CALIFORNIA LLW DISPOSAL SITE DEVELOPMENT UPDATE: AHEAD OF MILESTONE SCHEDULE

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ABSTRACT

US Ecology has been designated by the State of California to locate, develop and operate a low-level radioactive waste disposal facility. In early 1986, the firm identified eighteen desert basins in southeastern California for siting consideration. Three candidate sites were selected for detailed field characterization work in February, 1987. A preferred site for licensing purposes will be identified in early 1988. California is currently ahead of the siting milestone schedule mandated by the Low-Level Radioactive Waste Policy Amendments Act. It is likely that a license application will be filed before the 1990 milestone date. This paper describes the process undertaken by US Ecology to identify three candidate sites for characterization, and the public involvement program supporting this decision. Future activities leading to final site development are also described.

INTRODUCTION

California law requires that a low-level radioactive waste disposal facility be established within the State to meet California's responsibilities under the Low-Level Radioactive Waste Policy Amendments Act. This legislation was passed with strong bi-partisan support. The law provides for selection of a private license designee to establish the disposal facility, subject to regulatory approval by the State Department of Health Services (DHS). This enabling legislation, which provides a clear plan for meeting the Policy Act's requirements, essentially satisfies the Act's January 1, 1988 milestone.

US Ecology, Inc. was selected to serve as the developer in December, 1985. Disposal site selection activities began in January. After a year of technical studies and public involvement, US Ecology selected three candidate sites for detailed characterization studies. Should field studies indicate that any of the three primary sites are unsuitable, two alternate locations have been identified as backups. It is anticipated that a single preferred site will be named in early 1988, and that a license application will be filed by US Ecology in mid-1988. This would satisfy the 1990 siting milestone well ahead of the federally mandated schedule.

This paper describes the open, public process undertaken by US Ecology, in cooperation with the DHS, to identify specific candidate sites. The siting process has a single major goal: to find a technically suitable location with the highest degree of public support. The selection decision was based on input received from public meetings, meetings with public agencies, consultations with Native American groups, and an independent Citizens Advisory Committee coordinated by the League of Women Voters Southern California Regional Task Force. Plans for local community involvement during the upcoming site characterization phase are also described.

CANDIDATE SITE SELECTION

Statewide Screening

California Senate Bill 342, which provided for disposal site development, also directed the DHS to conduct a regional screening study for potentially suitable siting areas. DHS completed this study in March, 1984, applying site selection criteria in the 10 CFR Part 61 federal regulations and additional factors relevant to California. Chief among these additional criteria was a preference for siting areas with less than 10 inches of average annual rainfall.

US Ecology expanded on the State's work in preparing its application to serve as California's license designee. The application developed the concept of siting in topographically closed desert basins on the premise that sites in such basins could be characterized and modeled with a greater degree of confidence than other locations. Fourteen desert basins in the southeastern desert were identified as preliminary study areas in a report supporting US Ecology's application.

After securing license designee status, US Ecology reviewed the 14 preliminary desert basin study areas and added four basins. These 18 basins in Inyo, Riverside and San Bernardino Counties provided the focus for detailed regional screening studies during 1986, leading to selection of three specific candidate sites in February, 1987.

Regional Screening

Regional screening studies of the 18 study basins were conducted in coordination with an extensive public information and involvement process. Public input was obtained through public meetings and speaking engagements with service organizations in the desert communities, consultations with Native American groups, and recommendations from an independent Citizens Advisory Committee supported by the League of Women Voters Southern California Regional Task Force.

As a first step, the Citizens Advisory Committee (CAC) was established through a US Ecology grant to the League of Women Voters. Twelve members were appointed to the Committee through outside nominations. These included two members appointed by the County Board of Supervisors for each of the three counties under study, one member from each county appointed by the League of Women Voters, a representative from the Native American Heritage Commission, a Sierra Club appointee, and a representative of the CALRAD Forum, an organization of radioactive materials users. Committee meetings were moderated by a non-voting convenor selected by the League. Meeting arrangement and staff support services to the Committee were supplied by the League. In addition to information provided by US Ecology, technical expertise was provided to the Committee by the DHS, representatives from the County Environmental Health Departments, the California State University Desert Studies Consortium and the U.S. Nuclear Regulatory Commission.

The regional screening process was structured around six CAC meetings and three rounds of public meetings and workshops. Prior to each round of public meetings, CAC members commented on US Ecology's meeting plans. After each round of meetings, Advisory Committee members discussed public input received and worked with US Ecology and its support contractors to translate that input into specific siting guidance. At all public activities, citizens were invited to visit the Beatty, Nevada disposal facility. This has proven to be the single most effective educational tool.

