# Energy Justice A Network

## www.EnergyJustice.net

...helping communities protect themselves from polluting energy and waste technologies

## Environmental Justice & Environmental Racism



Norco, Louisiana residents live and play in shadow of Shell oil refinery

### What is Environmental Racism?

- Communities of color are more heavily targeted for hazardous industries than poor communities are.
- Doesn't need to be intentional to have a discriminatory effect



Chester, Pennsylvania children live and play next door to nation's largest trash incinerator and other major industry.



#### Racism isn't usually this obvious...



Zulene Mayfield shows signs of vandalism at office of Chester Residents Concerned for Quality Living in Chester, PA in 1996 "Laid to Waste" documentary.

#### 1984: Cerrell Associates Report (Trash incinerators in CA)

#### LEAST LIKELY TO RESIST

Southern, Midwestern communities Rural communities

Open to promises of economic benefits

Conservative, Republican, Free-Market

Above Middle Age

High school or less education Low income

Catholics

Not involved in social issues Old-time residents (20 years+) "Nature exploitive occupations" (farming, ranching, mining)

#### MOST LIKELY TO RESIST

Northeastern, western, California Urban communities Don't care or benefits are minor Liberal, Democrat, "Welfare State" Young and middle-aged College-educated Middle and upper income Other Activist Residents for 5-26 years Professional ("YUPPIES" & "housewives")

#### www.ejnet.org/ej/cerrell.pdf

#### 1991: Epley Associates 'window survey' (nuclear waste dump in NC)

Coleridge	"houses fairly wealthy"	out
Snow Camp	"fairly affluent"	out
<b>Cherry Grove</b>	"residences of site minority-owned"	in
Farmington 1	"fairly affluent"	out
Gold Hill 1	"dynamite companyexplosives/ munitions"	out
Gold Hill 3	"very depressed area"	in
Watson	"poultry operationsimpressiveHolly Farms"	out
	"some new homes—affluent"	
Ghio	"trailers everywhere"	in
	"forecloses then resells"	
	"distressed county"	
Marston	"distressed area"	out
	"buffer would have to be in game land"	
	(which violates state criteria)	
Hoffman	"distressed area" "major wetlands"	in
Millstone Lake	"Sheriff Goodman concerned about job loss"	in
Slocumb	"affluent"	out
Berea	"distressed county"	in

#### www.ejnet.org/ej/wmra.html

#### 1997: Louisiana Energy Services (uranium enrichment in LA)

Average black population within 1 mile of sites considered in site selection:

78 sites in 16 parishes:	28.35%
<b>37 sites in 9 parishes:</b>	36.78%
6 sites in Claiborne Parish:	64.74%
Selected site:	97.1% (highest of all sites originally examined)

Contractor "performed... evaluation of the population of the LeSage and Emerson sites by driving through the area and performing a visual or 'eyeball' assessment."

Atomic Safety and Licensing Board: "Racial discrimination in the facility site selection process cannot be uncovered with only a cursory review of the description of that process appearing in an applicant's environmental report. If it were so easily detected, racial discrimination would not be such a persistent and enduring problem in American society. ...the Staff must lift some rocks and look under them."

#### www.ejnet.org/ej/les.html

#### History of the Environmental Justice Movement



#### 1960's and 1970's





1968: Martin Luther King goes to Memphis to support environmental and economic rights of striking garbage workers

1979: Black residents of a middle-class suburb of Houston form the 'Northeast Community Action Group' to stop a proposed landfill. Their lawsuit, *Bean vs. Southwestern Waste Management, Inc.* is the first suit to challenge the citing of a waste facility under civil rights law.

#### "Environmental Racism" Term Coined in 1982 PCB Landfill Battle in North Carolina

Minority communities targeted by both private and government entities.





#### 1982: Warren County, North Carolina

- Siting of a PCB landfill in a mostly Black community
- Protests & over 550 arrests: "largest civil disobedience in the south since Dr. Martin Luther King, Jr."
- Term "environmental racism" coined



1983: U.S. General Accounting Office: "Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities"

Report found that in the 8 southeastern U.S. states studied, 3 out of 4 commercial hazardous waste facilities were located in mostly black neighborhoods, even though the region was only 20% black overall.

