



2014 National Training Conference on the Toxics Release Inventory and Environmental Conditions in Communities

TOXICS RELEASE INVENTORY

A MAJOR BUILDING BLOCK OF
THE ENVIRONMENTAL JUSTICE
MOVEMENT

MAY 7 – 9, 2014
WASHINGTON, DC

Dr. Beverly Wright
Director
Deep South Center
for Environmental Justice



WARREN COUNTY, NC - 1982



- The environmental justice movement was born in rural Warren County, NC
- The community was composed of rural, poor and mostly black residents
- Over 500 demonstrators were arrested protesting the siting of a hazardous PCB landfill

REPORT BY THE U.S.

1983

General Accounting Office

Siting Of Hazardous Waste Landfills And Their Correlation With Racial And Economic Status Of Surrounding Communities

This report provides information on the racial and economic characteristics of communities surrounding four hazardous waste landfills in three southeastern States. It also describes Federal criteria for siting landfills and provides data on public participation and how the Environmental Protection Agency's (EPA's) proposed hazardous waste facility permit changes will affect it.

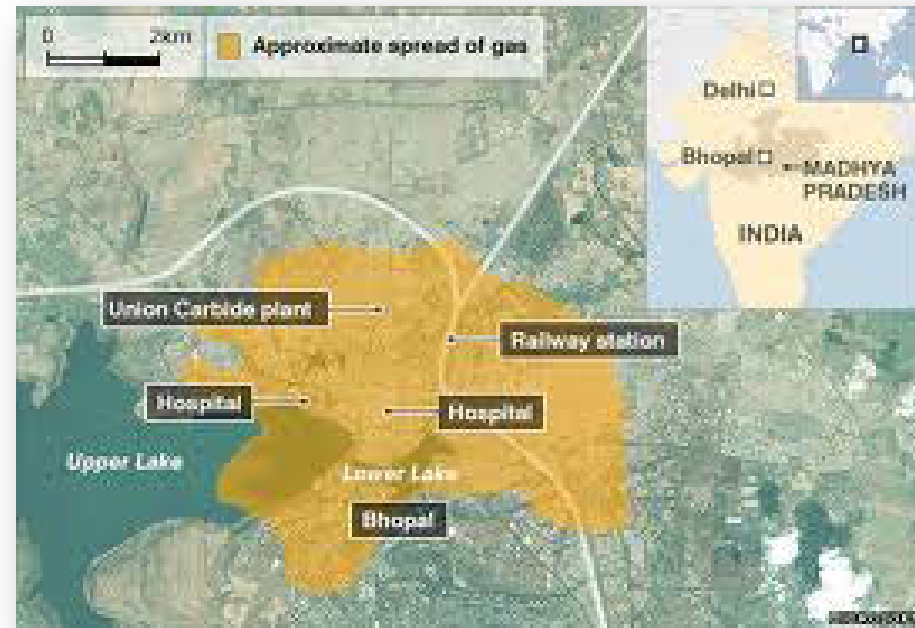


The Horrific Catalyst for Much Needed Change
THE DISASTER IN
BHOPAL, INDIA

UNION CARBIDE

The Bhopal, India Disaster

- On **December 2, 1984**, Union Carbide's pesticide plant in Bhopal, India
- Leaked **methyl isocyanate (MIC) gas** and other toxic chemicals,
- Creating a dense toxic cloud over the region
- Killing more than **8,000 people** in just a few days!



TOXIC CHEMICAL RELEASE

INSTITUTE, WEST VIRGINIA

August 11, 1985

- After completion of a safety improvement program
- Union Carbide (*now Bayer Crop Science*) once again was involved in an industrial accident at its plant in Institute, West Virginia,
- Institute, WV is the home of Historically Black College/University (HBCU) West Virginia State University
- The release of 500 gallons of highly toxic **aldchiloxin** and **methyl isocyanate**
- Caused over 100 people in this college town to be hospitalized.



West Virginia State University's campus and sports field are practically on Bayer's property, with only a chain link fence dividing the two entities.



The Louisiana Connection:

AT THE SAME TIME...

THE MISSISSIPPI RIVER CHEMICAL CORRIDOR

- An 85-mile tract of land along the Mississippi River located between New Orleans and Baton Rouge, Louisiana
- Infamously named **Cancer Alley**
- Lined with **136 petrochemical plants**
- and **7 oil refineries**

'Chemical Corridor' By 'Old Man River,' New Health Fear; [Home Edition]

