

What Can Be Done to Improve Air Quality in San Antonio?

Monty J. McGuffin, BS, RS
Senior Sanitarian

Food & Environmental Division, San Antonio, Texas ~ San Antonio Metropolitan Health Department

Introduction

The citizens and leadership of the city of San Antonio have long made famous the idea of a big city with small town charm, however, in a time when the environment and climate are changing so fast it's almost impossible to keep up with, it is imperative for people to try to make our city a healthier place to live.

Over the previous five to ten years, the metro area has grown in astronomical proportions in regards to population and housing development. Along with the explosion of growth, more construction and more people mean more pollution.

Two main issues that come with a region suffering from poor air quality are extremely poor health effects and the EPA rating of a non-attainment city. The poor health effects will contribute major problems to persons with asthma, emphysema, and overall poor respiratory functions.

The point of focus will be toward educating the public and private industry regarding the effects of becoming a non-attainment city. These ideas and any action, of course, will require support from city, county, and state leaders as well as the Alamo Area Council of Governments.

Project Goals and Objectives

Program Goal: Improve Air Quality in San Antonio Metro Area

Health Problem: Various health effects that come with an area suffering with poor air quality are increasingly high number of reported cases in regards to asthma or respiratory related issues

Outcome Objectives: By end of fiscal year 2007, try to secure addition funding to improve current Air Pollution Program for City of San Antonio

Determinant: Main hold up securing additional funding for staff and training

Impact Objective: Secure funding for an expanded air pollution program for the city of San Antonio within FY08-FY09



Figure 1. Photograph of petroleum refinery



Figure 2. Lone Star Brewery Manufacturing Facility

Project Logic Model

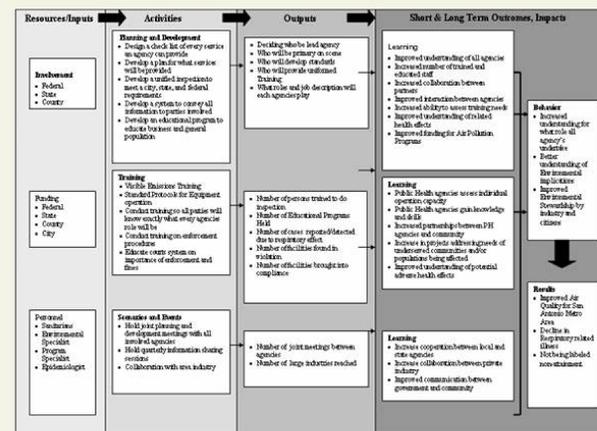


Figure 3: Project Logic Model

Flow of Resource/Inputs thru Short/Long Term Outcomes and Impacts

Behavior Over Time Graph

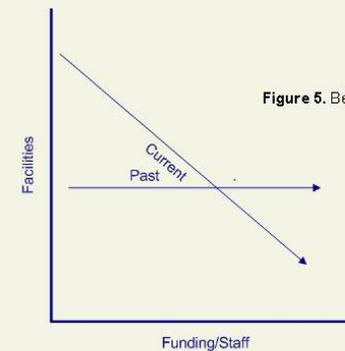


Figure 5. Behavior Over Time Graph

- TCEQ taking lead on monitoring and inspection of facilities in Metro area - program was reduced to current status
- In the past, amount of monies going into Air Pollution Program was equivalent with facilities located within City of San Antonio
- With current there is a rise in number of facilities and a decrease in funding and staffing in Air Inspections Program

Casual Loop Diagram

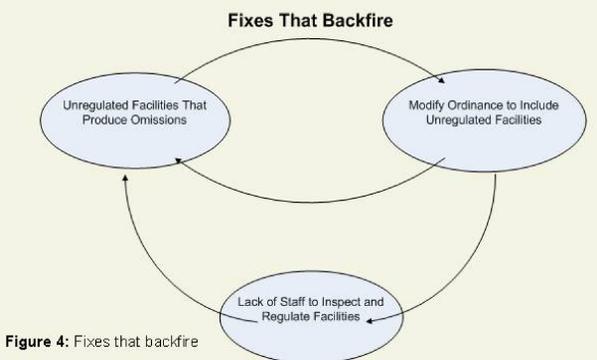


Figure 4: Fixes that backfire

- Unregulated facilities that produce omissions
- Modify ordinance to include unregulated facilities
- Lack of staff to inspect and regulate facilities

Limits of Growth

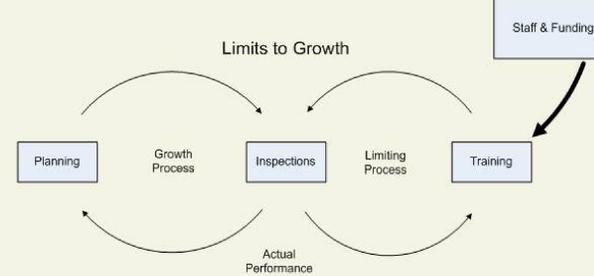


Figure 6: Staff and Funding

- Planning ~ Inspection = Growth Process
- Inspections ~ Training = Limiting Process
- Growth Process ~ Limiting Process = Actual Performance

Results

- Ground work for this project to become a reality is complete
- Reasoning, cost, and need have been expressed to target audience
- Next phase of project will be to secure funding
- Once funding is in place, will be able to move into implementation stage of project
- Include hiring of additional staff, training, and ordinance revisions
- Once new staff is totally trained, will be time to attempt to license, inspect, and educate businesses and citizens of San Antonio

Conclusion/Expected Outcomes

- Success of this project relies solely on securing additional funding from City of San Antonio
- If funding cannot be secured from city, we will continue to look for additional funds from State of Texas and available grant opportunities

References cited

- Carl Osaki, RA, MSPH, Northwest Center for Public Health Practice, *Essential Services of Environmental Health*, Available at: http://www.sboh.wa.gov/Meetings/Meetings_2002/2002-09_11/documents/Tab11_OsakiPresentation.pdf
- Robert H. Friis, *Essentials of Environmental Health*, 1st ed., Jones and Bartlett Publishers, 2006.
- Peter M. Senge, Art Kleiner, Charlotte Roberts, Richard B. Ross, Bryan J. Smith, *The Fifth Discipline Fieldbook*, Currency Doubleday, 1994.

Acknowledgments

- Center of Disease and Control
~
The National Environmental Public Health Leadership Institute
~
Lisa Corti, DVM, MPH, ACVPM, CEHP
Director
Division of Environmental Health, Florida
Department of Health

For further information

- Please contact Mr. Monty J. McGuffin, BS, RS at MontyMcGuffin@sanantonio.gov
- More information on this and related projects can be obtained at: <http://www.heartlandcenters.slu.edu:16080/ephi/finalProjects.htm>

