the appropriate flag to this exceedance day.

Please remember that Clark County Department of Air Quality will need to develop and implement a Natural Events Action Plan (NEAP) as required by EPA's Natural Events Policy ("Areas Affected by PM-10 Natural Events", Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation to Regional Air Division Directors, May 30, 1996).

If you have any questions please contact Bob Pallarino of my staff at (415) 947-4128.

Sincerely,

Sean Hogan, Acting Manager
Technical Support Office
Air Division

cc: Amy Zimpfer, EPA Region 9
Steven Barhite, EPA Region 9
Colleen Cripps, Nevada Division of Environmental Protection



Department of Air Quality & Environmental Management

500 S Grand Central Pky 1st Fl • PO Box 555210 • Las Vegas NV 89155-5210
(702) 455-5942 • Fax (702) 383-9994

Christine L. Robinson, Director • Alan Pinkerton, Deputy Director • Robert Folle, Acting Assistant Director

July 29, 2004

Mr. John Kennedy, Chief
Technical Support Office (Air-7)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: May 11, 2004 High-Wind PM₁₀ Exceedance Event

Dear Mr. Kennedy,

Pursuant to the requirements of the U. S. EPA Memorandum on *Areas Affected by PM₁₀ Natural Events* dated May 30, 1996, the Clark County Department of Air Quality and Environmental Management "flagged" May 11, 2004 PM₁₀ data for one (1) monitoring site in the Las Vegas Valley. This monitor recorded exceedance of the 24-hour PM₁₀ NAAQS on this date. After reviewing the meteorological data, site conditions, and control measures in place at the time of the exceedance, Clark County concluded that these exceedances occurred due to high-wind conditions. Attached are the data sets and findings that support this conclusion.

Please confirm flagging of the high-wind natural event data and receipt of this documentation. If you have any questions or need additional information, please contact Russell S. Merle Jr., Senior Planner, our staff natural event coordinator at (702) 455-1662 or FAX (702) 383-9994.

Sincerely,

Robert Folle
Acting Assistant Director

Enclosure

cc: Bob Pallarino, Environmental Engineer, Technical Support Office (AIR-7) U. S. EPA,
Region IX
Colleen Cripps, PhD, Bureau Chief, Nevada Division of Environmental Protection
(NDEP)

Enclosure 1

EPA Required Documentation of Natural Event

Subject: May 11, 2004 High-Wind Event in Clark County, Nevada

Clark County Department of Air Quality and Environmental Management (DAQEM) reviewed the data and findings related to the measured exceedances of the 24-Hour PM₁₀ NAAQS in the Las Vegas Valley, for May 11, 2004. Based on those data sets and findings, the DAQEM determined that a high-wind natural event caused this exceedance. Exceedance occurred at one (1) monitoring site within the Las Vegas Valley on this date. In accordance with the U. S. EPA Natural Events Policy Memorandum on “Areas Affected by PM₁₀ Natural Events” dated May 30, 1996 {Mary Nichols, Assistant Administrator for Air and Radiation (6101)}, states are responsible for establishing a clear causal relationship between the measured exceedances and the natural event. This document sets forth the relationship between the high-wind event and the exceedance that occurred on May 11, 2004.

The documentation supporting the high-wind natural event includes: meteorological data (e.g., wind speed and wind direction); hourly PM₁₀ sampled mass compared to wind data to support a source receptor relationship; precipitation data; and photographs/maps of the area showing sources of emissions. Additional information includes local news accounts of the high-wind event and related public outreach published by the Las Vegas Sun and the Las Vegas Review Journal newspapers.

In the case of high-wind events where contributing sources of dust are anthropogenic, the state must document the application of the required BACM to those sources. This document outlines the required BACM for these sources and the County’s high-wind enforcement activities on the day before and day of the high-wind event.

This documentation demonstrates that a high-wind natural event occurred on May 11, 2004. The high-wind natural event affected the specific monitoring site that recorded exceedance on that day. Exceedances of the 24-hour PM₁₀ NAAQS, because of elevated concentrations of PM₁₀ recorded at the monitoring site, were due to the emissions generated by the high-wind event.

During the month of July 2004, the DAQEM sent the air quality data affected by the high-wind natural event, to the U. S. EPA, for inclusion into the AIRS database. Clark County requested flagging of this data to indicate that a natural event (High-Wind Event) was involved. The sites affected by the high-wind natural event were:

- 1) East Craig (BS) #320030020, 4701 Mitchell St., N. Las Vegas, Nevada

The BACM applicable to the one (1) exceedance site includes Sections 90, 91, 92, 93, and 94 of the Clark County Air Quality Regulations (AQRs). These regulations require stabilization of open areas and disturbed vacant lands; stabilization of unpaved roads;

stabilization of unpaved parking lots; stabilization of paved road unpaved shoulders; and use of soil specific best management practices for construction activities. On May 10, the day before the event, eleven (11) compliance officers were active in the field on ten-hour shifts. In addition, three (3) management and administrative support staff supported the field enforcement efforts on this day. All 11 compliance officers continued enforcement activities until approximately 5:00 P.M., depending on the location. By 4:30 P.M., there was few construction sites reported as active. Inspectors made contact with 161 active construction sites. From 4:30 P.M. through 10:00 P.M., one standby officer was on duty. Three (3) dust complaints were called into the Standby Officer, and they were both addressed.

Many sites had shut down based on the faxed advisory (see Attachment 3) or other considerations. Only a few sites were not in compliance. Most contractors were aware of the advisory and, based upon their Dust Control Class training, took the appropriate measures. There were, however, fifteen (15) Corrective Action Orders (CAO's) written for failure to employ BACM and fugitive dust violations. Problems observed were: trackout; water truck operator without dust class certification; no dust control records for self inspection; no Dust Control Permit on site; no gravel pad; no Dust Control Permit; loading of materials without adequate mitigation, and saw cutting block without water.

The total number of faxes sent for this wind event was 1295. Of the 1295 sent out, 1069 were successfully sent and 226 failed. The procedure for unsuccessful batch faxes is to review the failed faxed confirmation list provided by departmental Information Technology (IT) personnel. Most of the unsuccessful faxes are to small companies that do not have dedicated fax lines. Faxes that do not transmit to any company that has three or more active Dust Control Permits, receive a follow-up call from department compliance staff to verify the fax number for a manual resend of the fax. This is usually successful, but if not, the company's landline is called in an attempt to remedy the situation. At a minimum, the dust advisory fax is read aloud over the phone.