J. MICHAEL KENNEDY. Los Angeles Times (pre-1997 Fulltext). Los Angeles, Calif.: May 9, 1989. pg. 1



Photo from
The Times Picayune Newspaper
Thursday, January 15, 1998

MISSISSIPPI RIVER CHEMICAL CORRIDOR

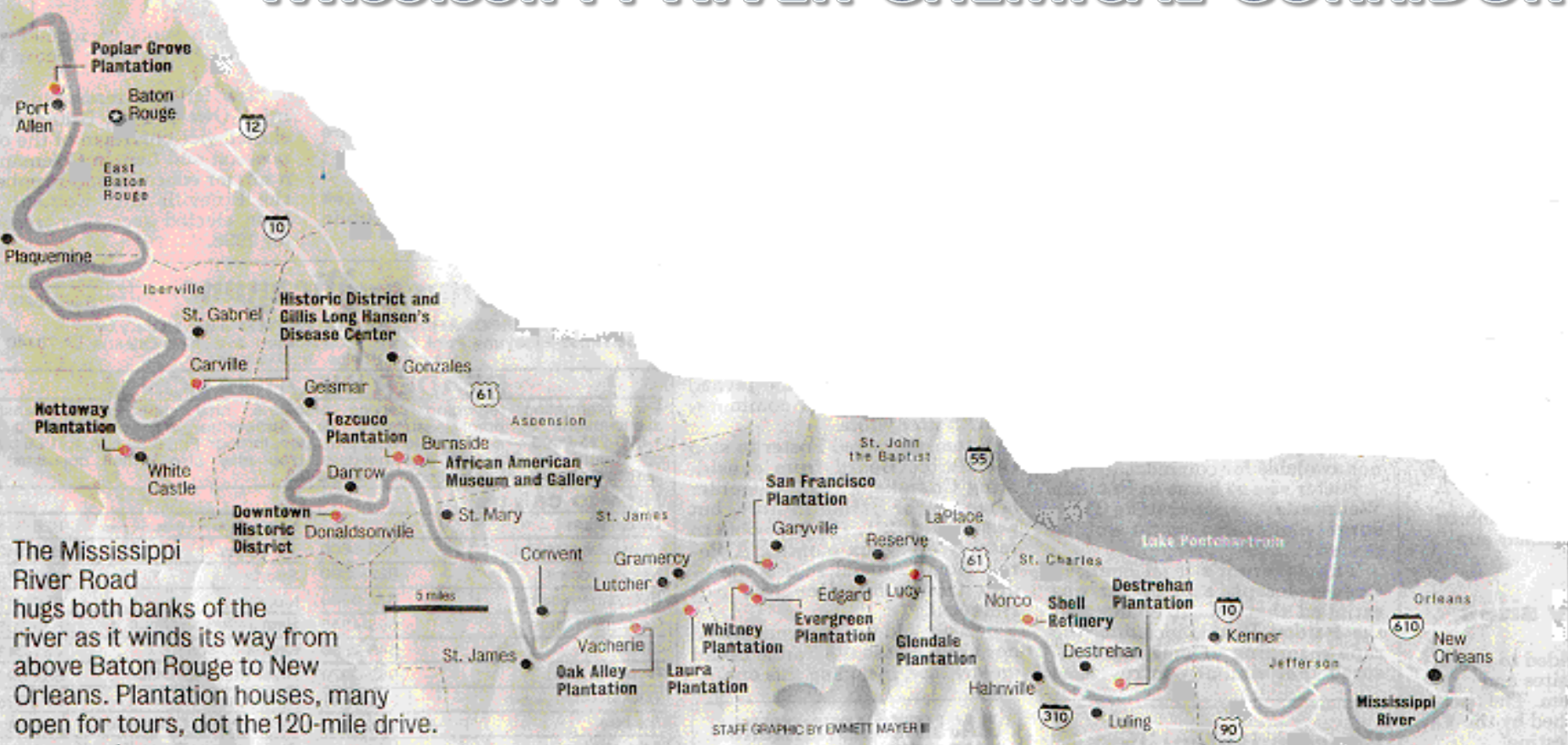


Photo from

Kate Orff, "Ecological Atlas to 'Petrochemical America'" *depicting the kinds of toxic emissions emanating from petrochemical plants along the MRCC.*
<http://dabrownstein.wordpress.com/2013/12/04/mapping-the-cancer-corridor-along-louisianas-gulf-coast/>

MISSISSIPPI RIVER CHEMICAL CORRIDOR



CANCER ALLEY

Population Demographics and Plant Location

- **People living closest to these plants in Cancer Alley**
- **wondered if their health was being compromised by the chemical emissions**
- **but had no way of determining what was being released or how much**



directly across the street from Shell Oil Refinery.

CHILDREN AT RISK

Playing in Norco, Louisiana

Children jumping rope at playground across the street from Shell Oil Refinery in Norco, Louisiana.



