

Summary
Great Lakes Commission Beneficial Use Task Force Meeting
June 27th, 2000
USEPA Offices, Chicago

The meeting opened with a discussion of the compendium of beneficial use profiles. Lisa Koch, Great Lakes Commission, began with an overview of the key findings and questions/issues of the draft compendium. Following the overview, a discussion ensued addressing various aspects of the profiles and recommendations for state and federal guidance.

Beneficial Use Definition

In the discussion that focused on the need for a codified federal definition for beneficial use, it was determined that it would be advantageous in tracking projects to have a broad federal definition. It was suggested that the definition needs to determine use within it. There was a suggestion to stick close to Minnesota's definition of excavated, unconfined, upland material. Wisconsin suggested that the existing solid waste definition in that state is a good fit because of the possibility of utilizing exemptions to avoid strict monitoring. It was further suggested that states use the Section 404 definition of "fill" as the type of material in beneficial use definition.

New York has addressed many of the issues involved with defining beneficial use of dredged material. Dredged material is not considered a solid waste until it is on land and, to avoid regulatory hurdles associated with solid waste, most beneficial projects are handled under dredging permits and transfers. This helps avoid ramifications of negative public perception associated with solid waste management. With a solid waste determination, handling and processing of dredged material becomes almost impossible to consider; few projects have been able to go through with solid waste permitting in New York. Use of a consent order with beneficial use can avoid permitting.

Benefit/Impact Evaluation

A discussion followed on the value of creating state or federal guidance to evaluate costs and benefits to beneficial use projects. A member of the task force stated it is important not to create less stringent federal

standards that could weaken more stringent state standards. Jan Miller suggested that cost/benefit decisionmaking for dredged material should also be consistent with the evaluation of the chemical and physical characteristics of dredged material, as addressed in Section 404. However, Section 404 has the force of law for in-water beneficial uses, but does not apply to upland uses, and there is no other federal regulatory basis for guiding upland beneficial use. Miller noted that the Corps would support the development of upland beneficial use guidance modeled after Section 404 criteria.

Contaminant Criteria

During the discussion of Wisconsin's development of Soil Criteria for PCBs, Beth Goodman, ecotoxicologist with the WDNR, noted the evolution of the development of contaminant criteria. In the 1990s, the various rules and guidance regarding contaminants were not consistent across programs. In addition, there were no rules or guidance for land spreading and no regulations, guidance or information regarding bioaccumulation. A cross-agency committee was established to ascertain contaminant concentrations in areas of Wisconsin and conduct mass balance studies. The maximum allowable PCB concentrations determined through these studies were based on assessments of risk to human (cancer) and wildlife (reproductive system) health. From these studies, a draft rule for PCB soil contaminant criteria was developed as proposed code NR 159. Complementary modifications to this code are found in NR 204 and 214.

A concern was raised regarding the language used in determining the maximum amount of material spread in any one area. Soil standards would apply after soil spreading and mixing procedures, not before the material is mixed with the soils found on the application site. Continual land spreading could occur and people could arguably create landfills under this code as a result. Straying away from contaminant criteria and using limits on soil concentration was offered as a possible solution to this issue.

Mark Werner, from Wisconsin's Division of Public Health, described the risk assessment used to determine soil criteria. Cumulative background exposure studies, conducted on Wisconsin family farms, showed that exposure to PCBs resulted in a 1/million cancer risk level.

Lee Lebenstein, WDNR's Contaminated Sediment Team Leader, discussed his team's efforts to manage heavily contaminated sediments. He stated that, generally, due to the extent of contamination, beneficial use projects are not considered. He also noted that, because of the requirements written into Admin. Code 347, any dredging project requires sediment sampling to take place along with chemical analysis.

Joan Peck from Michigan discussed the state solid waste rule (Part 115) that governs upland beneficial use. Originally, Part 115 dealt primarily with contaminated soils in landfills but, in 1993, the state revised it to include remediation criteria for contaminated soils outside of landfills. Subsequent changes to state law excluded dredged material from being considered a solid waste for public projects and allowed private parties to pursue upland beneficial use projects under the state 301 permit program, which regulates acceptability and end use options for beneficial use. Beneficial use projects (public or private) can be determined allowable through human health risk assessments and comparing dredged material to background or site specific soil characteristics. For example, dredged material found to be below detection or below designated levels can be placed anywhere not prohibited by law. Dredged material that is above designated levels may sometimes be placed in a specific site that eliminates all exposure pathways of concern.

Alyse Peterson addressed New York's definition of uncontaminated material. Peterson described an unsuccessful process in New York to develop contaminant criteria for dredged material. Years ago, a task force was created to determine "how clean is clean" in regard to a New York/New Jersey harbor dredging project. The task force determined the need for standards for uncontaminated material and exposure scenarios but found dissension within and among programs when presented with specific numerical standards. (It was noted that EPA had the same issue with sediment quality guidelines.) New York also determined that they would have a great deal of problems with the public's concept of risk when using particular numbers. It was finally decided that New York would not have numerical contaminant criteria for sediments and would use case-specific review instead. (Jan Miller noted that Section 404 uses a comparative approach instead of numbers.) Current New York state regulations use an end-use approach to determine acceptability of beneficial use projects, under the "Beneficial Use Determination" (BUD) process. Peterson noted that two BUDs, identified in New York regulations [Part 360-1.15(b)] reference the use of uncontaminated material, while one references contaminated material.