The first round of five public meetings was intended to provide basic information about the siting process and low-level radioactive waste management in general. The format included presentations by the US Ecology team, followed by a question and comment period. After the meetings, US Ecology worked with the Advisory Committee to identify ten siting objectives based on public concerns, and a list of specific criteria supporting each objective.

The CAC assigned a preliminary importance rating to each criteria, (high, moderate or low importance). The Committee also endorsed a list of exclusionary criteria which eliminated areas from siting consideration for either regulatory or restrictive land use considerations. Finally, the group recommended two high avoidance criteria; planned or existing agricultural land and Bureau of Land Management (BLM) Wilderness Study Areas.

At the second round of eight public meetings, maps applying the exclusion and high avoidance criteria were explained. Two of the original 18 basins were dropped from further study as a result of the mapping exercise. Attendees were then invited to review the importance ratings assigned to the discretionary criteria (i.e. not exclusion or high avoidance) by the Advisory Committee, and to indicate their personal rating. This exercise was followed by a question and comment period. The CAC finalized the criteria importance ratings at their next meeting.

The next step was to identify candidate site areas for detailed comparison. Each of the 16 candidate site areas chosen represented that portion of each basin that best satisfied the rated importance criteria. This was done with the help of a computerized mapping system which allowed digitized information for each criterion to be superimposed on a grid system. The grid display pattern, which stored information for one square mile in each cell, could be altered to overlay different sets of criteria.

The computer mapping exercise, and the resulting 16 candidate site areas were presented to the CAC at their November, 1986 meeting. Plans for the third round of public meetings were also presented for comment. The Committee recommended that the candidate site areas be presented in a workshop format to promote a high degree of one-to-one interaction.

The third round of ten public workshops was conducted by US Ecology in December and January. Resource persons were available to discuss poster displays on groundwater protection, transportation, radiation properties and safety practices, and sources of low-level waste. A drum containing noncontaminated waste examples was on display along with a video tape of US Ecology's Beatty, Nevada disposal site operation. DHS personnel were on hand to discuss their independent regulatory role. Finally, maps depicting the 16 candidate site areas were displayed. It was stressed that each siting area appeared suitable from a technical standpoint. To obtain public recommendations, a questionnaire was made available. Respondents were asked to identify which siting areas they considered the most and least favorable, and to explain their reasoning.

Advisory Committee members were then sent a rigorous homework assignment asking them to rate the 16 candidate siting areas. Resource materials included maps and detailed descriptions of each site area, results of the public workshop questionnaires, and copies of all resolutions and citizen correspondence sent to US Ecology regarding the site selection decision. Each CAC member was asked to indicate if a site should be considered in

the top five, bottom five, or middle six category, and to state the reasons for their classification. The group later convened to discuss the results. Several Committee members changed their classification based on the discussion.

US Ecology designated three candidate sites for detailed characterization in February, 1987. Each site is located on Bureau of Land Management property. The decision was based on the Advisory Committee's recommendations, agency input, public meeting comments, citizen letters and resolutions received from local officials, and two rounds of consultation interviews with Native American groups. Two of the sites - - the Ward and Silurian Valley sites were broadly considered to be favorable by CAC members. The Silurian Valley site was also among the least constrained locations from a Native American perspective. The third site, in Panamint Valley, was rated most favorably by citizens completing siting questionnaires at the round three workshops.

Two more site areas rated highly by the CAC were designated as alternate locations. No specific sites have been identified in these areas, and no further work is anticipated at this writing. The two sites will only be studied if primary sites are found to be unsuitable.

NEXT STEP: PREFERRED SITE SELECTION

A Draft Site Characterization Plan was distributed for comment in early February. The plan will be finalized some time in March. Work will then begin simultaneously on each of the three candidate sites. Each site will receive equal consideration initially.

The Citizens Advisory Committee will continue to provide recommendations to US Ecology during the candidate site characterization and comparison phase. In addition, Local Citizens Committees will be formed for each site to involve the local communities in future decisions. Information offices will also be set up near each candidate site to maintain close contact with local citizens.

A preferred site for licensing purposes will be identified in early 1988. In mid-1988, a license application and Proponents Environmental Assessment will be prepared and submitted to the State. As the lead agency, the DHS will then prepare an independent environmental impact report, (EIR), and hold formal hearings on the EIR and US Ecology's license application. The EIR will be prepared in coordination with the BLM to comply with NEPA requirements. If all goes well, US Ecology expects to receive a license, and begin facility construction in early 1990.