Land Use Planning at Energy Sites Involves Communication, Coordination, and Commitment

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The U.S. Department of Energy (DOE) occupies a large amount of land, with vast sites located in a few states but smaller parcels found in more than 30 states. These are places where nuclear materials and weapons have been designed, manufactured, and assembled. At many of the larger sites, such as Hanford in southeastern Washington (560 square miles) and the Savannah River site (SRS) in South Carolina (310 square miles), production facilities are concentrated toward the center of the tract, leaving sizable buffer zones of uncontaminated and untouched land.

Challenges Are Ahead

Although DOE is the nation's fourth largest landlord, with more than 2.4 million acres under its management, it never has been a land management agency and therefore has no formal policy for managing and planning the use of its lands, other than for national security missions. In fact, it has traditionally operated in a manner antithetical to that of a land management agency. Site officials have not been trained in land use planning; no uniform land use planning documents have been required; and until recently, no open public involvement processes have been implemented.

In contrast, other large land-owning agencies, like the Department of the Interior's Bureau of Land Management (BLM), the National Park Service (NPS), and the Department of Agriculture's U.S. Forest Service (USFS), all have statutory mandates to manage land either for multiple use (BLM and USFS) or for preservation and enjoyment (NPS). Likewise, these agencies have uniform policies that have been in place for decades to govern the development of management plans and procedures for updating them.

More Important Issues

As weapons are no longer being manufactured and as DOE moves from cleanup to reuse and eventual closure of some of its major nuclear weapons sites, the issue of future land use is becoming ever more important. Before environmental management activities have been completed and especially now, as cleanup and reuse decisions are being made, it is crucial to develop a process to coordinate on-site planning with off-site local and regional planning activities.

Establishing a lasting planning relationship with local officials will ensure that critical information is exchanged, that community land use concerns are addressed, and that sites are successfully coordinated with regional land use and development plans.

The goal of a recent study conducted at Rutgers University's Bloustein School of Planning and Public Policy was to find out what is happening with planning for future land use at these sites and to what degree interaction goes on between on- and off-site planners. Interviewing these planners has allowed Rutgers to compare local views with those of the people responsible for planning at the sites.

At the community level, the university specifically targeted officials with land use planning positions because these officials are trained to analyze land use issues with a broad understanding of legal, environmental, economic, social, and public health aspects.

Plus, they are generally familiar with public opinion and experienced at forming a consensus among multiple interests in a community, including developers, community organizations, and environmental groups. They also usually retain a long-term perspective and enjoy a longer tenure in their jobs than do elected public officials.

Planner Interviews in the Rutgers Study

Rutgers selected 13 major DOE sites, including sites located at Los Alamos, New Mexico; Hanford, Washington; Savannah River Site, South Carolina, and Rocky Flats, Colorado, at each of which the official federal contact staff for planning was questioned. The university received responses to eight open-ended questions covering the state of future-use planning at the site, key land use issues, and interactions with planners from surrounding regions.

Research staff also contacted planning officials from counties that have land area occupied by part of a DOE site, and surveyed the major host or adjacent towns. The reason for including only those places hosting or bordering the sites is that in these places the site land is literally most visible and has the greatest direct impact, and coordination of land use planning is most critical there.

Study Results and Discussion

Status of land use planning on sites. Land use planning takes many forms on the sites in this study. It is not performed consistently across sites and is not necessarily tied to policy and program decisions. Rutgers's study reveals that none of the points of contact for planning (contact persons) on the site level are actually trained planners—a sign that this position is not afforded a great degree of managerial support or legitimacy.

The existence/status of land use planning documents at the sites ranges from none at all, other than plans drawn from existing cleanup agreements, to vague future-use plans, to standard comprehensive plans of which land use is but one component, to incorporation of land use into a sitewide environmental impact statement.

Although DOE sites are required to do land use planning, there have been so many different initiatives that sites have been, at best, free to adopt or pursue whatever type of land use planning suits their needs and, at worst, confused as to how to meet requirements and so completely inactive. The department's own guidance on comprehensive land use planning urges sites to examine multiple land use options and to evaluate site characteristics within their regional contexts, coordinating with local and tribal governments to maintain their trust and involvement in the process.

Sites are free, however, to choose whether or how to implement these suggestions. A footnote on the first page states that the document is not intended to be a "requirement [for] how a comprehensive planning process will be managed."

Local and regional land use issues. The university asked site planners for their opinions on the critical land use issues facing the site's neighboring communities. Virtually every site planner had his or her own answer, although four general concerns appeared most often:

- The economic and financial impacts of the sites on the nearby communities.
- The identification of lands for residential or industrial use by neighboring jurisdictions.
- A need to resolve the end-states of the sites.
- An assurance that future contamination of water and land will not threaten public health. Appropriate monitoring programs for groundwater.