Permitting

Jan Miller discussed the federal laws and regulations applicable to beneficial use. These are sections 404, 401(CWA); and Section 10 (RHA); CZMA; RCRA; and TSCA. He noted that a *dredging* permit isn't the controlling factor in determining beneficial use options; it is the *placement* permitting process. Miller highlighted the importance of Section 404 to beneficial use in waters of the U.S., noting that it is a uniquely holistic regulation that weighs economic, social and environmental factors. Contaminant determination is made based on the Great Lakes Testing Manual, with rule making and guidance falling under the purview of the Corps. A permit can not be issued, however, without full state concurrence through 401 certification and CZMA compliance.

Ron Fassbender, from WDNR, discussed Section 401. The purpose of Section 401 is to certify that federal dredging projects are in compliance with state water quality regulations. Section 401 certification is not a permit. However, a federal proposal to dredge and fill may be granted, granted with condition, waived or denied based on Section 401 determination.

Fassbender then discussed the body of laws used to determine beneficial use in Wisconsin. Wisconsin processes Section 401 certification as a ch. 30 permit, which regulates structures and deposits in navigable waters. In addition, sand blanket permits can be issued for in-water projects. A sand blanket project at Wisconsin Point in Lake Superior was not very successful, however, due to difficulties with determining a proper testing procedure. Lake bed leases and bulkhead line leases can also be used with the improving/creating shoreline. These permits are very valuable for those beneficial uses that are in-water projects. For instance, island creation in Pensaukee Harbor used a bulkhead line lease. Also, approaching beneficial use projects through direct, specific legislative authorization is being attempted with a proposed project to renovate the eroded Cat Island chain in lower Green Bay.

Steve West discussed Indiana permitting procedures. In Indiana, dredged material that is uncontaminated can be used for landfill cover, roadbeds, structural fill and beach nourishment without a permit. In-water projects using uncontaminated material require a Section 404 permit and compliance with state water quality regulations. Contamination is determined by state published (not codified) the Risk-Integrated System of Closure (RISC) guidance using the residential values for soil criteria. Contaminated material must go to a CDF. There are no provisions for exceptions or for using contaminated material with end-use restrictions (i.e., exposure controls). West stated that one could, however, define contamination by risk-based analysis or by a case by case basis, thus allowing for exposure controls, but this has not been done to date in Indiana.

Beneficial use guidance under development at the Indiana Department of Environmental Management, however, will set forth procedures for risk-based application of dredged material for upland and in-water environments.

The floor was opened to Beneficial Use Task Force members to discuss permitting issues related to CDF “mining.” It was stated that, in Wisconsin, the municipality has ownership of a CDF. Therefore, material could be removed without a fee. It is believed that Section 404 would not apply to materials extracted from CDFs because the material would be dewatered and, therefore, it would be unlikely that there would be a discharge or return flow. The process to stratify material might result in the space left in a CDF having higher economic value than material extracted, which brings up interesting fee considerations.

Jan Miller stated that Corps headquarters has no overarching policy on economic value of dredged material. Also, CDF mining raises questions about ownership because, with CDFs, land is owned locally with the Corps having operation rights until the CDF is full. Issues about the legality of mining a CDF and a competitive bidding process remain unanswered, though individual arrangements have been made in the past. Before a sale occurs, the Corps will ask the local sponsor to deal with marketing, testing, evaluation and regulation. The pressure to consider beneficial use is delayed where CDF has sufficient long-term capacity or where capacity can be increased by dike raising. Unless there is pressure on local sponsors for new disposal options, they will continue to fill a CDF. There must be economic incentives for beneficial use.

Duluth Harbor: Beneficial Use and DMMP

Ray Skelton, Duluth Seaway Port Authority, and Andrew Bramson, Arrowhead Regional Development Commission, gave overviews on some beneficial use projects taking place in the Duluth Harbor area. These projects include mineland reclamation, beach erosion control, habitat creation and capping. It was noted that almost all docks in Duluth/Superior Harbor have been built with dredged materials, and dredged material has been shown to be excellent in soil enhancement studies at a mineland reclamation site. A significant issue in the harbor is the need to promote beneficial use projects in the face of diminishing capacity at the Erie Pier CDF, which has been a major impetus for making beneficial use a key component of the DMMP there.

There was discussion about how beneficial use might be better incorporated into DMMPs elsewhere. It was noted that there is little incentive for enacting beneficial use projects in areas where there is sufficient CDF capacity, capacity can be increased by raising dike walls, or where open water disposal is available for clean material. This is due in large part to the Corps' "federal standard," which requires that dredged material be disposed of in the "least costly alternative which is engineeringly sound and satisfies acceptable environmental regulations." Open water disposal, placement in a CDF, and to a certain extent beach nourishment have been widely demonstrated to meet the federal standard for particular projects. Other beneficial uses are usually more costly and the extra costs would need to be borne by local or state sponsors.

USEPA Beneficial Use Workgroup Update

Bonnie Eleder provided a brief update of the USEPA Beneficial Use Work Group. The group's efforts have been geared toward: 1) support and review of Wisconsin's efforts to develop soil criteria for PCBs; 2) evaluation of federal regulations that might apply to such state criteria and the development of an agency position paper; and 3) technical support to the states on beneficial use of dredged material. Eleder noted that the group has shifted away from its initial focus—to develop guidelines including numeric limits for beneficial use—in support of the three above mentioned efforts.

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