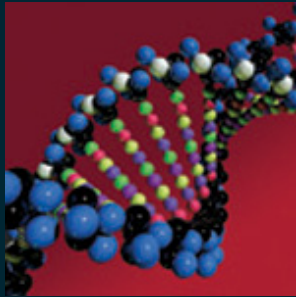


ENVIRON Independent Review for Cerritos Related to the 2002 NATA



Julia Lester, PhD

ENVIRON International Corporation

Cerritos Town Hall Meeting

August 18, 2009

ENVIRON

Background



- **USEPA release of 2002 National-Scale Air Toxics Assessment (June 24, 2009)**
- **Media coverage cited Cerritos as having the highest cancer risk in the country (> 1,200 in a million or ~30x the national average)**
- **Cerritos hired ENVIRON International**
 - International environmental consultancy
 - Experienced with air agency databases and analyses
 - Lead Consultant has over 19 years of regulatory / consulting air quality experience



ENVIRON Independent Review



- **Critical review of 2002 USEPA NATA Report**
- **Review analyses done by local (SCAQMD), state (CARB), and federal (USEPA) air agencies**
- **Assistance to City in discussions with Agencies**
- **Support to City in response to public concerns**
- **Other assistance, as needed**



Results of Independent Review



- **Errors in the USEPA analysis resulted in cancer risk levels at a Santa Fe Springs facility being overestimated by over a factor of 1000**
 - Erroneous hydrazine emissions and facility location
 - ❖ Corrected: Hydrazine cancer risk < 1 in a million
- **SCAQMD testing reliable and lead to lower cancer risk estimates (< 0.5 in a million)**
- **Corrected City of Cerritos total cancer risk levels comparable to other urban areas using either USEPA or SCAQMD methods**

The 2002 USEPA NATA



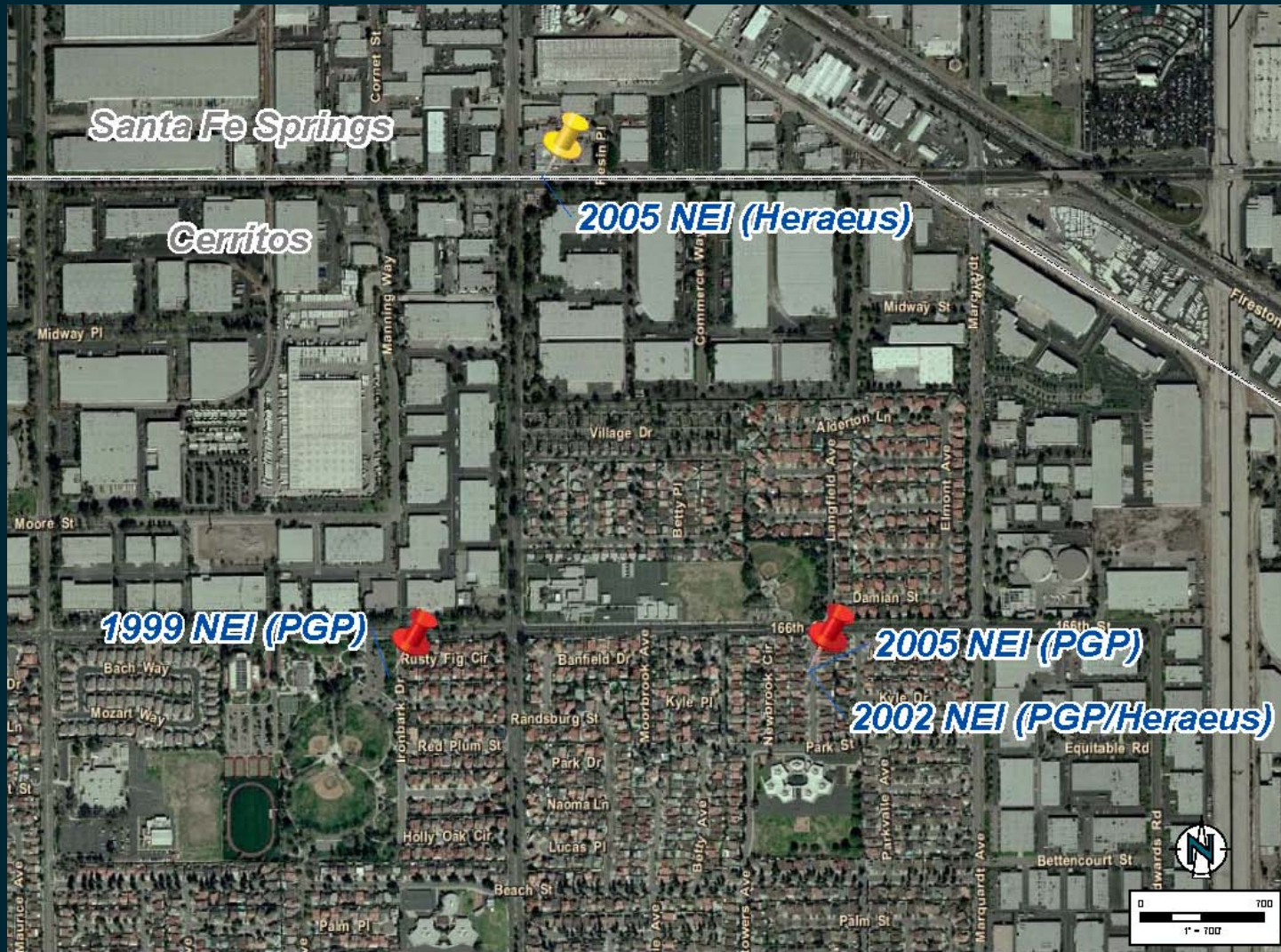
- **The National-Scale Air Toxics Assessment (NATA)**
 - Estimated risk of cancer and other serious health effects from breathing air toxics
- **On June 24, 2009, USEPA issues its 2002 NATA data (but not a written Report)**
- **Media report that highest air toxics risk in the nation was in Cerritos**