Impacts of the site on traffic congestion and on the general quality of life were mentioned as important regional concerns by planners at two of the most urban sites, Sandia Laboratories in Albuquerque and Lawrence Livermore Labs in California. Three of the planners responded that neighboring communities had no concerns about the land use impacts of the site, or that all stakeholders were "on board" with the current plans.

Rutgers also asked the planning officials from the towns and counties near the weapons sites for their most important land use concerns regarding the sites. Minimal-to-no-concerns were reported at Hamilton County, near the Fernald site; Aiken City near SRS; and Bingham County near the Idaho National Engineering and Environmental Laboratory (INEEL). On the other hand,

extensive interest in and concern about land use at the site was reported in Benton County, near Hanford; Butte County, near INEEL; and Miamisburg, host city to the Mound site.

The two most commonly mentioned land use–related matters were (1) the desire that DOE should identify areas on the sites that are in excess of needs and that could be put toward a beneficial reuse for the community; and (2) the desire that DOE should provide assurances that communities are neither subject to nor held responsible for future contamination problems. Along with these two wishes, the planners interviewed expressed an almost universal concern that their local governments are not prepared to assume responsibilities for such long-term stewardship as surveillance and monitoring. These top concerns matched closely with the responses of the site planners in describing their perceptions of important local land use issues.

Several local planners added that some type of federal funding would have to be provided, as well as legal authority granted by the states to the localities, in order for local governments to assume stewardship responsibilities. Another universal opinion was that neither the local governments nor the sites were very far along in their planning for long-term stewardship measures.

Most of the planners said that their communities had no immediate interest in annexing any of the site property, but on the other hand, most had clear opinions on what they would like to see happen on the sites and how their communities would best be served. Communities around a number of sites (Hanford, Oak Ridge, Mound) are interested in industrial reuse, while others (Rocky Flats, INEEL) would prefer to have open space or that the site be left as it is.

The counties around the Hanford site have the widest range of potential interests in the use of the site's lands, including industrial, agricultural, recreational, and historic preservation uses. A county planner there commented that DOE is simply out of touch when it comes to issues of land management.

Among the land use concerns expressed by the planners were the following:

- Identification of hazard-free sites for industrial reuse.
- Assurance that cleanup agreements will be met.
- Protection from future liability.
- Division of the site into parcels with specified levels of contamination.
- Greater public access to recreational areas on the sites.
- Transportation impacts of site activities (traffic, safety of transport routes).
- Long-term funding to maintain institutional controls.
- Local control of permitting for private construction on the sites.

- Local power to levy and collect fines for environmental violations.
- Sharing of information for GIS development (aerial photos, data layers).

Coordination with off-site planners. Site planners told Rutgers that there still is little direct communication between the sites and local planners. At some sites, mid-level staff responsible for planning have reached out directly to planners, as at SRS, where an informal regional planning network has been formed. These efforts, however, have had little support from upper management levels at the sites. At most sites, there is some limited communication with local officials—in most cases, the jurisdiction's elected officials or executives—regarding land use.

Interaction with surrounding governments at most sites in this study is done on an as-needed basis. Two sites, Los Alamos and Mound, reported meetings with local officials daily or weekly, and Lawrence Livermore and Sandia also reported periodic planning meetings with local officials. At the other sites, there is commonly contact only through general public meetings that local officials might attend, though review of NEPA documents, and/or through the citizens' advisory board or other organized regional government group. Memoranda of understanding (MOUs) are in place at Pantex, where the site planner says he has a "first-name working relationship" with local officials in Amarillo and the four counties involved.

The Hanford site's recently completed Hanford Comprehensive Land Use Environmental Impact Statement Plan (HCP-EIS) represents the highest degree of formal local planning involvement in a site planning initiative. A group consisting of planning officials from all of the host counties actually helped develop the plan and, according to Chapter 6 of the proposed plan, will continue to play a role in future planning decisions. A NEPA-chartered site planning advisory board will be formed, with contributing agency status, including the duty to review some of the proposals for projects on the site as would a local planning board.

Responses from local planners from 10 of the sites in the study, though, indicated that there is little or no direct communication between the DOE sites and the planners. The most common form of involvement occurs when off-site planners review documents and attend occasional meetings. Only at Hanford and at Mound, where the city's Community Improvement Corporation is in the process of acquiring parts of the site for reuse, did planners report significant involvement.

Several local planners believe that the current level of interaction with their sites is adequate, even if minimal. One comments that site officials have gone out of their way to communicate with local officials. But even though the past five years have seen the beginnings of land use plan development at the sites and the creation of various local advisory groups and special task forces,

important planning considerations are not adequately being taken into account, according to some of the officials.

Notably, a few respondents commented that local community officials have less status than other stakeholders. Three respondents pointed out that they had to lobby and beat at the doors of the sites for years to gain attention to local impacts.

