



Implementing Environmental Justice in Air Enforcement

June 15, 2011

United States Environmental Protection Agency Region 5
2011 NACAA Joint Permitting and Enforcement Workshop
Chicago, IL

U.S. EPA Region 5

- Six States: Illinois, Indiana, Ohio, Michigan, Minnesota and Wisconsin
- 30 Tribal Areas
- Industrial “Rust Belt”



Environmental Justice (EJ)

- **Feb. 11, 1994 Executive Order 12898:**

http://www.epa.gov/compliance/ej/resources/policy/exec_order_12898.pdf

- **In Draft Plan EJ 2014, EPA will seek to meaningfully engage with communities and stakeholders.**

<http://www.epa.gov/compliance/ej/resources/policy/plan-ej-2014.pdf>

Region 5 Demographics (U.S. Census Data)

- **Total Population:** **51,676,882**
- **Children Under 5 Years Old:** **3,410,380**
- **Senior Citizens (Over 65)** **6,789,897**
- **Minorities** **9,787,889**
- **Below Poverty Level** **6,464,322**

Traditional Sector Enforcement

- **Region 5 has achieved air emission reductions at the following industrial sectors:**
 - Coal-fired Boilers
 - Cement Kilns
 - Acid Plants
 - Secondary Metals
 - Chemical Plants
 - Refineries
- **Sector-based investigations**



Region 5 Air Emission Reductions (FY 2011)

R5's Emission Reductions	Tons
SO ₂	60,199
NOx	8,598
PM _{2.5}	434
VOC	9
Non-monetized pollutants (Cd, Hg, CFC, H ₂ SO ₄ , CO)	1,348
Total	70,588

Estimated Benefits (projected for 2015) of Region 5 Emission Reductions in the First Half of FY 2011	Total (Rounded)
Monetized benefits (Pope, 2010\$)	\$2.7 billion
Monetized benefits (Laden, 2010\$)	\$6.5 billion
Mortality incidence (Pope)	290
Mortality incidence (Laden)	750
Chronic Bronchitis	190
Nonfatal Heart Attacks	470
Hospital Admissions, Respiratory	72
Hospital Admissions, Cardiovascular	150
ER Visits, Respiratory	290
Acute Bronchitis	450
Work Loss Days	38,000
Asthma Exacerbation	5,000
Minor Restricted Activity Days	220,000
Upper and Lower Respiratory Symptoms	9,500

Challenges for Enforcement in Environmental Justice Areas

- Smaller local sources – lower emission reductions if you get a case
- Fewer /weaker regulations that apply
- May not know source of pollution problem
- Unrealistic expectations of local citizens

Importance of Focusing Enforcement in EJ Areas

- Close proximity of industrial sources to nearby residents/schools – Health Impacts
- EJ Sources have often not been scrutinized - State and Federal enforcement agencies have often focused on larger emitters (sectors) in non-EJ areas
- Citizens in EJ areas have felt underserved

Region 5 Air Enforcement Approach

- Community Group Outreach:
 - Set up meetings with local citizen groups
 - Problem facilities in local area
 - SEP ideas that benefit local communities
 - Groups are typically excited to discuss their concerns
- Targeting Local Areas for Enforcement
 - Census tract data
 - Health risk
 - Air quality

Questions?

**Please feel free to contact me,
if you have any further questions:**

**Kushal Som
Environmental Engineer
U.S. EPA Region 5 Office
(312) 353-5792**