Compliance Section Staff conducted follow up inspections to assure compliance with Air Quality Regulations at those sites that received a CAO. DAQEM Compliance Officers issued three (3) Notices of Violation (NOV) to: 1) J. A. Tiberti at the Orleans Hotel construction site for fugitive dust crossing property line, failure to employ BACM and no record of self inspection; 2) C & L Development, Inc. at the Catania Plaza construction site for exceeding acreage, no record of self inspection, no copy of Dust Control Permit on site and water truck operators without Dust Control Certification; and 3) The Orleans construction project for failure to obtain a permit and failure to employ BACM. The hearing dates are pending.

All enforcement activity occurred within twenty-four (24) hours of the High-Wind Event. DAQEM believes this enhanced NEAP enforcement activity reduced the potential for exceedances of the 24-hour National Ambient Air Quality Standards (NAAQS) for PM₁₀ throughout the Las Vegas Valley. The three-hour High-Wind Event occurred in the late evening. All construction activity had ceased, minimal population exposure occurred during the high concentrations of PM₁₀ experienced at the Craig Road Monitoring site, in

North Las Vegas (surrounding environment are warehouses, batch plants and other activities not in operation during the time of the event) on May 11, 2004.

The DAQEM is not aware of any other construction site operators that failed to curtail construction activities in accordance with the high-wind provisions of Section 94 of the Air Quality Regulations on this exceedance day.

Table 1 provides a summary of the Monitoring sites with data and wind speeds meeting the criteria to qualify as a high-wind event exceedance.

Table 1

High Wind Event 24-Hour PM₁₀ NAAQS Exceedance Data

Monitoring Site Location & AIRS Code	Date of High Wind Event	Measured QA/QC Concentration (µg/m³)	Wind Dir.	Max. Wind Gust (mph)
East Craig (BS) #320030020	5/11/04	283	NNW	49

Analysis of Data:

Data supplied as Attachment 1, include data sets for the day before the high-wind event; day of the high-wind event; and the day after the high-wind event for comparison. The data sheets clearly establish the high-wind event occurred on May 11, 2004 between the hours of approximately 9:00 PM and 12:00 PM. The wind direction was predominantly from the North by Northwest, with peak gusts of 49 mph, and sustained two-minute winds of 37 mph {National Oceanic Atmospheric Administration (NOAA), data sheet – Attachment 2}. The majority of the Monitoring Station’s average hourly wind speeds shown in Attachment 1, ranged from 18.4 to 38.3 miles per hour throughout the high-wind event. Attachment 2 is the MET data sheet from the NOAA, Climatic Data Center.

Southern Nevada continues to experience extreme drought, as of May 11, 2004 the Las Vegas Valley, according to the National Weather Service records, received only 2.62 inches of measurable precipitation. The absence of moisture/precipitation increased the amount of fugitive dust generated from native desert during the high-wind event. Attachment 5 shows the monitoring site and the surrounding environment subject to the exceedances on the high-wind event day. Wind gusts exceeding the 25-mile per hour threshold, as discussed in the June 2001 PM₁₀ State Implementation Plan (SIP) for Clark County (Appendix B, Emissions Inventories, Page B-21) overwhelmed the native desert environment and stabilized vacant land areas. Attachment 4 is the News Release (“Air Quality Advisory Issued for Dust” – *Strong Winds With 45-mile-Per-Hour Gust Predicted for Today*) sent out by the Clark County Public Information Office prior to the High-Wind Event. Attachments 6 and 7 are newspaper articles from the Las Vegas Sun

newspaper and the Las Vegas Review Journal newspapers that discuss high-wind event related public outreach and high-wind effects on the Las Vegas Valley.

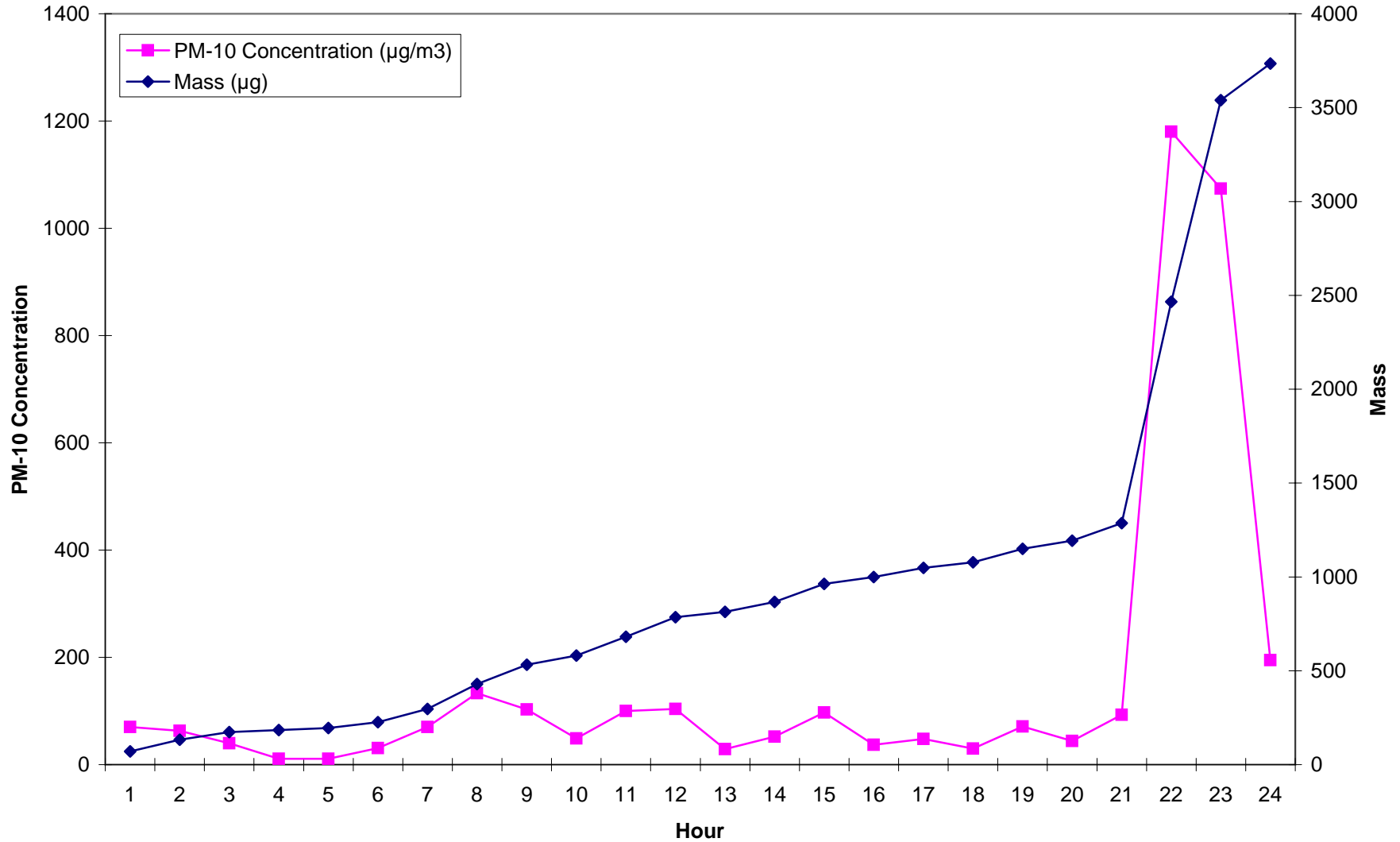
The Clark County Department of Air Quality and Environmental Management requests, based on the evidence of a high-wind natural event enclosed in this documentation; that the U. S. EPA Region IX support the flagging of the exceedances in AIRS.