ON THE FENCELINE

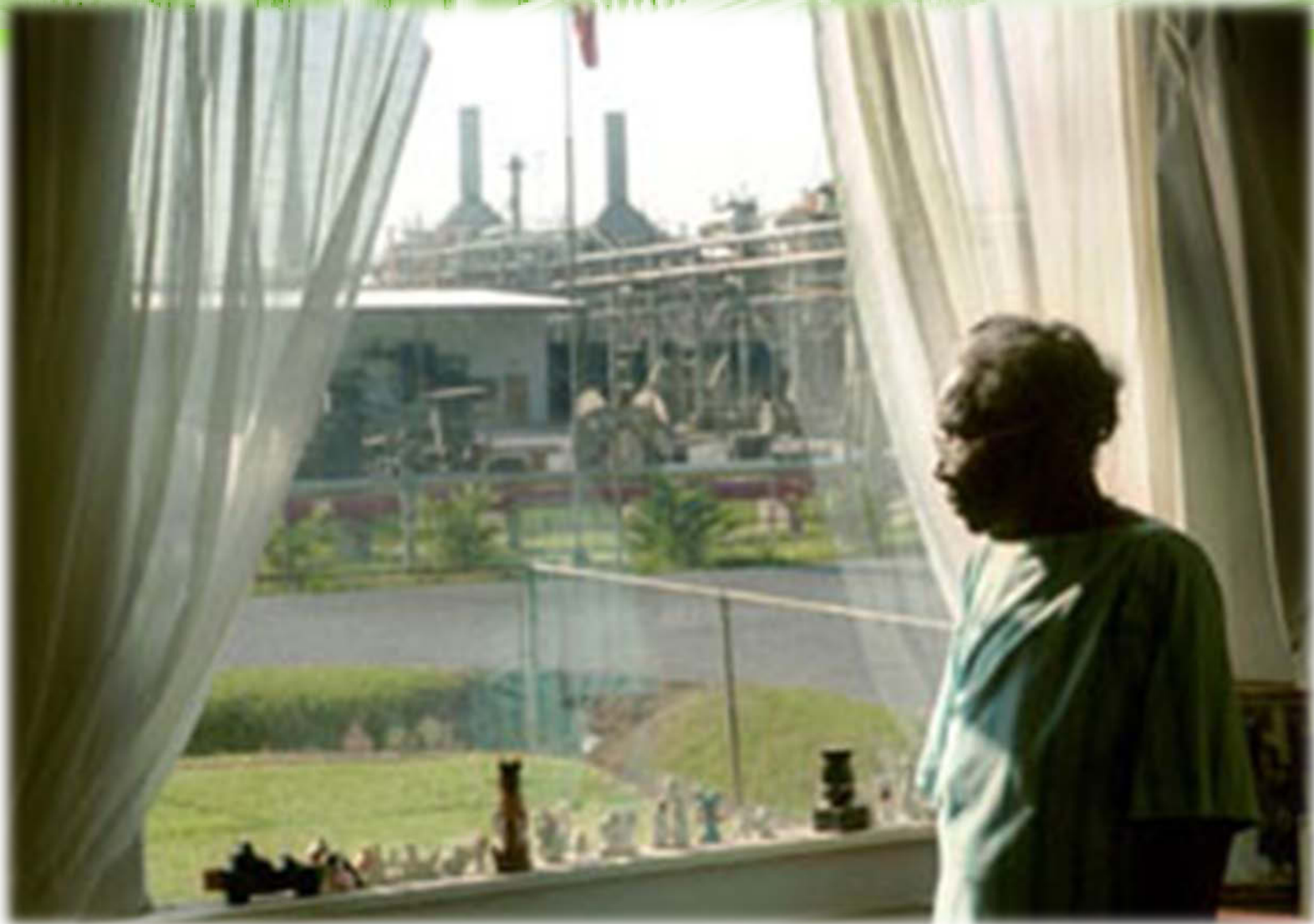
In the Diamond Community of Louisiana

**Homes in Old Diamond
Community near the
fenceline of Shell Oil
Refinery.**



LIVING IN THE SHADOW

Of Shell Oil Refinery...



ECONOMIC DEVELOPMENT TRUMPED HUMAN HEALTH

In Louisiana...

- **Facilities were heavily recruited by state and local governments as a means to stimulate economic development**
- **Cooperative agreements were written to support the growth of the oil and gas industry**
- **Guaranteeing low taxes, low wages, a non-union labor force and a lack of industry regulation**
- **The MRCC flourished while communities perished**

IN RESPONSE TO THE BHOPAL DISASTER

And the Toxic Gas Leak Incident in Institute, West Virginia

- **The Toxics Release**

- Inventory was proposed in
1985**

- **It was established in 1986
under the Emergency
Planning and Community
Right to Know Act (EPCRA)**

IMPACT OF EPCRA

On Cancer Alley Residents

- Because of this Act
- Chemical Corridor Communities
- Learned that in 1985 **700 million pounds** of extremely hazardous chemicals (**carcinogens**) were released into the
Air, water and soil in their neighborhoods.