## 1987: UCC Commission for Racial Justice publishes *Toxic Waste and Race* Report

Race more of a factor than class in the geography of hazardous waste disposal facilities.

Same trend found 20 years later, in updated 2007 report.



Source: <u>www.ejnet.org/ej/twart.pdf</u>

### What is Environmental Justice?

- Environmental Justice is the movement's response to environmental racism
- Principles of Environmental Justice developed at the First National People of Color Environmental Leadership Summit in 1991
- Defined by the movement, not by EPA

www.ejnet.org/ej/

#### 1991:

#### First National People of Color Environmental Leadership Summit



Redefined 'the environment' as "where people live, work, and play"

WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

- 1. Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2. Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- **3.** Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4. Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.
- **5.** Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

Source: First National People of Color Environmental Leadership Summit, Washington, DC, 1991. Online at: www.ejnet.org/ej

- 6. Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7. Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8. Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- **9.** Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

Source: First National People of Color Environmental Leadership Summit, Washington, DC, 1991. Online at: www.ejnet.org/ej

- **10. Environmental Justice** considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.
- **11. Environmental Justice** must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.
- **12. Environmental Justice** affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.
- **13. Environmental Justice** calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

Source: First National People of Color Environmental Leadership Summit, Washington, DC, 1991. Online at: www.ejnet.org/ej

- **14. Environmental Justice** opposes the destructive operations of multinational corporations.
- **15. Environmental Justice** opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.
- **16. Environmental Justice** calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
- **17. Environmental Justice** requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

#### What does "radical" mean?









#### Occupy Earth Day: An Expose of the Corporate Propaganda Systems that Undermine Systemic Change Activism

www.corporations.org/occupyearthday.html

Why are some of the largest culprits of environmental racism sponsoring "environmental justice" conferences?



2016 National Environmental Justice Conference & Training Program



U.S. Environmental Protection Agency



**U.S. Nuclear Regulatory Commission** 



#### U.S. Department of Energy



Waste Management

и рерсо

Drengt for a changing worth?

#### Pepco Holdings, Inc.



#### Beveridge & Diamond, P.C.



#### Sodexo, Inc.

Source: www.thenejc.org

#### EJ Groups Challenge Big Greens on their policies and lack of diversity

- 1990: Gulf Coast Tenants Organization and Southwest Organizing Project send open letter to "Group of 10" (largest environmental groups)
  - Call for equitable distribution of resources
  - Representation of People of Color on boards and staff



Pat Bryant, Gulf Coast Tenants Organization



Richard Moore, Southwest Organizing Project Source: <u>www.ejnet.org/ej/#enviromvmt</u>

#### EJ Groups Challenge Big Greens on diversity

2014: Green 2.0 project picks up same cause and challenges mainstream environmental organizations, foundations and government agencies to publish their diversity data and make improvements



#### 2002:

#### Second National People of Color Environmental Leadership Summit



Produced Principles of Working Together and Principles of Alliance with Green Groups

#### EJ Groups Challenge EPA as well...

1991: Southwest Network for Environmental & Economic Justice letter to U.S. EPA, charging EPA with racism



Richard Moore, Southwest Network for Environmental & Economic Justice



## Response of the Environmental Protection Agency

 July 1990: EPA creates Environmental Equity Workgroup in response to the presentation of findings by social scientists that "racial minority and low-income populations bear a higher environmental risk burden than the general population" and that EPA's inspections failed to adequately protect lowincome communities of color.



## Response of the Environmental Protection Agency

- June 1992: Environmental Equity Workgroup produces a report supporting the findings that recommended the formation of an EPA office to address these disparities.
- Nov. 1992: EPA forms Office of Environmental Equity.
- 1994: In response to public criticism, EPA changed the name of the office to the Office of Environmental Justice.