- Attachments:
- 1 – DAQEM Monitoring Data Sheet(s)
 - 2 – NOAA Data Sheet(s)
 - 3 – FAX Notice
 - 4 – News Release by Clark County Public Information Office
 - 5 – East Craig (BS) Monitoring Site
 - 6 - Las Vegas Sun newspaper articles
 - 7 - Las Vegas Review Journal articles

East Craig Road - 2003

Site	Month	Day	Hour	Wind Speed (MPH)	Wind Direction (0-360°)	PM-10 Concentration $\mu\text{g}/\text{M}^3$	PM-10 Mass μg
BS	5	10	1	4.4	54	11	29
BS	5	10	2	5.4	145	23	50
BS	5	10	3	6.3	235	29	83
BS	5	10	4	6.2	77	51	137
BS	5	10	5	7.1	141	57	194
BS	5	10	6	8.4	142	99	294
BS	5	10	7	14.4	168	54	353
BS	5	10	8	15.4	173	53	406
BS	5	10	9	18.0	193	63	476
BS	5	10	10	15.4	209	86	560
BS	5	10	11	16.7	212	56	620
BS	5	10	12	20.5	206	111	737
BS	5	10	13	22.6	223	261	999
BS	5	10	14	21.7	228	134	1130
BS	5	10	15	19.2	238	73	1205
BS	5	10	16	20.3	245	70	1277
BS	5	10	17	27.6	231	172	1458
BS	5	10	18	24.8	230	200	1657
BS	5	10	19	20.2	205	139	1796
BS	5	10	20	17.3	226	118	1916
BS	5	10	21	13.5	212	104	2021
BS	5	10	22	11.1	218	52	2073
BS	5	10	23	14.2	279	45	2121
BS	5	10	24	19.9	296	55	2180
BS	5	11	1	21.0	302	70	72
BS	5	11	2	22.2	312	63	127
BS	5	11	3	19.6	303	40	164
BS	5	11	4	17.1	317	11	177
BS	5	11	5	14.1	311	11	193
BS	5	11	6	17.1	325	31	227
BS	5	11	7	21.6	322	70	302
BS	5	11	8	23.1	313	133	438
BS	5	11	9	11.1	13	103	540
BS	5	11	10	13.2	310	49	594
BS	5	11	11	10.0	277	100	696
BS	5	11	12	10.1	262	104	799
BS	5	11	13	8.3	222	29	832
BS	5	11	14	8.6	245	52	884
BS	5	11	15	11.8	209	97	983
BS	5	11	16	15.2	216	37	1020
BS	5	11	17	16.6	230	48	1070
BS	5	11	18	16.5	241	30	1104
BS	5	11	19	9.5	208	71	1175
BS	5	11	20	6.2	179	44	1221
BS	5	11	21	18.4	255	93	1291
BS	5	11	22	38.3	307	1180	1010
BS	5	11	23	35.2	305	1074	1798
BS	5	11	24	26.5	312	195	1989
BS	5	12	1	15.2	349	25	31
BS	5	12	2	11.0	344	17	38
BS	5	12	3	11.8	339	12	53
BS	5	12	4	8.2	332	18	72
BS	5	12	5	9.2	321	19	93
BS	5	12	6	8.3	296	28	124
BS	5	12	7	16.8	317	32	157
BS	5	12	8	13.0	321	27	184
BS	5	12	9	12.6	320	14	202
BS	5	12	10	9.8	302	13	216
BS	5	12	11	7.0	266	17	235
BS	5	12	12	7.7	106	22	260
BS	5	12	13	8.2	60	42	301
BS	5	12	14	8.7	170	15	319
BS	5	12	15	7.3	306	20	339
BS	5	12	16	8.8	338	18	359
BS	5	12	17	6.5	349	10	372
BS	5	12	18	5.9	76	18	394
BS	5	12	19	6.8	90	23	416
BS	5	12	20	5.4	132	45	465
BS	5	12	21	4.0	62	36	500
BS	5	12	22	6.7	8	25	527
BS	5	12	23	5.6	327	14	546
BS	5	12	24	5.6	328	26	571

PM-10 Concentration and Mass
Concentration for the day: 283



Mass accumulation data from concentration channel.

True mass for the day is 6789 μg .

HOURLY PRECIPITATION
(WATER EQUIVALENT IN INCHES)

LAS VEGAS, NV
MAY 2004 LAS WBAN # 23169

DATE	FOR HOUR (LST) ENDING AT								FOR HOUR (LST) ENDING AT								Sum if Different (See Note)	2400 LST Water Equiv.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			17	18	19	20	21	22	23
01																									0.00
02																									0.00
03																									0.00
04																									0.00
05																									0.00
06																									0.00
07																									0.00
08																									0.00
09																									0.00
10																									0.00
11																									0.00
12																									0.00
13																									0.00
14																									0.00
15																									0.00
16																									0.00
17																									0.00
18																									0.00
19																									0.00
20																									0.00
21																									0.00
22																									0.00
23																									0.00
24																									0.00
25																									0.00
26																									0.00
27																									0.00
28																									0.00
29																									0.00
30																									0.00
31																									0.00

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Note: The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

Date and time are not entered for TRACE amounts.