A Paradigm Shift

THE BIRTH OF A MOVEMENT

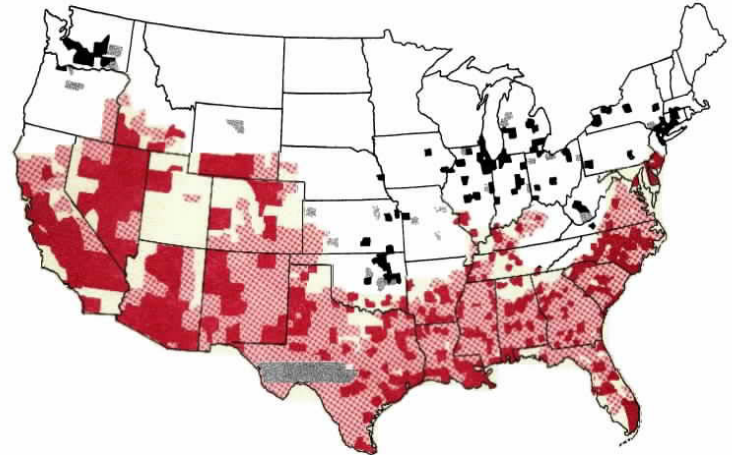
TOXIC WASTES AND RACE IN THE UNITED STATES

1987

- The United Church of Christ commissioned a national study linking race and the location of hazardous waste sites

TOXIC WASTES AND RACE In The United States

A National Report on the Racial and Socio-Economic
Characteristics of Communities
with Hazardous Waste Sites



COMMISSION FOR RACIAL JUSTICE
United Church of Christ
©1987

GRASSROOTS ACTIVISM



ENVIRONMENTAL JUSTICE PRINCIPLES ADOPTED IN OCTOBER, 1991

The First National People of Color Environmental Leadership Summit

- This summit led to the adoption of 17 basic principles of Environmental Justice

PROGRAM GUIDE



*THE FIRST NATIONAL PEOPLE OF COLOR ENVIRONMENTAL
LEADERSHIP SUMMIT*

The Washington Court on Capitol Hill
Washington, D.C.
October 24 - 27, 1991

Sponsored By
United Church of Christ
Commission for Racial Justice



GOVERNMENT RESPONSES

NATIONAL MINORITY ENVIRONMENTAL HEALTH CONFERENCE 1991

- The Agency for Toxic Substances and Disease Registry (ATSDR) convened the conference in Atlanta, GA in 1991.



THE EPA CREATES NEJAC

1993



- **The U.S. EPA created the 25 member National Environmental Justice Advisory Council (NEJAC) under the Federal Advisory Committee Act (FACA)**

EJ HEALTH AND RESEARCH SYMPOSIUM 1994

- Interagency “Health and Research Needs to Ensure Environmental Justice Symposium” held in February, 1994
- The original meeting was supposed to be a workshop of 75–100 scholars, researchers, and scientists
- This plan was abandoned and expanded to include participation by grassroots and community leaders
- The symposium was attended by over 1,000 participants
- NIEHS took lead on EJ and health issues



EJ REACHES THE WHITEHOUSE

1994

- On February 11, 1994, President Clinton signed Executive Order 12898
- EO 12898 reinforced existing two existing laws, Title VI of the Civil Rights Act of 1964 and the National Environmental Policy Act of 1969
- Present at the EO signing in the Oval Office were cabinet officials, 4 members of Congress, 4 grassroots EJ leaders, a lawyer, and two sociologists



THE DEEP SOUTH CENTER FOR ENVIRONMENTAL JUSTICE

Instituted for Action

- The DSCEJ, founded in 1992,
- Established a **Community Advisory Board**
- Composed of residents from **Mississippi River Chemical Corridor Communities**





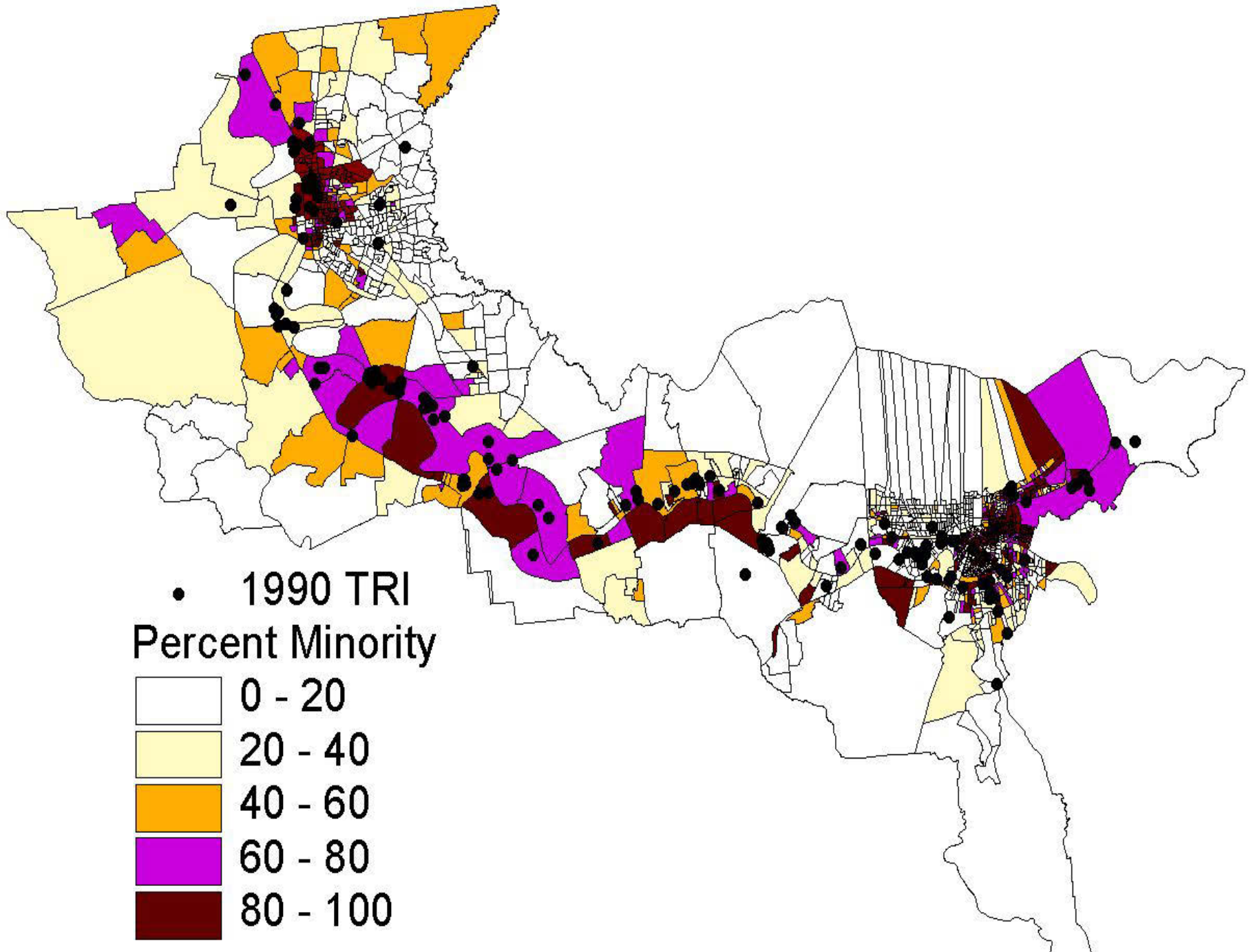
Spatial Distribution Analysis of TRI Data