Source: Mike Ewall, Esq., "Legal Tools for Environmental Equity vs. Environmental Justice," Sustainable Development Law & Policy Journal, 2012-2013, p.4. www.ejnet.org/ej/SDLP\_Ewall\_Article.pdf

## Institutional Racism at the Environmental Protection Agency

- EPA takes longer to get around to cleaning up toxic waste sites in communities of color
- Penalties under hazardous waste laws were five times higher in white communities
- Penalties were 46% higher for other programs relating to air, water and waste



Source: Marianne Lavelle & Marcia Coyle, "Unequal Protection: The Racial Divide in Environmental Law," National Law Journal, Sept. 21, 1992, at S1-S12. The study reviewed EPA enforcement cases from 1985 to 1991 and EPA's response to Superfund sites on the National Priority List from 1980 to 1992. <u>www.ejnet.org/ej/nlj.pdf</u>



## Institutional Racism at the Environmental Protection Agency

- EPA Office of Civil Rights rejected or dismissed
  95% of environmental justice complaints filed
  between 1996 and mid-2013
- Typically, EPA takes over a year (sometimes over a decade) to react to complaints, then rules the wrong way



Source: Center for Public Integrity, "Environmental Justice, Denied – Environmental racism persists, and the EPA is one reason why," Aug. 3, 2015.

www.publicintegrity.org/2015/08/03/17668/environmental-racism-persists-and-epa-one-reason-why

The **EPA defines "environmental justice"** as the **fair treatment** and **meaningful involvement** of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

**Fair Treatment** means that no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental and commercial operations or programs and policies.

**Meaningful Involvement** means that: (1) potentially affected populations have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory Agency's decision; (3) the concerns of all participants involved will be considered in the decision-making process; and (4) the rule-writers and decision-makers seek out and facilitate the involvement of those potentially affected.

Source: U.S. Environmental Protection Agency, "Guidance on Considering Environmental Justice During the Development of Regulatory Actions," May 2015. <a href="https://www3.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-final.pdf">www3.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-final.pdf</a>

#### Justice vs. Equity

Environmental Justice is NOT the same as "environmental equity"

- Environmental equity = "Poison people equally"
- Environmental justice = "Stop poisoning people!"

The environmental justice movement is not a NIMBY movement. It's about NIABY:

#### Not in ANYone's Backyard

www.ejnet.org/ej/

## **Equity is Impossible**

- Dioxin pollution reaching the Arctic
- Fluoride / Lead connection
- Mercury, dioxins and PCBs in fish

#### **Equity is insufficient**:

• Doesn't tackle existing facilities

## **Justice Approach**

- Not framed as "EJ"
- Toxic Use Reduction laws
- Bans on inappropriate technologies (like incineration or water fluoridation)
- Removing dirty energy subsidies

• NO SUCH THING as Environmental Justice Policy
### **Equity Approach**

- Housing
- Education
- Medical care
- Parks
- Transit
- Fresh food access
- Street lighting
- Utilities (water, sewer, electricity)

#### **Equity Approach for Necessary Evils**

- Recycling Facilities
- Transit Infrastructure

#### Mebane, NC Access to Sewer Lines

Mebane Sewer Lines, Compared to Racial Composition



Mebane City Limit

- ETJ boundary
- African-American Communities
- Mebane Sewer Plant
  - Sewer Lines

Percent African-American, Census 2000





Source: Cedar Grove Institute for Sustainable Communities, <u>www.cedargroveinst.org/files/mebanecase.pdf</u> (p31)

#### Modesto, CA Access to Sewer Lines



Source: Cedar Grove Institute for Sustainable Communities, <u>www.cedargroveinst.org</u>

### Modesto, CA Street Lighting



Source: Cedar Grove Institute for Sustainable Communities, <u>www.cedargroveinst.org</u>

Justice Map: Visualize race and income data for your community, county, and country. Includes tools for data journalists, bloggers and community activists.



#### www.JusticeMap.org

Layers: American Indian Asian Black Hispanic Multi-Racial Nonwhite White Plurality Remove Income athersburg Con Mune Birton Damestown + ASDERIGHT mariant -South Lucine aton a Significative ton Travdah Polotune Falls Reteville Potomac Sterling Crottor Great Falls 450 Glenn Date Lanhame Wolf Trap Mitchellyth McLean Davidsonville shington Lake Arbot Vietina Cherat lly Kettering ATHIRD Suttand-Silver Hill Westphalia Lake Baropal [close] Fairfax Annendale Black Percent 0-1 Sphaafield THECYS 1-2.5 2.5 - 5 Newinction Friendshi 5-9 Dumkink owings 9-16 Washingto 6-26 Chesape Linke Bidg 6 - 47 47 - 79 Gadbridge 79 - 100 JusticeMap.org Date City Google Huntingtown