**LAS VEGAS, NV
MAY 2004**

**REFERENCE NOTES &
SUPPLEMENTAL SUMMARIES**

Ceillometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

* = Extreme for the month (last occurrence if more than one)
T = Trace precipitation amount
+ = also occurs on earlier date
FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1971-2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		OTHER
	PRECIPITATION	OBSCURATION	
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SC Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):

*+ = Heavy ' ' = Moderate '- ' = Light

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)	
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS	MN-MN	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM
01							10.00	10.00
02							10.00	10.00
03							10.00	10.00
04							10.00	10.00
05							10.00	10.00
06							10.00	10.00
07							10.00	10.00
08							10.00	10.00
09							10.00	10.00
10							6.00	10.00
11							5.00	10.00
12							10.00	10.00
13							10.00	10.00
14							10.00	10.00
15							10.00	10.00
16							10.00	10.00
17							10.00	10.00
18							10.00	10.00
19							10.00	10.00
20							10.00	10.00
21							10.00	10.00
22							10.00	10.00
23							10.00	10.00
24							10.00	10.00
25							10.00	10.00
26							10.00	10.00
27							10.00	10.00
28							10.00	10.00
29							10.00	10.00
30							10.00	10.00
31							10.00	10.00
MONTHLY AVGS							9.71	10.00
SUNSHINE (MINUTES) Total: Possible: Percent Possible:								
NUMBER OF DAYS WITH: SKY CONDITION CLR PTLY CLDY CLOUDY MISSING 31 MINIMUM VISIBILITY (MILES) <=0.25 <=3.0 >=7.0 0 0 29								

OBSERVATIONS AT 3-HOURLY INTERVALS LAS VEGAS, NV LAS MAY 2004 WBAN # 23169

HOUR (LST)	WEATHER			VISIBILITY (MILES)		TEMPERATURE °F		WIND		PRESSURE (INCHES HG)		SEA LEVEL	
	SKY COVER	CEILING	100'S OF FT	SATELLITE	VISIBILITY (MILES)	DRY BULB	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0436													SUNRISE: 1837
01	CLR NC				10.00	63	27	46	26	8	26	27.62	29.85
04	CLR NC				10.00	61	26	45	26	5	21	27.65	29.89
07	CLR NC				10.00	59	25	44	25	4	16	27.74	29.98
10	CLR NC				10.00	57	24	43	24	12	06	27.74	29.99
13	CLR NC				10.00	55	23	42	23	13	03	27.75	29.99
16	FEW NC				10.00	53	22	41	22	10	04	27.70	29.93
19	FEW NC				10.00	51	21	40	21	6	11	27.64	29.88
22	FEW NC				10.00	49	20	39	20	6	07	27.64	29.86
SUNRISE: 0435													SUNRISE: 1838
01	CLR NC				10.00	68	34	51	28	8	26	27.64	29.87
04	CLR NC				10.00	64	27	47	25	3	20	27.66	29.89
07	FEW NC				10.00	61	25	45	24	3	05	27.70	29.93
10	FEW NC				10.00	58	23	43	23	5	07	27.69	29.91
13	BKN 250				10.00	55	21	41	21	7	14	27.61	29.82
16	BKN 250				10.00	52	20	40	20	8	19	27.53	29.74
19	BKN 250				10.00	49	19	38	19	9	23	27.51	29.72
22	SCT NC				10.00	46	18	36	18	5	20	27.55	29.76
SUNRISE: 0434													SUNRISE: 1839
01	SCT NC				10.00	78	33	55	19	10	22	27.54	29.75
04	FEW NC				10.00	71	30	51	22	0	00	27.55	29.75
07	SCT NC				10.00	65	27	46	25	3	12	27.58	29.79
10	BKN 250				10.00	57	23	42	23	5	31	27.56	29.77
13	BKN 250				10.00	50	20	38	20	10	17	27.56	29.77
16	BKN 250				10.00	43	17	34	17	14	22	27.49	29.68
19	BKN 250				10.00	36	14	30	14	25	27	27.42	29.62
22	BKN 250				10.00	29	11	26	11	23	27	27.43	29.62
SUNRISE: 0433													SUNRISE: 1840
01	BKN 250				10.00	84	38	59	19	12	24	27.44	29.63
04	BKN 250				10.00	78	36	56	22	14	20	27.44	29.62
07	BKN 250				10.00	71	33	52	25	5	23	27.46	29.65
10	OVC 250				10.00	65	30	48	28	0	00	27.49	29.70
13	BKN 250				10.00	58	27	44	27	5	36	27.50	29.70
16	BKN 250				10.00	50	23	40	26	13	19	27.44	29.63
19	BKN 250				10.00	43	20	36	23	15	20	27.39	29.58
22	BKN 250				10.00	36	17	33	18	14	22	27.38	29.58
SUNRISE: 0433													SUNRISE: 1841
01	BKN 250				10.00	82	38	58	21	9	23	27.43	29.62
04	BKN 250				10.00	75	35	54	23	0	00	27.42	29.61
07	OVC 250				10.00	68	32	50	26	0	00	27.42	29.61
10	OVC 250				10.00	60	28	46	29	0	00	27.48	29.67
13	BKN 250				10.00	52	25	42	28	9	19	27.51	29.71
16	BKN 250				10.00	44	22	38	26	17	21	27.50	29.70
19	BKN 250				10.00	36	19	34	24	16	22	27.49	29.69
22	BKN 250				10.00	29	16	31	22	13	22	27.48	29.67
SUNRISE: 0432													SUNRISE: 1842
01	SCT NC				10.00	74	39	58	23	16	19	27.42	29.61
04	SCT NC				10.00	71	37	55	26	13	18	27.48	29.67
07	SCT NC				10.00	67	34	52	29	10	17	27.51	29.71
10	BKN 250				10.00	60	30	48	30	9	19	27.50	29.70
13	SCT NC				10.00	52	26	42	30	8	20	27.49	29.69
16	BKN 250				10.00	44	22	38	29	16	22	27.48	29.67
19	BKN 250				10.00	36	19	34	26	13	22	27.48	29.67
22	BKN 250				10.00	29	16	31	23	10	22	27.51	29.71
SUNRISE: 0431													SUNRISE: 1843
01	CLR NC				10.00	74	40	56	29	13	20	27.52	29.72
04	CLR NC				10.00	68	41	54	38	8	20	27.54	29.76
07	FEW NC				10.00	60	36	53	29	15	18	27.59	29.80
10	FEW NC				10.00	53	31	56	21	17	18	27.59	29.80
13	BKN 250				10.00	45	27	51	16	20	23	27.55	29.76
16	BKN 250				10.00	38	23	47	16	15	20	27.52	29.73
19	BKN 250				10.00	31	20	43	16	15	20	27.52	29.73
22	SCT NC				10.00	24	17	39	16	14	22	27.52	29.74
SUNRISE: 0430													SUNRISE: 1844
01	SCT NC				10.00	70	40	54	34	13	21	27.56	29.77
04	FEW NC				10.00	67	38	52	35	12	20	27.56	29.78
07	SCT NC				10.00	63	36	50	32	12	18	27.60	29.82
10	BKN 250				10.00	57	33	55	21	8	20	27.60	29.82
13	BKN 250				10.00	50	29	51	17	14	22	27.53	29.75
16	BKN 250				10.00	43	26	48	17	13	23	27.47	29.68
19	BKN 250				10.00	36	23	45	19	13	22	27.46	29.67
22	BKN 250				10.00	29	20	42	24	12	21	27.51	29.73
SUNRISE: 0429													SUNRISE: 1845
01	BKN 250				10.00	68	41	54	38	10	18	27.53	29.75
04	BKN 250				10.00	63	41	52	45	9	18	27.53	29.75
07	BKN 250				10.00	57	38	53	32	5	19	27.58	29.80
10	OVC 250				10.00	50	34	56	27	3	VR	27.58	29.80
13	BKN 250				10.00	43	30	59	20	13	19	27.53	29.75
16	BKN 250				10.00	36	27	56	19	10	21	27.48	29.69
19	BKN 250				10.00	29	24	53	24	8	23	27.48	29.69
22	BKN 250				10.00	22	21	50	25	8	20	27.49	29.71
SUNRISE: 0429													SUNRISE: 1845
01	BKN 250				10.00	72	41	55	33	10	18	27.49	29.69
04	BKN 250				10.00	69	42	55	38	7	16	27.49	29.69
07	OVC 250				10.00	63	41	55	34	9	18	27.50	29.72
10	OVC 250				10.00	57	38	53	27	14	20	27.49	29.70
13	BKN 250				10.00	50	34	56	24	18	24	27.43	29.63
16	BKN 250				10.00	43	31	53	21	17	24	27.38	29.58
19	SCT NC				10.00	36	28	50	21	9	22	27.39	29.60
22	SCT NC				10.00	29	25	47	27	9	20	27.44	29.64
SUNRISE: 0428													SUNRISE: 1846
01	SCT NC				10.00	71	42	55	35	13	19	27.46	29.66
04	SCT NC				10.00	66	39	52	37	10	19	27.47	29.67
07	SCT NC				10.00	60	36	54	35	6	25	27.52	29.74
10	BKN 250				10.00	53	33	56	26	7	20	27.53	29.75
13	SCT NC				10.00	46	30	56	20	10	19	27.48	29.68
16	BKN 250				10.00	39	27	53	16	14	21	27.42	29.63
19	BKN 250				10.00	32	24	50	15	13	24	27.44	29.64
22	BKN 250				10.00	25	21	47	14	5	22	27.46	29.67

