

Abstract

Grounds for Action: Community and Science in Environmental Controversy

by

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In 2001 and 2002, residents of the southeastern Louisiana community of New Sarpy campaigned for relocation away from the adjacent Orion refinery with the help of an environmental justice non-profit group, the Louisiana Bucket Brigade (LABB). Predictably, residents and LABB argued with Orion officials over the effects of refinery emissions on community health, producing their own data to contradict Orion's assertions that their operations posed no threat to residents. Yet the dispute over the "facts" of Orion's health effects was secondary to conflicts between residents, LABB, and Orion over who had the authority and the responsibility to protect the community from the (potential) hazards of the refinery's operations. In the context of struggles over who could and should act, my dissertation argues, scientific data and data collection take on greater significance than simply informing politics; I show how science is used to support industry and environmentalists' claims that they can rightfully act on behalf of community members, and to allocate responsibility for the protection of "fenceline communities" like New Sarpy among industry, regulators, and citizens.

Situating New Sarpy as a battleground in far-reaching contention over the regulation of the petrochemical industry, I draw on a year of ethnographic fieldwork in the community—spanning the final six months of the campaign and the six months immediately following its resolution—to describe political action in New Sarpy both under normal circumstances and during the exceptionally contentious campaign. I show that, usually, individual residents are both able and expected to work for the betterment of their community; the ability of community leaders to represent New Sarpy as a whole is only questioned—or even considered—during the final stages of the campaign. I describe residents’ expectations of nearby industrial facilities and local government and argue that getting those entities to meet their obligations is a central part of residents’ campaign.

My ethnography of community politics forms the basis for understanding how relations between scientific knowledge and political action are configured by New Sarpy residents, Orion officials and their counterparts at nearby petrochemical facilities, and LABB and other environmental activists. Analyzing how residents incorporate their own studies of air quality and community health into their public complaints about Orion, I argue that, although the studies do help give voice to residents’ “local knowledge” (as other authors have argued), they are more importantly used to bolster residents’ arguments that Orion is shirking its responsibilities to the community. I detail the interactions between residents and industry officials in industry-structured Community Advisory Panels and other “dialogues” to show how industry establishes not only responsibility for, but sole authority over, facility operations through their insistence that scientific knowledge should inform action. Finally, I examine the ways

environmentalists incorporate community-based data collection efforts into campaign publicity, arguing that, by publicly impugning industry and regulatory agencies' commitment to protecting fence-line communities, they assert the relevance of and need for action on the part of the general public.

Understanding how relationships between knowledge and action are diversely configured in practices of contestation and dialogue in New Sarpy has consequences for theories of science and politics. Where social studies of science have focused on the complex interrelations between scientific knowledge and questions of *how* to act, my research demonstrates that science is deeply implicated in the question of *who* has the right and responsibility to act. In discussions of "science and the public," the public and its political functions must thus be understood, at least in part, as constituted through scientific claims.