ENVIRON Review of 2002 NATA



- **ENVIRON reviewed the 2002 NATA data and found that in assessing risk from a metals recovery facility, USEPA:**
 - placed the source of emissions in wrong location = 0.6 miles south of actual location (and in front of a Cerritos home)
 - used outdated, 20-year old emission levels that were grossly overestimated = 1,250 pounds/year
- **Wrong Location + Wrong Emissions = Wrong Risk
≈1,200 in a million**

Facility Location in the National Emissions Inventory (NEI)



Re-evaluation of 2002 NATA



- **Placed the source of emissions in correct location**
- **Used most recently reported emissions from facility (10 pounds / year)**
- **Corrected Location + Corrected Emissions
= Corrected Risk
< 1 in a million**
- **With correction of this facility's hydrazine cancer risk, total USEPA-method cancer risk levels in Cerritos (60 to 70 in a million) are comparable to other local areas and urban areas nationwide**



SCAQMD Source Testing Results



- **The day after initial media reports, SCAQMD began source tests at the Heraeus metals processing facility in Santa Fe Springs**
- **SCAQMD determined that:**
 - hydrazine emissions were less than 2 pounds per year
 - risk levels were < 0.5 in a million
 - *“These results have shown that this facility does not pose a significant cancer risk to Cerritos or the community surrounding the plant”*
(SCAQMD Press Release, July 9, 2009)

Review of Source Testing Results



- **At the request of the City, ENVIRON provided an independent review of SCAQMD source testing**
- **ENVIRON found that, even with the rapid response of the SCAQMD, the:**
 - report contained no significant errors or other problems that would affect test results
 - reported test results can be considered reliable
- **ENVIRON assessment agrees with SCAQMD's corrected hydrazine risk calculation for Heraeus facility (< 1 in a million)**

Other Issues



- **SCAQMD's latest Multiple Air Toxics Exposure Study (MATES III): ~1,200 in a million (Cerritos)**
 - In contrast, corrected NATA results are ~ 65 in a million
- **Why?**
 - USEPA and California use different methods to assess cancer risk from diesel exhaust
 - Continuing scientific controversy over correct approach and data that should be used
- **IMPORTANT!**
 - Comparing to California cities: SCAQMD results
 - Comparing to cities in other states: corrected USEPA results



Why Did This Happen?



- **Multiple agency air toxics databases exist with different information**
 - Databases, which may have contradictory information, have multiple uses (many of which they were not designed for)
- **Insufficient coordination among local, state and federal air agencies for air toxics databases**
 - Old, erroneous data can stay in local, state and federal air agency databases without correction
- **Insufficient quality checking of both input data and final results by USEPA before releasing 2002 NATA**

Additional Assistance



- **Assisting in response to public questions**
 - SCAQMD vs. USEPA risk results and methods
 - What is hydrazine?
 - Impact of freeways and diesel truck emissions

- **Review of data for Heraeus and other facilities**
 - Reported air toxics emissions
 - Chemical Inventories
 - Safety and Handling Procedures
 - Emergency Response Plans

ENVIRON Recommendations



- **ENVIRON concurs with SCAQMD's July 10th recommendations for future NATAs**
 - Better interagency coordination and formal review protocols for air toxics databases and analyses
 - Discussion with “high-risk” communities before release
 - Better documentation and risk communication by USEPA
- ❖ **On-going regular status reports and draft review protocols should be made public**
- **USEPA, California, and stakeholders should work together to resolve diesel exhaust risk scientific and regulatory issues**