LAS VEGAS, NV
MAY 2004
LAS
WBAN # 23169

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUR (LST)	SKY COVER			SATELLITE OBSERVATION TIME (LST)	VISIBILITY (MILES)	WEATHER	TEMPERATURE F		WIND SPEED (MPH) DIRECTION TENS OF DEG	PRESSURE (INCHES, HG)	SEA LEVEL
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)				DRY BULB	WET BULB			
MAY 25											
SUNRISE: 0428											
01	CLR	NC	71	35	53	27	71	17	27.49	29.69	
04	CLR	NC	67	31	27	33	10	19	27.49	29.70	
07	CLR	NC	71	41	55	34	7	17	27.53	29.75	
10	CLR	NC	80	36	59	23	8	14	27.52	29.74	
13	FEW	NC	86	35	59	17	6	25	27.47	29.67	
16	FEW	NC	88	37	60	16	12	21	27.42	29.62	
19	FEW	NC	82	33	56	17	12	26	27.45	29.65	
22	CLR	NC	77	40	57	26	13	36	27.51	29.72	
MAY 26											
SUNRISE: 0427											
01	CLR	NC	70	39	54	32	3	25	27.52	29.74	
04	CLR	NC	69	40	54	35	10	02	27.54	29.75	
07	CLR	NC	72	42	56	34	3	VR	27.59	29.81	
10	FEW	NC	80	38	57	22	3	VR	27.59	29.80	
13	FEW	NC	85	38	59	19	7	04	27.54	29.76	
16	FEW	NC	85	39	59	20	0	00	27.49	29.71	
19	BKN	140	85	37	59	18	3	16	27.49	29.70	
22	BKN	140	79	37	57	22	7	23	27.52	29.73	
MAY 27											
SUNRISE: 0427											
01	SCT	NC	75	37	55	25	9	20	27.53	29.74	
04	CLR	NC	72	38	54	29	6	24	27.56	29.77	
07	CLR	NC	76	40	56	27	3	28	27.62	29.83	
10	FEW	NC	87	48	64	26	8	09	27.63	29.84	
13	FEW	NC	95	50	67	22	7	VR	27.55	29.75	
16	FEW	NC	96	52	68	23	7	VR	27.50	29.70	
19	SCT	NC	91	49	65	24	13	22	27.50	29.70	
22	FEW	NC	86	47	63	26	17	20	27.52	29.71	
MAY 28											
SUNRISE: 0426											
01	SCT	NC	80	43	59	27	13	20	27.51	29.70	
04	SCT	NC	76	43	58	31	12	18	27.50	29.69	
07	SCT	NC	79	48	61	34	13	16	27.49	29.69	
10	BKN	250	85	49	63	29	17	22	27.49	29.68	
13	BKN	220	87	52	65	30	17	19	27.43	29.62	
16	SCT	NC	88	53	66	30	20	20	27.36	29.56	
19	SCT	NC	82	52	64	35	16	21	27.35	29.54	
22	CLR	NC	75	51	61	43	18	20	27.37	29.57	
MAY 29											
SUNRISE: 0426											
01	CLR	NC	72	49	59	44	8	20	27.39	29.59	
04	CLR	NC	68	49	57	51	5	25	27.46	29.66	
07	FEW	NC	75	51	61	43	9	35	27.53	29.74	
10	FEW	NC	80	46	60	30	14	05	27.57	29.78	
13	SCT	NC	84	46	62	27	9	01	27.54	29.76	
16	FEW	NC	87	42	61	21	16	36	27.51	29.72	
19	CLR	NC	85	44	60	21	9	32	27.51	29.72	
22	CLR	NC	81	35	57	19	14	32	27.57	29.77	
MAY 30											
SUNRISE: 0426											
01	CLR	NC	78	35	56	21	15	35	27.61	29.82	
04	CLR	NC	72	33	52	24	8	06	27.67	29.89	
07	CLR	NC	74	37	55	26	10	05	27.73	29.95	
10	CLR	NC	80	40	58	24	3	36	27.74	29.96	
13	CLR	NC	85	43	61	23	7	11	27.67	29.89	
16	CLR	NC	91	45	64	20	6	VR	27.59	29.80	
19	CLR	NC	88	43	62	21	5	12	27.57	29.78	
22	CLR	NC	84	44	61	25	7	23	27.59	29.80	

3-HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky observed. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No ceiling detected. & = Original observation contained additional weather elements. See page 3 for additional notes.

