MEMORANDUM

Date: September 28, 2009

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **Pima County Department of Environmental Quality**
July 2009 Beryllium Monitoring Data

The Pima County Department of Environmental Quality's (PDEQ) Beryllium Monitoring Network sampling results from July 2009 are attached. PDEQ began ambient air beryllium monitoring in December 2007 in response to community concern that arose during the air quality permitting of Brush Ceramics Products. Brush uses beryllium in their manufacturing processes. The attached monitoring results indicate that on July 22, 2009, there was a detectable level of beryllium recorded at 0.35 nanograms/cubic meter (ng/m3). This is the first time a detectable level of beryllium has been recorded since the monitoring began. This is an extremely low level of beryllium. PDEQ is working with Dr. Eric Betterton, an independent advisor from The University of Arizona, and the Sonora Environmental Research Institute to evaluate the results of this beryllium monitoring data. PDEQ will be contacting the Sunnyside Unified School District and the Environmental Justice Action Group to notify them of the monitoring results.

Prior to July 22, 2009, beryllium monitoring data had been consistently below the detectable level of 0.265 ng/m3. On July 22, the Tucson region experienced an exceptional dust event that originated near Casa Grande. As the dust moved into the Tucson area, PDEQ issued an air quality advisory for dust/particulate matter. PDEQ recorded the highest value ever for particulate matter that day and two monitors exceeded the federal health standard (please see attached graph). In addition to the beryllium monitoring data, PDEQ will also be evaluating meteorological data such as wind speed and direction for July 22. As beryllium is a naturally occurring constituent of soil, PDEQ is evaluating any relationship the exceptional dust event had with regards to beryllium detection, as both happened on the same day.

In addition, to determine the nature of operations that were occurring at the Brush Ceramic Products facility on July 22, PDEQ has formally requested operation, maintenance, and production information for that date. Brush Ceramic Products must keep logs of these activities as a requirement of their PDEQ air quality permit.

PDEQ will continue efforts to work with The University of Arizona and others to determine the nature of the elevated beryllium level on July 22. If you have any questions or would like additional information, please contact Ursula Kramer at 740-3352.

CHH/mjk

Enclosures

c: John Bernal, Deputy County Administrator – Public Works
        Sherry Daniels, Director, Health Department Pima County Board of Health
        Ursula Kramer, Director, Environmental Quality Department

Pima County Regional Wastewater Reclamation Department
Compliance and Regulatory Affairs Office
7101 N. Casa Grande Highway

Sample Location	Sample ID	Parameter	Sample Date	Analysis Method	Analysis Date		Analysis Value	Units	PQL
Chaparral M.S.	2009081242	Beryllium	7/3/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Transportation Bldg.	2009081243	Beryllium	7/4/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Sunnyside H.S.	2009081244	Beryllium	7/5/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #1	2009081245	Beryllium	7/6/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #2	2009081246	Beryllium	7/6/2009	IO-3.5	8/21/2009	<	0.265	ng/m^3	0.265
Los Amigos Elementary	2009081247	Beryllium	7/7/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Los Ninos Elementary	2009081248	Beryllium	7/8/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Chaparral M.S.	2009081249	Beryllium	7/9/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Transportation Bldg.	2009081250	Beryllium	7/10/2009	IO-3.5	8/28/2009	<	0.265	ng/m^3	0.265
Sunnyside H.S.	2009081251	Beryllium	7/11/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #1	2009081252	Beryllium	7/12/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #2	2009081253	Beryllium	7/12/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Amigos Elementary	2009081254	Beryllium	7/13/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Ninos Elementary	2009081255	Beryllium	7/14/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Chaparral M.S.	2009081256	Beryllium	7/15/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Transportation Bldg.	2009081257	Beryllium	7/16/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Sunnyside H.S.	2009081258	Beryllium	7/17/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #1	2009081259	Beryllium	7/18/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #2	2009081260	Beryllium	7/18/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Amigos Elementary	2009081261	Beryllium	7/19/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Ninos Elementary	2009081262	Beryllium	7/20/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Chaparral M.S.	2009081263	Beryllium	7/21/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Transportation Bldg.	2009081264	Beryllium	7/22/2009	IO-3.4	9/10/2009		**0.35**	ng/m^3	0.265
Sunnyside H.S.	2009081265	Beryllium	7/23/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #1	2009081266	Beryllium	7/24/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #2	2009081267	Beryllium	7/24/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Amigos Elementary	2009081268	Beryllium	7/25/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Ninos Elementary	2009081269	Beryllium	7/26/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Chaparral M.S.	2009081270	Beryllium	7/27/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Transportation Bldg.	2009081271	Beryllium	7/28/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Sunnyside H.S.	2009081272	Beryllium	7/29/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Ocotillo Elementary #2	2009081273	Beryllium	7/30/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265
Los Amigos Elementary	2009071274	Beryllium	7/31/2009	IO-3.4	8/28/2009	<	0.265	ng/m^3	0.265

Transportation Building Dust/PM10 Data

Dust/PM10 ug/m3

Date of sample

Transportation PM10