The vast majority of local planners, regardless of their degree of involvement with the sites, echoed the findings of numerous other studies and observations—both from the DOE itself and from outside organizations—that the DOE has left a legacy of distrust. That is, local planners have no faith that any of their input will be incorporated by site officials, and they feel that site officials will do what they want to anyway. There is, at best, a resignation to let the site "do its own thing" and, at worst, a resentment over insecure attempts to solicit local government participation.

Several respondents noted that, though significant local staff time and effort are spent in providing input to the site, this input is never acknowledged or compensated for. Some charged that attempts to request input are just "for show" or "a ploy." Several of the planners speculated, further, that DOE focuses solely on cleanup and has no incentive to care about future use after cleanup has been completed. Most DOE employees, they say, are not local and therefore have no long-term stake in what happens to the region.

Off-site planners have some suggestions for improving the coordination of land use planning between the site and the neighboring jurisdictions. Most planners interviewed do not perceive a need for new regional planning organizations to be formed, but several believe that existing regional groups could be used as mechanisms to exchange information and hold meetings.

One suggests that a multiagency group be formed to look at land management issues continually and to put all perspectives on the table. At a minimum, as expressed by a planner near the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico, "Any cooperative communication would be appreciated." Many off-site planners suggest that regular formal meetings would be helpful, along with a legal requirement that local officials be consulted in land use decisions with a local impact, and that the department be held accountable to respond to the local input it receives.

Proposals for Change

One statement that can be made with certainty is that DOE sites are not a monolith. In fact, each has its own distinct set of land use characteristics, including vastly different sizes, landscapes, levels of contamination, types of

use, suitability for redevelopment, and flora and fauna, among many other features.

This situation is compounded by the vastly differing regional characteristics outside the site boundaries: the types and degrees of land development, demographic and economic population profiles, regional culture and politics, and so on. The exact process of off-site planning coordination that is appropriate will vary across sites, requiring the development of different models.

A county planner near the Hanford site suggests the need for a new model at the former weapons sites, one that "allows some private sector development and public use to occur, alongside continuing federal activities." On the way toward forming this new model, several steps must be taken. Most steps need to be clearly defined and articulated from DOD's headquarters, with implementation occurring at the site level, while others will primarily be accomplished at the site and local levels.

Here are some policy and program recommendations for DOE to follow, as gleaned from this study:

1. Make land use planning a priority at all major DOE sites, beginning with the establishment of a clear DOE land use policy with consistent guidelines.
2. To support a commitment to land use planning, work toward the goal of every site's hiring a trained professional planner (a DOE employee) to serve both (a) as the federal point of contact for planning and (b) as the adjacent communities' contact person for land use planning concerns.
3. Set up communication mechanisms between on-site planners and off-site planning agencies at each site, with their structures and purposes defined according to the site mission and local needs.
4. Perform a mutual review, and gather commentary on land use plans between the sites and neighboring jurisdictions, with some incentives provided for sites to become accountable for responses to the comments.
5. Develop and define roles and responsibilities for stewardship, with early involvement of local government officials and adequate long-term support for agencies charged with responsibilities.
6. If there are security concerns over discussing certain data with local governments, explain the security issues clearly to local officials so that the rules of engagement for communications are known.
7. Actively identify excess or underused land parcels at the sites, and present a list of them in a timely and forthright manner to local land use authorities, hazards and constraints identified.
8. Concentrate future federal activities geographically on the sites to allow more opportunity for reuse around the edges, to minimize possible health risks, and to protect resources from further damage.

9. Jointly manage and link databases of land use information with local land use agencies. Employ uniform definitions for potential land use categories.
10. Prepare and distribute a comprehensive guide for local officials on long-term planning, reuse, and stewardship.
11. Consider the creation of new cooperative planning entities at the sites, made up of local planners, officials from the site, and officials from other federal and state agencies. This organization would assume long-term planning responsibilities, such as testing the impacts of alternative land use ideas on the site and surrounding regions, and considering alternative management processes in response to these land use options.

Value Remains

One of the planners Rutgers interviewed notes that "the concept of a cooperative relationship between DOE and local agencies should have been a top priority during the growth years for DOE facilities." Instead, for years DOE assumed that the economic benefits of the weapons sites and the laboratories exceeded the adverse impacts of the sites on nearby communities. In the post–Cold War era, the value of these sites as production facilities and long-term job producers has been greatly diminished.

At the same time, their value as land that can perform multiple functions, from economic reuse to recreation to ecological sanctuary, now can be emphasized and enhanced. To achieve this shift of emphasis, new thinking, new skills, and new processes will need to be developed. Most local governments were established long before the weapons sites were placed in their midst, and most will remain long after the sites have been closed. It is only logical that local planning officials play a larger role in preparing for and entering this next phase.

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