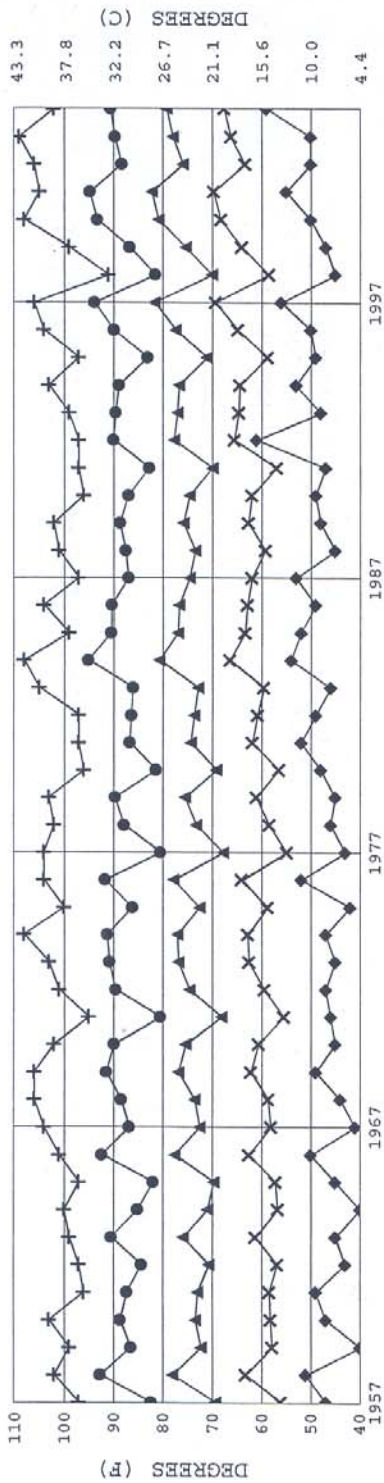
SUMMARY BY HOUR

HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CELLOMETER	EFF CLD AMT	DRY BULB	DEW POINT	RELATIVE HUMIDITY	STATION PRESSURE (INCHES, HG)	SEA LEVEL	VISIBILITY (MILES)	WIND SPEED (MPH)	DIRECTION	SPEED	DIRECTION
01			73	34	25	27.56	29.77	10.00	10	10	7	20
02			72	34	26	27.56	29.77	10.00	9	6	20	20
03			71	34	27	27.56	29.77	10.00	8	6	19	19
04			69	34	29	27.57	29.78	10.00	9	6	20	21
05			68	34	31	27.58	29.80	10.00	9	5	20	20
06			70	35	32	27.60	29.82	10.00	7	3	19	19
07			73	35	35	27.61	29.83	10.00	9	3	20	20
08			77	35	35	27.62	29.84	10.00	8	2	19	19
09			79	35	35	27.62	29.84	10.00	9	4	19	19
10			82	35	37	27.62	29.84	10.00	9	4	19	19
11			84	36	38	27.61	29.82	10.00	8	5	18	18
12			86	37	39	27.58	29.80	9.87	8	6	20	20
13			88	36	40	27.56	29.77	9.94	11	8	20	20
14			89	37	41	27.54	29.75	9.94	11	7	21	21
15			89	37	41	27.52	29.73	10.00	11	7	21	21
16			89	37	41	27.51	29.71	10.00	11	8	22	22
17			88	37	40	27.50	29.71	10.00	12	8	22	22
18			87	37	40	27.50	29.71	10.00	11	9	21	21
19			85	35	38	27.51	29.71	10.00	10	7	21	21
20			83	34	37	27.52	29.73	10.00	9	8	22	22
21			81	34	36	27.54	29.74	10.00	10	8	22	22
22			78	34	35	27.54	29.75	9.84	10	7	23	23
23			77	34	35	27.55	29.75	9.90	11	8	22	22
24			75	34	34	27.55	29.75	10.00	10	7	21	21

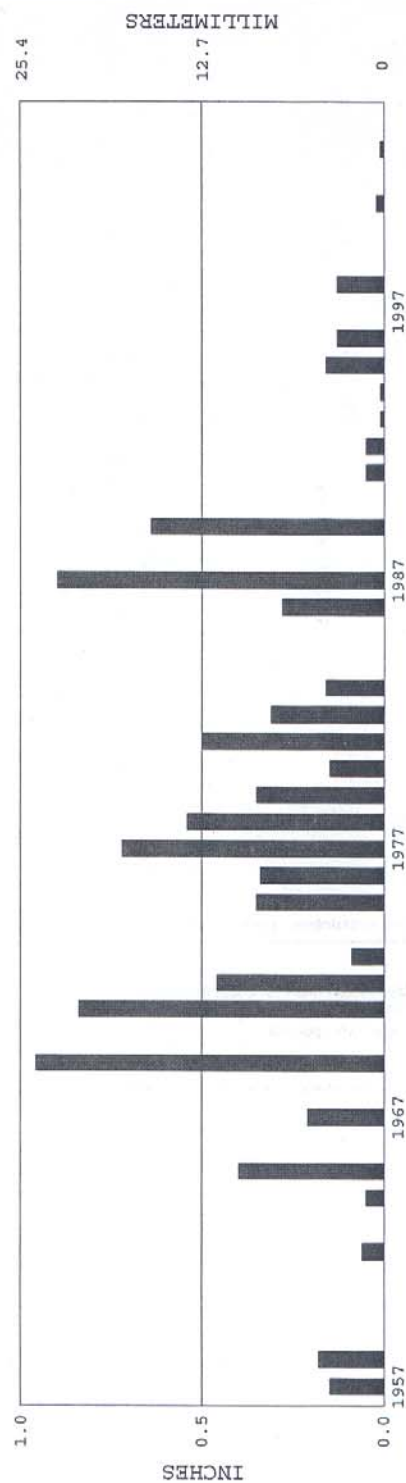
Attachment 2

Published By: National Climatic Data Center

LAS VEGAS, NV MAY TEMPERATURES



LAS VEGAS, NV MAY PRECIPITATION





MAY 2004
LAS VEGAS, NV

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost is \$29 for online delivery (including back issues) compared to \$34 for offline delivery.** To order this and other subscriptions online with your credit card, go to: **www.ncdc.noaa.gov** and choose subscriptions.

