



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FID #460143200
ERR - SFND
FOLDER NO. 213

REPLY TO THE ATTENTION OF

SP-14J

NOTICE

WISCONSIN DEPARTMENT OF NATURAL RESOURCES TOXIC SUBSTANCES CONTROL ACT DISPOSAL APPROVAL

On January 24, 1995, the United States Environmental Protection Agency (U.S. EPA), Region 5, issued a disposal approval under the Toxic Substances Control Act (TSCA) (40 C.F.R. § 761.60[a][5]-[iii]) to the Wisconsin Department of Natural Resources (WDNR). This approval allows the WDNR to select landfills that comply with Wisconsin Administrative Code Chapters NR 500-520 and with the terms and conditions of the TSCA approval for the disposal of sediments contaminated with Polychlorinated Biphenyls (PCBs) at concentrations of 50 parts per million (ppm) or greater. This approval only applies to sediment from remediation projects conducted under the authority and control of the WDNR.

This approval was issued in response to an alternate disposal application for PCB contaminated dredged material submitted by the WDNR on May 6, 1994. On October 5, 1994, the U.S. EPA and WDNR held a public meeting in Madison, Wisconsin to discuss the WDNR's application and the proposed TSCA approval. During the public comment period, the U.S. EPA received both oral and written comments.

Enclosed is a copy of the final TSCA approval to dispose of PCB contaminated sediments, issued to the WDNR on January 24, 1995, and a copy of U.S. EPA's response to public comments. In addition, if you have not previously received a copy, enclosed is a copy of the transcript from the October 5, 1994, public meeting.

Response to Comments on the Proposed
Toxic Substances Control Act Disposal Approval
to the Wisconsin Department of Natural Resources (WDNR)

1. There was only one meeting on this proposal in Madison, Wisconsin, far removed from the sites and localities likely to be impacted by this decision. At a minimum, this hearing should have been held in the Fox River Valley where the permit at issue is likely to be implemented. At least a second public meeting should be held in the Fox River Valley.
2. It is not clear that an existing solid waste landfill which has been subject to public participation in the permitting process, as provided for under sec. 144.44, Wisc. Stats., but which did not consider acceptance of PCB waste, will be required to repeat the public participation process if the existing landfill is proposed by WDNR to accept PCB contaminated sediments.
3. The landfills, once publicly noticed and approved only for ordinary solid waste may be selected by WDNR under the proposed approval for receipt of PCB waste without the level of public scrutiny and test by fire they should have received had PCB waste been identified up front as a waste these landfills would have to handle.
4. A written condition should be added to the approval stating that the same procedures applicable to new ordinary and hazardous waste landfills in sec. 144.44, Wisc. Stats., should be expressly required for landfills to receive PCB waste.
5. A report should be submitted to the public in the area of the landfill to describe its investigation and finding about the proposed application and the plan for monitoring the leachate and an informational meeting is held to answer questions and listen to comments on the report before the decision is made.
6. Ordinary citizens, many of whom work for a living, cannot possibly attend meetings affecting their vital interests that are held in Madison, in mid-week, from 6:00 p.m. to 9:30 p.m. The DNR and EPA should hold public informational meetings in Neenah concerning TSCA proposed landfill disposal of PCBs and the Little Lake Butte de Morts sediment remediation project.

7. The discussion of the disposal of dredged material from a local Neenah PCB problem is taking place in Madison, 100 miles away from Neenah, in the evening. The problem exists along the Fox River between Neenah and Green Bay so these meetings should be held where the problem exists and where the local citizens will be affected by the hauling and dumping of this material.
8. This situation should get more publicity in the local area, and property taxpayers should get better explanation of what their public officials are agreeing to.
9. The DNR is not particularly helpful in keeping the general public informed regarding the proposal to issue a TSCA approval to the DNR and the Little Lake Butte des Morts sediment remediation demonstration project.
10. We are strongly opposed to the disposal of the PCB substance (Polychlorinated Biphenyls), which is a cancer causing agent, in our Outagamie County Landfill.
11. The residents of Outagamie County are concerned about the potential use of the Outagamie County Landfill in Wisconsin as a depository for PCB-contaminated sediment from the Fox River, Lake Winnebago and Lake Butte des Morts. It seems the EPA and DNR are holding each others hands on this issue, as the EPA has turned over to the DNR full authority and responsibility for the cleanup of toxic river sediment from state waters.
12. EPA dictates that PCB levels of 50 parts per million belong only in a designated hazardous waste site. The contaminated PCB material they are proposing to dump in Outagamie County Landfill contains PCB levels up to 220 ppm. Outagamie County Landfill is not certified or licensed to accept this contaminated material. Special approved licensed sites are available to accept these toxic materials.
13. If Outagamie County gets approval to accept this contaminated material, it will soon be disposing contaminated substances and material from a wide area.
14. There is no local community approval process for deciding whether a particular landfill should accept PCB contaminated sediment.