FIRST MAJOR DSCEJ RESEARCH PROJECT

DISPARATE IMPACT

GIS Mapping of TRI Facilities Conducted in 1995

A DSCEJ spatial distribution analysis shows disparate impact on minority communities in the Mississippi River Chemical Corridor.



DISPARATE IMPACT

- **80% of African Americans living in the Mississippi River Chemical Corridor live within 5 kilometers or 3 miles of a polluting facility.**

ANALYSIS OF 1998 TRI DATA SHOWED

- Approximately **48%** of all TRI reporting facilities are located in the Corridor
- Corridor parishes comprised approximately **69%** (129 million pounds) of the state's total releases
- **Ascension Parish** lead the Corridor Parishes with the largest number of total releases of **over 50 million pounds**.
- **St. James** ranked top in the Corridor for **on-site land releases** with **almost 1 million pounds** and **Jefferson** ranked top in **underground injection** with **almost 22 million pounds**.



TAKING A CLOSER LOOK

**Louisiana Chemical Corridor Communities Using
TRI Data for Relocation and Facility Siting**

- **Toxic Facility Siting in Convent, LA**
- **Community Relocation in Norco, LA**



Not In My Back Yard!

Facility Siting

CONVENT, LOUISIANA



CONVENT, LA

The 1998 Shintech Case Study

- **In 1998, Japanese-owned Shintech Inc. proposed to build the world's largest polyvinyl chloride (PVC) plastics production facility in Convent, Louisiana.**

CONVENT, LOUISIANA (LOCATED IN ST. JAMES PARISH)