#### www.EnergyJustice.net/map



#### www.EnergyJustice.net/md/pg

#### **Environmental Racism in DC**

#### Pollution Hazards in DC (see a trend?)



Ivy City historic Crummel School threatened by bus depot 5 trash transfer stations

Kenilworth Landfill / Superfund Toxic Waste site (park next to public housing)

Benning Road site: power plant (closed in 2012) incinerator (closed in 1994), likely new incinerator site also, a contaminated site, affecting groundwater

Buzzard Point Power Plant (closed in 2012)

Anacostia River polluted by military sites, landfills, and raw sewage from combined sewer overflows

Navy Yard toxic waste sites and contamination of Anacostia

**Capitol Power Plant** 

Blue Plains Sewage Treatment Plant (world's largest)

#### www.EnergyJustice.net/dc

#### Lorton, VA



#### www.EnergyJustice.net/va



DC's trash is burned in the giant Lorton, VA incinerator The incinerator and a giant landfill tower over a very diverse neighborhood

#### Lorton, VA



#### Allentown, PA



#### Minneapolis, MN

Covanta (HERC) 1,000 ton/day Trash Incinerator



#### Saint Paul, MN

Saint Paul District Energy Biomass Incinerator



#### **Chester, PA**



www.ejnet.org/chester

### Delaware County, PA / Chester City



- Environmental Hazards: DELAWARE County Compared with State of PENNSYLVANIA
- DELAWARE County
- State of PENNSYLVANIA

#### **Cancer Risks from Hazardous Air Pollutants**



#### **Density of Pollution Sources**



### Race is most deciding factor

Race is more correlated with distribution of toxic pollution in Delaware County, Pennsylania (where the City of Chester is) than income, poverty, childhood poverty, education, job classification or home ownership.

Distribution of Environmental Burdens in DELAWARE County

#### **DISTRIBUTION OF BURDENS BY RACE/ETHNICITY**

Releases of Toxic Chemicals	(indicator of chemical releases)	Ratio
People of Color	54000	2 00
Whites	18000	3.00
Facilities Emitting Criteria Air Pollutants	(facilities per square mile)	Ratio
People of Color	13	5.91
Whites	<b>2.2</b>	5.91

#### Moving up the River in Delco...

- Sun Oil Refinery (Marcus Hook)
- FPL Energy gas-fired power plant (Marcus Hook)
- ConocoPhillips Oil Refinery (Trainer)
- DELCORA sewage sludge incinerator (Chester)
- Abbonizio concrete and aggregate facility (Chester)
- Covanta trash incinerator (Chester)
- Kimberly Clark Tissue Corporation paper mill (Chester)
- SCI Chester (state prison) (Chester)
- Harrah's Casino (Chester)
- Liberty Electric gas-fired power plant (Eddystone)
- Exelon Eddystone coal power plant (Eddystone)
- Philadelphia Airport
- Plus... eight major chemical facilities plus waste handling facilities and toxic waste sites (mostly Chester)

#### Chester Health Crisis

- Highest percentage of lowweight births in the state
- Mortality (death) rate and lung cancer rates that are 60% higher than the rest of Delaware County
- Highest childrens' blood-lead levels in the state (60% of kids are over the "safe" limit)



#### Childhood asthma hospitalization 3x PA rate



Source: Analysis based on 2010 Census data and asthma data from The Asthma Program, PA Department of Health. Data provided by Pennsylvania Health Care Cost Containment Council (PHC4).

### Who Lives Near Environmental Hazards?

**Depends on industry and distance** 

On average...