RESPONSE TO COMMENTS 1 THROUGH 14:

The United States Environmental Protection Agency (U.S. EPA) agrees that local communities must have input to local disposal of PCB contaminated sediments. Additional opportunities for public input on selection of landfills are incorporated in the Toxic Substances Control Act (TSCA) Disposal Approval (Approval) to the Wisconsin Department of Natural Resources (WDNR). The Approval does not select individual landfills for the disposal of PCB contaminated sediments; rather, it approves an alternate method for sediment disposal, in solid waste landfills having approved plans of operation under § NR 144.44(3) Wisconsin Statutes (Wis. Stats.) that comply with chapters (chs.) NR 500-520, Wisconsin Administrative Code (Wis. Adm. Code), are authorized under § NR 157.07, Wis. Adm. Code, and comply with the conditions of the Approval. WDNR will select the landfills which comply with the terms of the Approval and the U.S. EPA will maintain an oversight role. WDNR will provide an opportunity for public input each time a specific landfill is proposed for selection under the Approval. WDNR will follow the same procedure for public input as the U.S. EPA presently employs in considering alternate methods for the disposal of PCB contaminated dredged material. Condition #4 has been amended to clarify the process for obtaining public input. Under Condition #4, WDNR must provide public notification at least 30 days prior to the selection of each sediment disposal landfill under this Approval. If this notification generates sufficient public interest, WDNR must hold a public meeting to discuss the selection of the landfill. WDNR must consider all oral and written comments received prior to issuing a landfill plan modification to accept PCB contaminated sediments.

15. **The legal authority of the United States Environmental Protection Agency (U.S. EPA) to issue the proposed disposal approval to the Wisconsin Department of Natural Resources (WDNR) under the Toxic Substances Control Act (TSCA) is questionable. This proposal is essentially a delegation of U.S. EPA's TSCA authority to the WDNR and delegation to the states is not authorized under TSCA or its regulations.**

RESPONSE:

U.S. EPA believes it has the legal authority to issue this Approval and can make a strong legal argument to support this position. The Approval is not a delegation of U.S. EPA's TSCA authority. The TSCA does not preempt a State from regulating the disposal of PCBs. Section 18(a)(2)(B) of TSCA prohibits any State from regulating a chemical substance or mixture or article containing a chemical or mixture regulated under TSCA, except that a State may

regulate the disposal of such chemicals, mixtures and articles as described at Section 6(a)(6) of TSCA. State requirements regarding disposal of PCBs are completely exempt from Federal preemption insofar as they prescribe what may be done within the State boundaries, but a State may not require PCBs generated within its boundaries to be disposed of by a method less restrictive than prescribed by TSCA (43 FR 7153, February 17, 1978). In issuing this Approval, U.S. EPA has determined, in accordance with 40 C.F.R. § 761.60(a)(5), that WDNR's disposal of PCB contaminated sediments in landfills under the terms and conditions of the Approval complies with TSCA and will provide adequate protection to health and the environment. Therefore, this Approval is a confirmation of existing State authority for the disposal of PCB contaminated sediments by a specified method and not a delegation of preempted TSCA authority.

16. **Since the approval is subject to serious legal question or challenge, basing cleanup actions on this authority could setback or delay cleanup of contaminated sediments.**

RESPONSE:

If the Approval is challenged, U.S. EPA will continue to evaluate applications for individual sediment disposal actions under present 40 C.F.R. § 761.60(a)(5) authority. Following this existing procedure will not speed up cleanups of PCB contaminated sediments in Wisconsin, but it also should not delay cleanup beyond the status quo.

17. **Issuing a permit to WDNR to further approve yet unspecified disposal methods for PCBs is not approving a "disposal method" as envisioned under 40 C.F.R. § 761.60 (a) (5). This permit proposes to delegate the authority to approve specific disposal methods to WDNR.**

RESPONSE:

WDNR's disposal method is specified. It is specified as landfills with approved plans of operation under § 144.44(3) Wis. Stats. which comply with chs. NR 500-520, Wis. Adm. Code, are authorized under § NR 157.07, Wis. Adm. Code, and which comply with the conditions of the Approval.