Proposed Site for Shintech PVC Plant in 1998

Demographics

Small rural community

82.0% Black

2,100 Persons total

45.0% residents living below poverty level

Environmental Problems

Air and water quality

Land Pollution

Soil Contamination

Ranked 3rd in the state for toxic releases

9 TRI reporting facilities

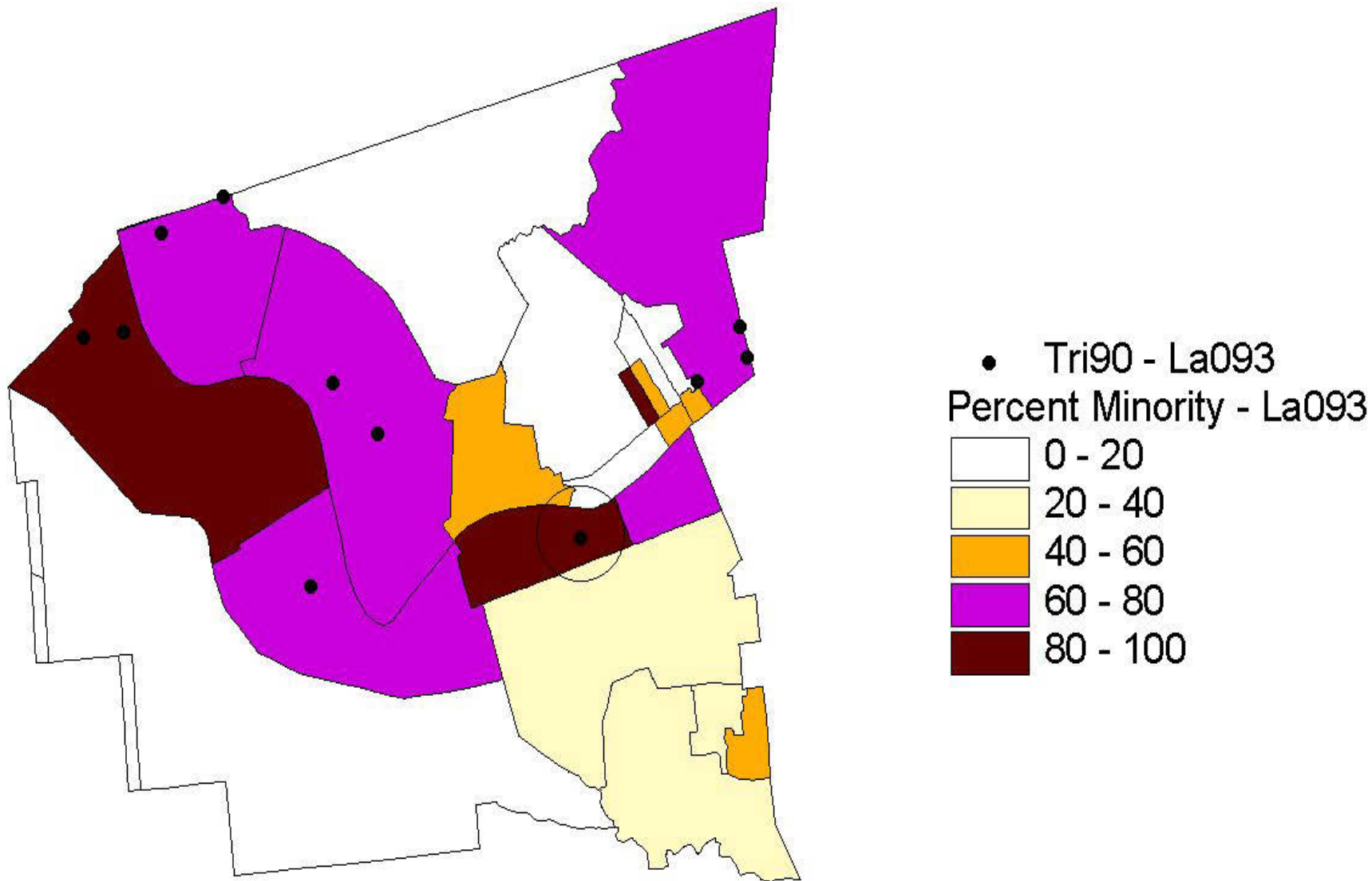
Total TRI releases and transfers

– 17,200,995 lbs.

Sources of Problem

**Located within a three mile radius
of five then operating plants.**





1998 TRI Sites in St. James Parish



THE LARGE PLANT WOULD HAVE...

- Released 600,000 pounds of toxic chemicals into the air
- Daily pumped 8 million gallons of waste water into Mississippi River
- Emitted dioxin, a carcinogenic by-product of PVC production

TRI: AN EFFECTIVE TOOL

For protecting communities from toxic emissions

On September 18, 1998,
Shintech announced that it
would not site in Convent.



Too Dangerous to Stay...

NORCO, LOUISIANA
Relocation

NORCO, LOUISIANA (LOCATED IN ST. CHARLES PARISH) Chemical Plant and Shell Norco Refinery

