



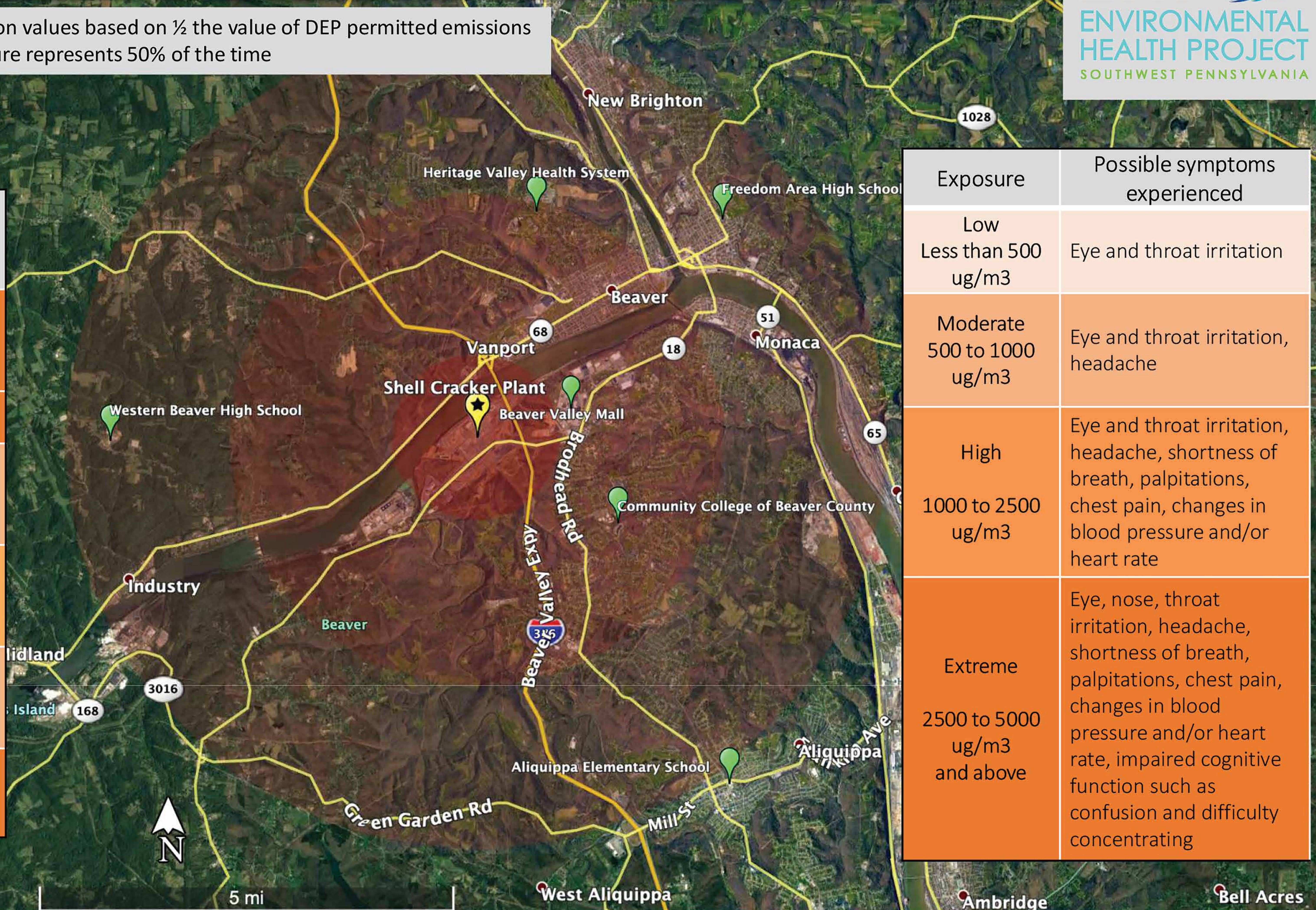


# EHP Exposure Modeling of the Shell Cracker Plant

**Legend**

-  1 Mile
-  3 Miles
-  5 Miles
-  Shell Cracker Plant

- Emission values based on ½ the value of DEP permitted emissions
- Exposure represents 50% of the time



| Location  | Exposure to emissions (ug/m3) |
|---|-------------------------------|
| Heritage Valley Health System                     | 2,861                         |
| CCBC  | 2,861                         |
| Aliquippa Elementary School                       | 715                           |
| Western Beaver High School                        | 1,073                         |
| Freedom Area High School                          | 715                           |
| Beaver Valley Mall (Head Start & Office on Aging) | 13,234                        |

| Exposure                                | Possible symptoms experienced  |
|---|--|
| Low<br>Less than 500 ug/m3              | Eye and throat irritation  |
| Moderate<br>500 to 1000 ug/m3           | Eye and throat irritation, headache  |
| High<br>1000 to 2500 ug/m3              | Eye and throat irritation, headache, shortness of breath, palpitations, chest pain, changes in blood pressure and/or heart rate  |
| Extreme<br>2500 to 5000 ug/m3 and above | Eye, nose, throat irritation, headache, shortness of breath, palpitations, chest pain, changes in blood pressure and/or heart rate, impaired cognitive function such as confusion and difficulty concentrating |



5 mi

Bell Acres