We welcome your questions or comments, please contact us at
Toll Free Number (866) 742-3322 (voice)
Fax Number : (304) 726-4409
TDD : 828-271-4010
or Email : ncdc.info@noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

United States
Department of Commerce

National Oceanic and
Atmospheric Administration

National Environmental, Satellite
Data, and Information Service

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19

OFFICIAL BUSINESS, PENALTY FOR PRIVATE USE \$300

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

344772004310
CLARK COUNTY DEPT AIR QUALITY MNGT
FEMI DURSINMI
PO BOX 5571776
LAS VEGAS NV 89155

For address correction, please return a photocopy of this page to Subscription Services indicating changes

Attachment 3: High Wind Notice to Dust Permit Holders



HIGH WIND NOTICE
Attention Dust Control Permit Holders
Contractors and Stationary Sources

The National Weather Service has forecast strong sustained winds in excess of 25 mph with gust of 45 mph, are expected for Monday, May 10, 2004.

The Department of Air Quality and Environmental Management (DAQEM) directs each permittee to immediately their site and employ Best Available Control Measures (BACM) to stabilize all disturbed soils to reduce wind blowing dust. Permittees with multiple sites should contact each site Superintendent to ensure compliance with the DAQEM Air Quality Regulations.

DAQEM Compliance Officers will inspect construction and stationary source sites during the wind episode and any observed air quality violation will receive a Notice of Violation (NOV).

Please direct questions about this Wind Advisory to a DAQEM Compliance Supervisor at 702-455-5942.



Attachment 4 News Release

Public Communications ■ 500 S. Grand Central Parkway, 6th Fl., Las Vegas, NV 89155-1111 ■ Fax: (702) 455-3558

Contact: **Stacey Welling**
Sr. Public Information Officer

Phone: **(702) 455-3546**
Cell: **(702) 378-8970**
E-mail: stac@co.clark.nv.us

For Immediate Release

Monday, May 10, 2004

Air Quality Advisory Issued For Dust Strong Winds With 45-Mile-Per-Hour Gusts Predicted Today

With strong winds expected in Southern Nevada throughout most of the day, Clark County Air Quality officials are advising residents and operators of local construction sites to brace for blowing dust and higher levels of PM-10.

The Las Vegas office of the National Weather Service has a wind advisory in effect through late this evening. Sustained winds of 25 to 35 miles an hour with gusts of 45 mile per hours are expected in the valley. Dry, windy conditions tend to make the valley's PM-10 problems worse. PM-10 stands for particulate matter, primarily dust, 10 microns or less. It's a type of inhalable air pollution that aggravates respiratory diseases such as bronchitis or asthma.

Under air quality advisory conditions, children, seniors and people with chronic respiratory problems are urged to stay indoors. All residents should limit outdoor exercise.

As part of today's advisory, officials also are notifying construction site operators to take steps to check and stabilize their property for blowing dust and debris as required by local air quality regulations. The Las Vegas Valley currently does not meet the federal 24-hour air quality standard for PM-10. Air Quality officials have implemented several measures to improve local air quality, including a 24-hour dust complaint hotline. Call 385-DUST (3878) to report excessive amounts of blowing dust. Officials also recommend the following tips to keep dust down:

- Drive slowly on unpaved roads.
- Don't take short cuts across vacant lots.
- Reduce fireplace wood-burning.
- Ride off-road vehicles outside the urban areas of the Las Vegas Valley.
- For information about current air quality conditions, visit the monitoring section of Air Quality's website via www.accessclarkcounty.com.

###

News release also available on the Internet at www.accessclarkcounty.com

Clark County Board of Commissioners

Chip Maxfield, Chairman ■ Myrna Williams, Vice-Chair ■ Yvonne Atkinson Gates ■ Mary Kincaid-Chauncey ■ Lynette Boggs McDonald ■ Rory Reid ■ Bruce L. Woodbury / Thom Reilly, County Manager

Attachment 5



East Craig Road (BS) Monitoring Site

Attachment 5



East Craig Road (BS) Monitoring Site #320030020

Attachment 5



East Craig Road (BS) Monitoring Site #320030020

Attachment 6

Return to the [referring page](#).

Photo: [Hazy conditions](#)

[Las Vegas SUN](#)

May 11, 2004

County launching latest anti-dust campaign

By Ed Koch

[<koch@lasvegassun.com>](mailto:koch@lasvegassun.com)

LAS VEGAS SUN

With one unhealthy day caused by dust last month and threats Monday of another because of high winds, Clark County officials today were to kick off their latest anti-dust campaign to try to cut down on the pollutant in the Las Vegas Valley.

The campaign is aimed at educating residents about what causes dust problems and what can be done to avoid them -- suggestions as simple as: Do not drive on unpaved road shoulders and avoid walking across vacant, dirt-covered lots.

The Environmental Protection Agency designated the Las Vegas Valley as a "serious non-attainment area" for dust in 1993. Last week the EPA approved the county's plan to clean up the air by 2006.

"We want to keep the desert crust undisturbed," said Bob Folle, compliance manager at the county's Department of Air Quality and Environmental Management. "We are working closely with the construction industry and have received cooperation with dust control management."

There's only so much that people in Clark County can control, however. On Monday Clark County Air Quality issued an air quality advisory for dust because winds of 25 to 35 mph and gusts of 45 mph were expected.

Only the Apex air monitoring station in the northeast corner of Clark County, beyond the Las Vegas Valley, reached an unhealthy level of ozone yesterday, and then only for sensitive groups. Several other stations, however, peaked close to that level.

"We've noticed that high winds and high ozones go hand in hand," Koswan said.

Authorities are still studying the connection, but the wind may cause the air to mix with pollutants and create additional ozone, he said.

Attachment 6

Other pollutants remained at moderate levels Tuesday, Koswan said.

Folle said in such "high-wind events," the Environmental Protection Agency will not penalize the county for unhealthy readings on valley pollution monitoring stations as long as the county has done all it can do to prevent earth disturbances that add to problems the winds kick up.

That is because of the EPA's approval of the dust control plan.

The plan requires the county to issue news releases as it did Monday for high winds. It also must send wind advisory faxes to 1,200 construction firms.

Firms that do not comply are issued citations, Folle said.