Demographics

Old Diamond Plantation

100.0% Black

1,020 Persons total

45.0% residents living below poverty level

Environmental Problems

Air and water quality

Land Pollution

Soil Contamination

Ranked 4rd in the state for toxic re

15 TRI reporting facilities

Total TRI releases and transfers – 1

Sources of Problem

Sandwiched between the Shell Chemical Plant and the Shell/Motiva Refinery

Located within 10 ft of the Shell Chemical Plant



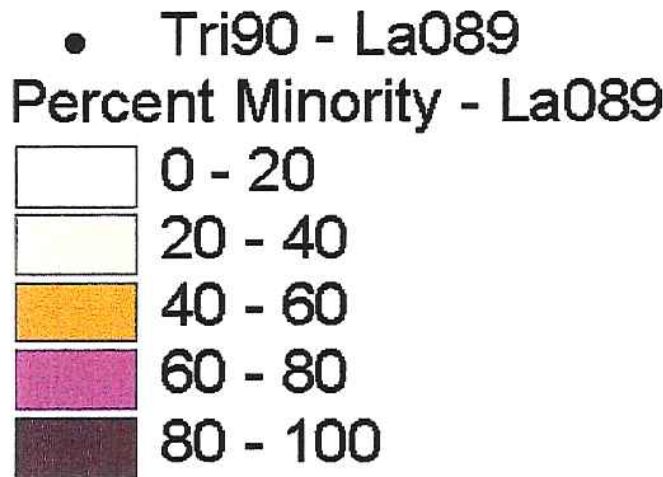
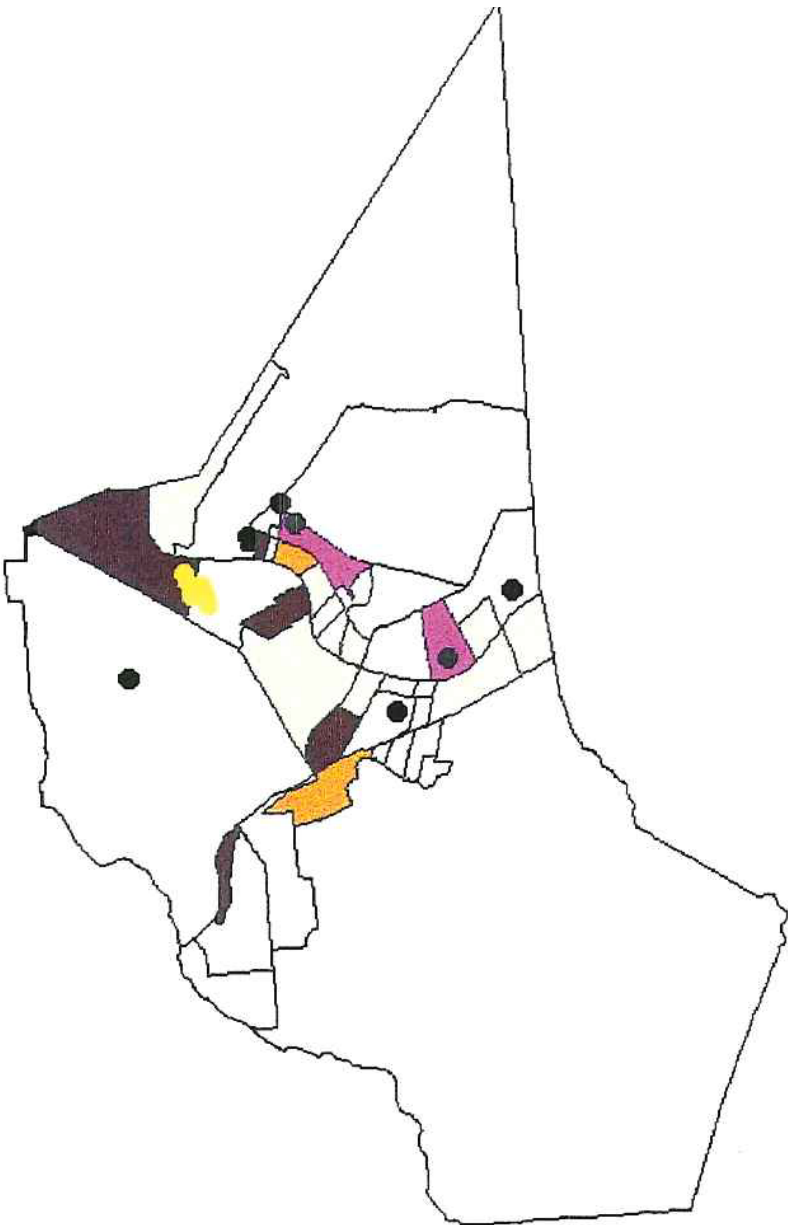
PROBLEMS IN THE NORCO COMMUNITY

Citizens Take Action

- Loud noises, noxious odors and deadly chemicals are constant neighbors of the citizens of Norco.
- The view from their front windows is of the pipes, storage tanks, and production towers of a petro-chemical plant.
- Flares erupt noisily and unpredictably, sometimes roaring through the night.
- Delivery trucks and vehicles servicing the chemical plant move deadly chemicals through their communities.
- Unexplained booming noises shake their homes in the night.



