

Coming Clean—Too Clean, In Fact

by Markus Niebanck

I just received a copy of a closure letter for an underground storage tank case opened 25 years ago. It got me to thinking about endpoints and process. Again.

“How clean is clean” has been examined and talked about innumerable times since the advent of traditional environmental remediation in the 1980s. The conversations have turned most frequently on notions of practicability and risk assessment, on balancing the level of remedial effort against other social/economic priorities.

In “The Beginning” the engagement was classically framed as “us against them” and “polluters must pay,” creating in our imagination forces for good (environmental advocates, regulators, regulations) and a dark force (corporations, builders, capital). And in instances, perhaps, this wasn’t an unreasonable way of looking at releases of hazardous substances to the environment.

Framing the battle thusly in the 1970s and 80s, irrespective of the actual percentage of bad actors in the general population, was expedient. Environmental catastrophes weren’t uncommon: Love Canal, the Cuyahoga River fire, and acid rain made an emotional appeal both appropriate and necessary.

Out of this came CERCLA, RCRA, the Clean Air and Water Acts, the EPA, and a raft of state and local agencies charged with the protection of health, safety, and the environment. And from these modest beginnings grew a Substantial Organism, comprised of environmental service and support companies, waste disposal businesses, federal, state and local regulatory agencies, non-governmental environmental organizations—hundreds of thousands of people employed, billions in annual expenditures.

An unforeseen consequence of the newly promulgated laws was the creation of Brownfields: post-industrial property abandoned due to real or perceived environmental contamination (“contamination” was a more ambiguous concept prior to the promulgation of CERCLA). EPA responded, establishing their Brownfield program in 1995, a resource center and grant funding focused on the revitalization of the land made fallow in part because of the establishment of (good) environmental laws.

Over the years a tension between the objectives of those invested in the economic revitalization of Brownfields and the Substantial Organism has been apparent, a tension flowing from a lack of durable connection between the economic motivation of the Organism and the economic benefit to communities from the expedient restoration of the affected Brownfield land.

Not to suggest impropriety, certainly, but when market forces provide no immediate reward to the Organism for completing a restoration project quickly ... projects don’t get completed quickly.

In terms of remedial objectives, regulatory cleanup standards were (and generally still are) quite strict, often requiring an attempt

to re-attain pre-release environmental quality. But there’s an unintended consequence—the pursuit of pristine pre-release environmental conditions, while certainly well-intentioned, can work adverse to societal benefit.

If a release has been mitigated to the extent practicable and there’s demonstrably no further hazard posed to human or ecologic health, the continued pursuit of the practically unattainable has a chilling effect on the redevelopment potential of a Brownfield site.

The pursuit adds years, if not decades, to the process, and until the oversight agency confers closure the property remains marginalized, difficult to transact or redevelop. Its condition perpetuates blight, blocks the infusion of redevelopment capital and kills economic opportunity.

As we work to leverage abandoned land, to hasten the urban economic renaissance, we must step back from the status quo and ask if perhaps we might be able to motivate overdue process improvements. Examples of areas for attention include:

1. We must re-emphasize the concept of Brownfield in the regulatory equation. A response action serves a dual purpose – the removal of an offending substance to or beyond a protective threshold AND the prompt restoration of the subject property to a productive purpose. Or, we must re-emphasize the concept of land revitalization for those who break out into cold sweats when they hear the term “brownfields.”
2. In this context, we must honestly examine process enhancements – on-site management of non-mobile waste as opposed to off-site transport and disposal. The creation of the terrestrial equivalent of Confined Aquatic Disposal cells (CAD) for non-volatile/non-leachable waste seems a far more expedient and environmentally benign solution than the excavation and relocation of the waste to somebody else’s backyard.
3. The reexamination of risk assessment practices. Great strides have been made in the understanding of exposure pathways, dosage and toxicity. A pragmatic evaluation of the evolution of standards of practice, their consequences (both intended and otherwise), and the state of current science and understanding may yield a productive outcome.

Recognition of the need to improve has in places contributed to the development of new standards of practice. In California, for example, one state agency has worked to revise the way it goes about regulating releases of petroleum hydrocarbons to the environment while another is examining alternatives to off-site disposal of waste as the reflexive remedial preference. These are steps in the proper direction. More must be taken. ■■■■

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