 Income slightly higher than average



- Majority white, but disproportionately people of color
- Some industries are opposite: lower-income and whiter than average (biomass, coal)
- Some lower-income and less white, but still majority white (landfills)
- Anomaly: wealthy/white (nuclear power plants)



	National Avg	Within 1 mile	Difference
White	63.8%	55.0%	-8.8%
Hispanic	16.4%	18.4%	2.1%
Black	12.6%	14.2%	1.6%
Asian	4.8%	10.1%	5.3%
Multi-Racial	2.9%	3.3%	0.4%
American Indian	0.9%	0.7%	-0.2%

Source: Energy Justice Network, www.justicemap-api.org/test/220.html

www.justicemap-api.org/jtest.php

#### Spatial Justice Test for Race and Income

You can test if race and income changes as you move closer or further to a set of points. For instance, you might want to test if parks, schools, or landfills were disproportionately located near lower-income or higher-income people.

To test your own data you must upload a CSV data file with the format of Latitude, Longitude (a CSV file with two columns of data). The first line can include text column titles if you want. If the first line's fields are text than they will be ignored. Sample Data File (US nuclear plants - old data)

Or you can run a test on our power plant data.

This website will return results that show how income and race change with distance from your data. The calculations can take several minutes. For instance analyzing a thousand points with the 'more distances' option can take 5 minutes. Doing more than 10,000-15,000 points is likely to time out. The current time limit is 100 minutes. Email me if you need more time.

Note: your results are saved in a file that is shared with the public.

What are you analyzing? Ex. landfill.			
Describe your data and project (a notes fis with the public)	eld for sharing it		
	11		
You can either analyze a power plant laye Justice Communities Map OR upload you			
Power Plant	44.7	~	
Power Plant Status		~	
State (optional)		×	
Data File (latitude, longitude). Must be .c.	svtxt. or .dat. Browse 1	to file selected.	

: Median Household Income vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice

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Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: Energy Justice Network, www.justicemap-api.org/test/220.html

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#### Percent White vs Distance



Distance (miles)

White Percent

Source: Energy Justice Network, www.justicemap-api.org/test/220.html

Ratio of Median Household Income to US Median vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: Energy Justice Network, www.justicemap-api.org/test/220.html

#### Uranium Mines : Ratio of Percent Race to US Median vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: www.justicemap-api.org/test/67.html

### Who Lives Near Coal Power Plants?

#### Ratio of Percent Race to US Median vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: <a href="http://www.justicemap-api.org/test/5.html">www.justicemap-api.org/test/5.html</a>

### Who Lives Near Coal Power Plants?

#### Percent White vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: <a href="http://www.justicemap-api.org/test/5.html">www.justicemap-api.org/test/5.html</a>

### Who Lives Near Trash Incinerators?

#### Ratio of Percent Race to US Median vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: <u>www.justicemap-api.org/test/14.html</u>

### Who Lives Near Trash Incinerators?

Percent White vs Distance

Powered by: JusticeMap.org, Census Data, and Energy Justice



Source: www.justicemap-api.org/test/14.html

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#### Poor Communities Bear Greatest Burden from Fracking

Poor in Pennsylvania? You're more likely to be fracked

By Brian Bienkowski and Environmental Health News | May 6, 2015

Fracking wells in Pennsylvania's Marcellus Shale region are disproportionately located in poor rural communities, which bear the brunt of associated pollution, according to a new study.

The study bolsters concerns that poor people are more likely to deal with hydraulic fracturing in their community and



Source: www.scientificamerican.com/article/poor-communities-bear-greatest-burden-from-fracking/

#### Poor in Pennsylvania? You're fracked.

ShareThis



Public Herald/flickr

Hydraulic fracturing wells and the pollution from them are more likely to impact poor communities in Pennsylvania May 6, 2015

By Brian Bienkowski Environmental Health News

Source: www.environmentalhealthnews.org/ehs/news/2015/may/pennsylvania-fracking-environmental-justice-poor-economics

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#### **Energy Justice: Shale Initiative**

See More

www.EnergyJusticeSummer.org

#### Relationship between Cumulative Impact and Social/Economic Indicators







 Grouped all block groups based on percent minority and poverty

 Calculated average cumulative impact score for combined groups

 Cumulative impact scores increase steadily with increasing percent minority and poverty

Source: <a href="https://www.nj.gov/dep/ej/docs/ejc\_screeningmethods\_pp20091222.pdf">www.nj.gov/dep/ej/docs/ejc\_screeningmethods\_pp20091222.pdf</a>

### **EJ Legal History**

- Chester
- Camden
- Sandoval
- LES
- Select Steel
- Angelita C.
- Padrias Hacia Una Vida Mejor