TRI Sites in St. Charles Parish



WHAT CHANGED THE PICTURE FOR NORCO RESIDENTS

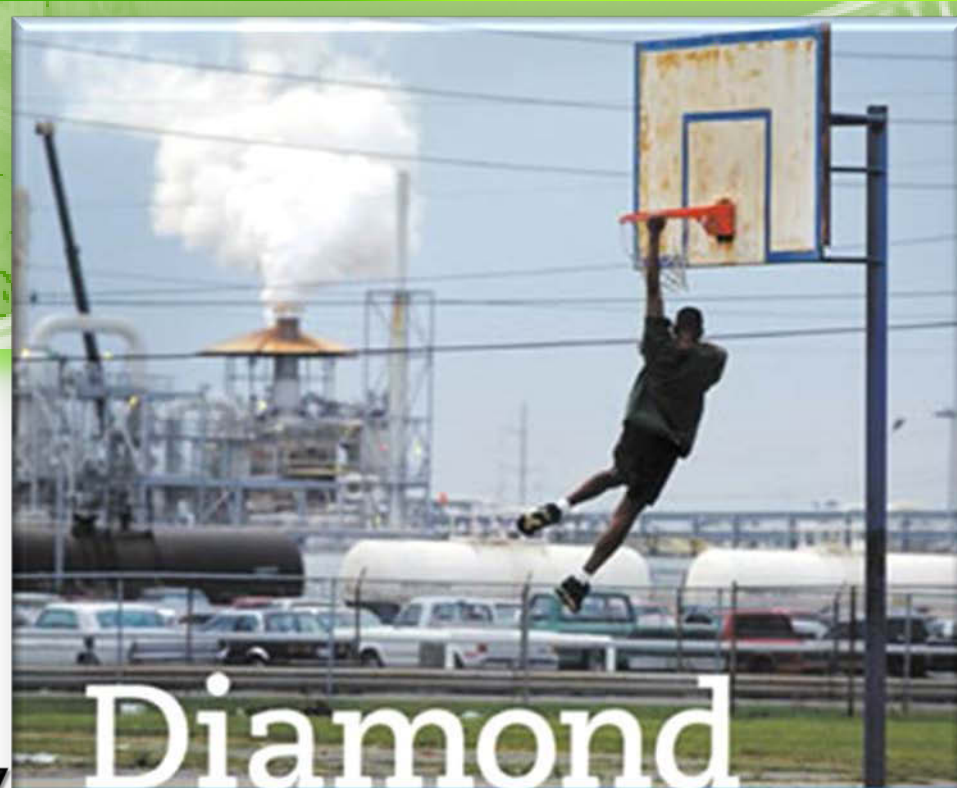
For years Shell refused to offer relocation to residents until...
Conflicting Evidence Could Not Be Ignored!

- Norco community residents were exposed to a white gas that entered their homes causing their eyes and throats to burn with feelings of nausea that sent many residents to the emergency room
- It was described by Shell as only steam.
- Samples of the air taken by Citizens for a Better Environment, that were analyzed by an EPA approved laboratory showed that it was Methyl-Ethyl Ketone (MEK) which is known to cause irritation of eyes and nausea and other health effects.
- Shell conceded that a tank containing MEK was over-pressurized, but continued to assert their position of “no chemical releases from the tank”.



DIAMOND, LA

- On June 9, 2002, Concerned Citizens of Norco and Shell announced to the Diamond Community the “Diamond Options Program” that allowed residents to relocate away from Shell facilities.



A Struggle for
Environmental Justice
in Louisiana's
Chemical Corridor

STEVE LERNER

foreword by Robert D. Bullard

KNOWLEDGE IS POWER

Community Education and Activism

- **Convent, Louisiana**
Dangerous Facility Siting
Stopped
- **Norco, Louisiana**
Relocation Complete:
Moved Out of Harms Way



1995 through 2012
TOXIC RELEASES
INVENTORY



**REDUCTION FROM 1985 TOTAL OF
700 Million Pounds**

- **Access to TRI data as mandated by EPCRA has been one of the major factors in reducing releases from toxic facilities in the Corridor.**

LOUISIANA TOXIC RELEASES AND TRANSFERS

1985	700 Million Pounds
1995	185 Million Pounds
1998	186 Million Pounds
2002	121 Million Pounds
2008	140 Million Pounds
2012	102.4 Million Pounds

HOW TRI DATA WAS USED

We concurrently worked with communities to:

- **Assess health Impacts**
- **Shape policy on local and national levels**
- **Monitor toxic release increases and reductions**
- **Support evidence of racial and health disparities**
- **Communicate potential risks**
- **Explore vulnerabilities of communities**
- **Explore vulnerabilities in chemical accident preparedness**



TRI DATA USAGE

Helps:

- **Define EJ Communities**
- **Shape Policy Agendas and Advocacy Efforts**
- **Rebuild and Recover after Environmental Injustice**

HELPING COMMUNITIES HELP THEMSELVES

Community Trainings on using TRI Data



GRASSROOTS CITIZEN ACTIVISTS



NATIONAL ACTIVIST ORGANIZATIONS



**Like Minds with
a Common
Purpose...**



RESULTS OF TRI DATA USAGE

- The Toxics Release Inventory objectified the experiences of community residents living in close proximity to extremely hazardous and noxious facilities
- It validated community complaints and concerns as being more than just the anecdotal ramblings of a disgruntled community.



IN CONCLUSION

- **The use of Toxic Release Inventory (TRI) data has been a major building block in community efforts to achieve environmental justice.**
- **It has provided the scientific evidence for defining an “environmental justice community,” thereby creating a basis for government action to begin protecting these most vulnerable communities.**

ENVIRONMENTAL DECISION-MAKING AND TRI DATA

It is imperative that communities learn how to access and make positive use of TRI data to support environmental decision-making.

TWO MUST READS

RACE, PLACE, AND ENVIRONMENTAL JUSTICE AFTER HURRICANE KATRINA

Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast



FOREWORD BY MARC H. MORIAL

***** EDITED BY *****
**ROBERT D. BULLARD
AND BEVERLY WRIGHT**

ROBERT D. BULLARD & BEVERLY WRIGHT

THE WRONG COMPLEXION FOR PROTECTION

*HOW THE GOVERNMENT
RESPONSE TO DISASTER*

*ENDANGERS
AFRICAN AMERICAN
COMMUNITIES*





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