**1)**

The distribution of hazardous waste within the U.S. is motivated by the interplay of political, economic, prejudicial, and classist forces. The elements of prejudice and classism are, however, structurally hidden under the economic and political machinery that directly control waste management (Pulido, 33). First among these institutions are the companies constituting the waste industry: Waste Management, Newalta, etc. Being for-profit, these companies not surprisingly seek out monetarily efficient locations for waste disposal. Many, more maliciously, ‘target’ those locations least able to challenge them legally. Regardless of intent, the locations chosen are overwhelmingly those harboring communities ill-equipped to protect themselves. These communities are commonly without healthcare and with insufficient political weight to resist the industries endangering their health.

Far from being causeless, the vulnerabilities listed (those that have allowed the distribution of waste to develop so unevenly) can be originated in the failures of sociopolitical institutions to provide just treatment to low-income communities (Saha, xii). The most obvious and indeed farce-like of these unjust institutions is public education, in which the funding disparity between high-income and low-income districts is over $10,000 per student (Baker). A 1991 study concluded that a 10% increase in funding corresponds to an increase in graduation rates and test scores –both of which have been conclusively correlated to future employment and accordingly political influence (Ferguson, 487). It is therefore unsurprising that low-income regions chosen by the waste industries are also those with the least healthcare and political weight.

Finally, it must be noted that the distribution often has political motivations rather than fiscal. California companies, for example, were recommended by the taxpayer funded Cerell Report to locate facilities in communities of least resistance: those that would pose the least ‘nimby’ threat to the involved politicians (Cole, The Struggle for Kettleman). It was not until 2003 that community participation in California was mandated in the siting of waste facilities (Bonorris, 27). Thus there are inherent sources of distributional injustice in both halves of the intimately wedded political and economic structure.

**2)**

In any study, it is important to collect accurate data on variables chosen to illuminate the question of the study (in this case the potential danger to the community and the injustice of the facility’s placement). I would subdivide the needed data into output (the flux of hazardous materials from the industrial facility), input (the proportion of those materials coming into contact with the community), and community vulnerability: potential stressors, cumulative effects, and the health of the community members (Morello-Frosch, 882). For the first of these data sets, it makes sense to employ the traditional methods of research: analyzing samples at a lab (looking for known hazards), and performing air quality tests in the vicinity of the facility. Results from this initial study could be written up in traditional academic format and sent out for peer review while the rest of the study was underway.

For the second data set, community involvement makes intuitive sense (it is the community being exposed after all). The data is, however, more traditionally analytical –so in fact it makes the most sense to pursue a mix of community based and traditional methods. A schematic in which researchers developed a training program for paid community members to monitor the air for dangerous chemicals would be ideal – researchers could use the enormous influx of data to build a map of the chemical hotspots for the purpose of correlating the income distribution with the distribution of hazards, but also to give the community members a way to lessen exposure (Pastor, 16). Finally, the third component of the study would require the most extensive community involvement in order to build a picture of the health of the community –with community members providing insight through interviews and surveys into the stressors in their lives, into their anxiety and depression, into the status of their healthcare, and into past health issues (Sexton 4038-4039). Combining the perspectives of the three components of the study it would be possible to build a correlation between the presence of the facility and the unjust presence of dangerous chemicals in the air of a conclusively vulnerable community.

**3)**

The most effective campaign strategies employed by the Environmental Justice Movement have been those that have successfully involved a large number of community members: Having the complaints of professional activists and technical experts be backed up by hundreds or thousands of families directly experiencing the injustice engenders significantly more media traction and potential for change then does a movement external to the people of the affected community. The first core principle of any Environmental Justice campaign is therefore the empowerment of the community being threatened –through education and leadership of the movement (Cole, 661). This endows permanence to the campaign. The community members will keep fighting for the safety of their homes and their children long after activists and experts have given up or decided to pursue other causes –and perhaps engage in community environmental policing to ensure that future businesses tread carefully around the health of the community (O’Rourke, 386). Furthermore, it is imperative for the campaign to frame its argument in such a way that it is clear to all which government and/or corporate policies need to change. Thus the second core principle of an effective Environmental Justice campaign is clarity of ambitions – this will in turn help to create enthusiasm in the community as the movement achieves larger and larger goals. The third and by no means least important core principle of any Environmental Justice campaign must be that its ethical foundation – that its goals are those that are best for (and determined by) the community in question, connects it to all the other diverse Environmental Justice campaigns (Brulle, 300). They are fighting the same fight. It follows naturally from these principles that the role of technical experts – lawyers, researchers, even activists, would be secondary to the role of community members. The experts would help to achieve the goals of the movement and interact with the incredibly inertial and complicated governmental system, but they would not determine those goals.

Works Cited

Baker, Bruce, and David Sciarra. "National Report Card - Introduction." *National Report Card - Introduction*. The National Report Card, n.d. Web. 16 May 2014.

Bonorris, Steven. "State EJ." (2010): n. pag. Web.

Brulle, Robert J. "The Future of the Environmental Justice Movement." (2004): n. pag. Print.

Cole, Luke W. "Empowerment as the Key to Environmental Protection." (1992): n. pag. Web.

Cole, Luke W. "The Struggle of Kettleman City: Lessons for the Movement." *Maryland Journal of Contemporary Legal Issues* 5 (1994): n. pag.*HeinOnline*. Web. 15 May 2014. <http://heinonline.org/HOL/Page?handle=hein.journals/mjcolei5&div=10&g\_sent=1&collection=journals#74>.

Ferguson, Ronald F. "Paying For Public Education." *Harvard Journal on Legislation* 28 (1991): n. pag. *HeinOnline*. Web. 15 May 2014. <http://heinonline.org/HOL/Page?handle=hein.journals/hjl28&div=24&g\_sent=1&collection=journals#493>.

"List of Hazardous Waste Disposal Companies Worldwide." *Bloomberg.com*. Bloomberg, 15 Jan. 2014. Web. 16 May 2014.

Morello-Frosch, Rachel. "Cumulative Impacts." (2011): n. pag. Web.

O'Rourke, Dara, and Gregg P. Macey. "Community Environmental Policing: Assessing New Strategies of Public Participation in Environmental Regulation." *Journal of Policy Analysis and Management* 22.3 (2003): n. pag. Print.

Pastor, Manuel. "Screening for Justice." N.p., 2013. Web.

Pulido, Laura. "Rethinking Environmental Racism." (2000): n. pag. Print.

Saha, Robin. "Racial and Socioeconomic Disparities in the Distribution of Environmental Hazards." (2007): n. pag. Web.

Sexton, Ken. "Cumulative Risk Assessment." (2010): n. pag. Web.