#### www.ejnet.org/ej/SDLP\_Ewall\_Article.pdf

#### **Nuclear Power**

- **Uranium mines:** Native American lands in U.S. and Canada, Aboriginal lands in Australia; Niger in Africa (with recent French/U.S. war for uranium in Mali)
- Uranium enrichment: targeting of black and Hispanic communities in LA and NM
- **"Low-level" nuclear waste:** black, Hispanic and Native American communities
- **"High-level" nuclear waste:** all 60 "temporary" sites and the Yucca Mountain permanent storage site ALL on Native American lands
- **Depleted uranium (DU) ammunition:** in wars and test sites around the world, contaminating Iraq, Afghanistan, Yugoslavia and Vieques, Puerto Rico. DU has largely been used against people of color in war, and low-income people and people of color are overrepresented in the U.S. military (and therefore are more affected by Gulf War Syndrome caused by DU).
- **Existing nuclear reactors:** low-income communities disproportionately impacted in southeastern U.S.
- **Proposed nuclear reactors:** some of the leading proposals targeting black communities in the southeast, and the southeastern U.S. in general (mainly low-income Source: www.EnergyJustice.net/ej

#### Coal

- **Coal power plants:** disproportionately affect African-American communities. 68% of African-Americans live within 30 miles of a coal-fired power plant – the distance within which the maximum effects of the smokestack plume are expected to occur. By comparison, 56% of the white population lives within 30 miles of these plants.
- **Coal mining:** destroys low-income rural communities in Appalachia, where mountains are dismantled and valleys are being filled with coal waste. Native American communities in the southwest are also being exploited for their coal by genocidal government policies and corporate abuses.
- **Coal-to-oil refineries:** some of the leading proposals targeting low-income communities, a site adjacent to a state prison (Schuylkill County, PA), and communities of color.

### Oil & Gas

- **Oil and gas wars:** fought against people of color in Iraq, Afghanistan, Colombia and many other countries in order to control oil and gas resources.
  - The U.S. military's "Africom" program exerts military control over Africa, in large part to control the flow of oil. Since 2005, U.S. oil imports from Africa have been greater than those from the Middle East.
- **Canadian tar sands:** causing massive ecological devastation, particularly to Indigenous communities in Alberta. Many U.S. communities are threatened by tar sands pipelines and refining, with Native American and black communities facing some of the worst impacts.
- **"Fracking" for natural gas:** destroying groundwater and polluting the air, mainly in low-income rural communities.
- Liquefied natural gas import/export terminals, pipelines, refineries and other gas infrastructure: Impacting Native American communities in Northern Alaska; black, Native and Vietnamese communities on the Gulf of Mexico, oil and gas extraction, refining, transportation and spills are disproportionately harming people of color.
- **Gas-fired power plants:** hundreds of gas-fired power plants were proposed since late 1990s. Many defeated, but those built largely in poor or minority communities. Source: <u>www.EnergyJustice.net/ej</u>

#### **"Biomass" / Waste Incineration**

- Incinerators to burn trash, tires, sewage sludge, animal wastes, construction/demolition wood wastes, paper and lumber mill wastes, trees, crops and toxic landfill gases have been described as "biomass" – masquerading as "renewable" energy, even though the pollution is worse than coal by most measures.
- **Trash and sewage sludge incinerators:** disproportionately located in low-income and minority communities.
- **Wood-burning "biomass" incinerators:** disproportionately in low-income communities.
- Incinerator pollution accumulates where minority populations are more affected.
  - **Mercury pollution** contaminates fish, which low-income and minority people consume more than others.
  - **Dioxins** in the U.S. migrate to the Canadian Arctic, where the highest levels have been found in breast milk of Native Americans who subsist on dioxin-contaminated food.

#### Hydroelectric

- Dams proposed in Canada would flood large areas, displacing Native Americans from their lands.
- Indigenous peoples in Brazil and around the world displaced by mega dam projects
- Dams can cause methane, a greenhouse gas, to be released when vegetation is flooded. They can also help liberate naturally-occurring mercury in the ground, enabling it to contaminate fish.

# Energy Justice **A Network**

## www.EnergyJustice.net

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