"We are a front-runner on enforcement with some of the most rigorous rules in the country for dust," Folle said.

The only unhealthy day for dust this year was April 28, Folle said. There were four unhealthy days for dust last year.

The consequences for non-attainment include the potential loss of millions of dollars in federal highway funds, not to mention potential significant public health problems.

Dust "can affect the respiratory system and cause problems for children with asthma, the elderly and adults with obstructive pulmonary or lung diseases," such as bronchitis and emphysema, Clark County Health District Chief Health Officer Dr. Donald Kwalik, said.

"Also, healthy people, including long-distance runners and tennis players, should avoid strenuous activity during an air quality advisory because they, too, can suffer symptoms, including difficulty breathing."

The new anti-dust campaign will feature the character "Dusty the Dusthole" in 30-second TV commercials and ads in newspapers that will focus on efforts to keep vacant lands undisturbed. Recommendations in the ads include riding off-road vehicles outside urban areas.

Return to the [referring page](#).

Photo: [Hazy conditions](#)

[Las Vegas SUN main page](#)

Questions or problems? [Click here](#).

All contents copyright 2004 Las Vegas SUN, Inc.

Attachment 6

Las Vegas SUN

May 11, 2004



THE sun glares off the side of the Luxor as high winds stir up dust, causing hazy conditions around the valley Monday. Only the air monitor near Apex showed unhealthy levels.

MATTHEW MINARD / LAS VEGAS SUN

[Las Vegas SUN main page](#)

Questions or problems? [Click here.](#)

All contents copyright 2004 Las Vegas SUN, Inc.

Search today's edition [input] Go >> Advanced Search Recent Editions Th F S Su M T W >> Complete Archive

Wednesday, May 12, 2004 Copyright © Las Vegas Review-Journal

\$150,000 ad blitz tries to settle dust

Campaign enlists public in cutting pollution

By KEITH ROGERS REVIEW-JOURNAL

NEWS

Today's Headlines

- Obituaries Judging the Judges Binion Murder River Run Riot Election 2004 Political Corruption: Galardi Investigation Opinion Polls Road Construction Yucca Mountain Operation Iraqi Freedom E-briefing

LOOKING FOR A CAR, TRUCK, OR VAN?

Two weeks after strong winds blew dust to unhealthy levels in the Las Vegas Valley, local air quality officials launched a public awareness campaign Tuesday in hopes of combating the problem.

The \$150,000 media blitz that features a character called "Dusty the dusthole" in 30-second television commercials and "break crust, raise dust" newspaper advertisements is part of Clark County's strategy to inform the public about how to prevent dust pollution.

The awareness campaign is among tools the Department of Air Quality Management is counting on to show the Environmental Protection Agency it is doing everything possible to demonstrate compliance under a plan the EPA approved this month.

Under that plan, the Las Vegas Valley must not violate the federal, 24-hour standard for dust more than three times

Advertisement Win Tickets to The Street of Dreams Click Here to Enter!



CHANNEL DIRECTORY

CHANNEL DIRECTORY

CHANNEL DIRECTORY

Arts & Entertainment

Auto Guide

Books

Attachment 7

<u>Casinos & Hotels</u>	through 2006. If it does, the county could face federal sanctions including the eventual loss of millions of dollars in federal highway funding. The plan targets airborne particulate matter smaller than the diameter of a human hair.
<u>Community</u>	
<u>E-forums</u>	
<u>Employment</u>	
<u>Food & Dining</u>	"The EPA's approval of our plan means the EPA believes we will do what we said we will do," said Clark County Commissioner Rory Reid.
<u>Fun & Games</u>	
<u>Health & Fitness</u>	
<u>Home & Garden</u>	Reid, joined by Air Quality Management Department Director Christine Robinson and the Health District chief, Dr. Donald Kwalick, said the ads are aimed at persuading motorists not to stir up dust when driving on unpaved roads, shoulders and across vacant lots. Of particular concern is breaking the desert's crust that keeps fine, dust particles in place on windy days.
<u>Legal Center</u>	
<u>Money</u>	
<u>Obituaries</u>	
<u>Personals</u>	
<u>Real Estate</u>	Winds gusting to 44 mph on April 28 triggered a violation of the 24-hour standard at the Craig Road monitoring station. Robinson said her staff will try to convince the EPA that a natural event, persistent high winds, caused the violation and it should not count against the county.
<u>Recreation</u>	
<u>Relocation</u>	
<u>Shopping & Coupons</u>	
<u>Technology</u>	
<u>Traffic & Transportation</u>	She listed a number of factors she hopes will show the EPA that the county is doing everything possible to prevent violations, including:
<u>Travel</u>	
<u>Weather</u>	<ul style="list-style-type: none">• Paving all dirt roads in the valley since 2001 that log 150 vehicle trips per day or more;
<u>Weddings</u>	
<u>About the site</u>	<ul style="list-style-type: none">• Requiring 12,000 construction site employees to take dust control classes since 1997;

Attachment 7

Contact the R-J

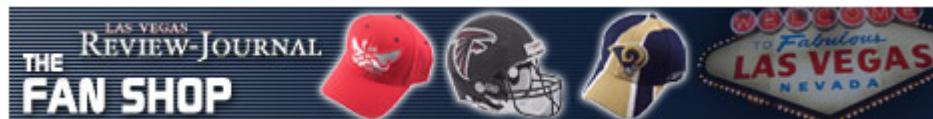
- [Subscribe](#)
- [Report a delivery problem](#)
- [Put the paper on hold](#)
- [Advertise with us](#)
- [Report a news tip/press release](#)
- [Send a letter to the editor](#)
- [Print the announcement forms](#)
- [Jobs at the R-J](#)

- Conducting 7,029 compliance inspections at construction sites and vacant lots last year.

Robinson said the effort appears to be working because construction activities were blamed on 36 percent of the valley's dust problem in 1998 but only 27 percent in 2001.

The biggest source is dust from vacant land, which accounts for 36 percent of the problem, according to the air quality officials.

Robinson hopes the public awareness campaign will have similar results to one last fall featuring the character, Dusty. The number of calls to a dust enforcement hot line tripled during that campaign.



[Nevada News](#) | [Sports](#) | [Business](#) | [Living](#) | [Opinion](#) | [Neon](#) | [Classifieds](#)
[Current Edition](#) | [Archive](#) | [Search](#) | [Print Edition](#) | [Online Edition](#)
[Contact the R-J](#) | [HOME](#)

Copyright © Las Vegas Review-Journal, 1997 - 2003
[Stephens Media Group Privacy Statement](#)

lasvegas.com