18. **EPA should issue authority for the WDNR to approve site-specific applications for the disposal of PCB-contaminated sediments from waterways only if the Wisconsin landfill meets the requirements of NR 500-520, including but not limited to the location, performance and design criteria of NR 504, the operational criteria of NR 506 and the monitoring requirements of NR 508.**

RESPONSE:

U.S. EPA agrees. Under the Approval, WDNR will only select landfills meeting the requirements of chs. NR 500-520, Wis. Adm. Code, including, but not limited to, the location, performance, and design criteria of ch. NR 504, Wis. Adm. Code, the operational criteria of ch. NR 506, Wis. Adm. Code, and the monitoring requirements of ch. NR 508, Wis. Adm. Code.

19. **The DMR application states that PCB contaminated sediments would be disposed of in landfills "approved and licensed under NR 500-520, in an approved and licensed landfill that meets the requirements of NR 500-520 or in a landfill constructed under the less restrictive requirements of NR 180. It is not clear in the application that sediment may go to the NR 180 landfill only if it meets the design criteria of NR 504. The TSCA permit should only be granted on the condition that the solid waste facility meets the substantive requirements of NR 500-520 and, specifically, meets the location, performance and design criteria of NR 504, operational criteria of NR 506 and monitoring requirements of NR 508.**

RESPONSE:

The WDNR application is for disposal of PCB contaminated sediments in landfills complying with chs. NR 500-520, Wis. Adm. Code. There is no reference in the WDNR application to a less restrictive ch. NR 180, Wis. Adm. Code, landfill. U.S. EPA has been advised by WDNR that there are no ch. NR 180 regulations under Wisconsin's Administrative Codes.

20. **The approval should contain a condition that WDNR may select only landfills that have approved feasibility reports, plans of operations, and licenses that considered at the time of their approval or amendment the disposal of PCB contaminated sediment.**

RESPONSE:

WDNR will issue a plan modification to accept PCB contaminated sediments to each landfill selected under the Approval. Condition #6 requires that the plan modification incorporate specified conditions of the Approval dealing with notification, incompatible wastes, monitoring, and dewatering sediments. In issuing this Approval, U.S. EPA reviewed WDNR's solid waste landfill regulations and determined that disposal of PCB contaminated sediments in Wisconsin landfills having approved plans of operation under § 144.44(3) Wis. Stats., that comply with chs. NR 500-520, Wis. Adm. Code, are authorized under § NR 157.07, Wis. Adm.

Code, and comply with the conditions of the Approval will provide adequate protection to health and the environment. Given this determination under 40 C.F.R. § 761.60(a)(5), U.S. EPA sees no purpose in requiring WDNR to repeat the entire solid waste landfill permitting process. As discussed in the response to comment #15, Condition #4 provides for public input to selection of landfills under the Approval.

21. **The approval should contain a condition that WDNR may not issue any waivers or exceptions from otherwise applicable and practicably applied standards and procedures for the facilities under the solid waste law and codes.**

RESPONSE:

Two additional conditions have been added to the Approval to address the concern over waivers or exemptions. Condition #8 requires WDNR to review all past exemptions from chs. NR 500-520, Wis. Adm. Code, granted to the landfill and determine whether any exemption is relevant to TSCA or the conditions of the Approval, prior to issuing a landfill a plan modification to accept PCB contaminated sediment. If there are relevant exemptions, WDNR must receive U.S. EPA concurrence with the exemption before issuing the plan modification. If WDNR issues additional exemptions from chs. NR 500-520, Wis. Adm. Code, relevant to this approval, after a landfill has received a plan modification, Condition #9 requires WDNR to obtain U.S. EPA concurrence before placing additional PCB contaminated sediments in the landfill.

22. **DNR proposed NR 722 to differentiate between state-of-the-art landfills and other operating landfills for disposing of contaminated media. Under the proposed NR 722, landfills that are not state-of-the-art are limited to accepting up to 250 yds³ of contaminated media. After NR 722 is promulgated, the TSCA permit should be modified to reflect the NR 722 criteria for defining a state-of-the-art landfill if the NR 722 criteria are equivalent of more restrictive than the selection criteria used under this TSCA permit.**

RESPONSE:

The Approval as presently constituted will provide adequate protection to health and the environment. Chapter NR 722, Wis. Adm. Code, is a proposed rule, which is presently being redrafted. It is speculative to say when a final ch. NR 722, Wis Adm. Code, might be issued and what it will contain. The Approval runs for a period of five years at which time it may be renewed. If the Approval is renewed, it would be appropriate to consider changes to the Approval at that time.

23. It is hoped that the EPA will take into account that fish which are contaminated with PCBs could also be disposed of in a landfill.

RESPONSE:

The WDNR's application to dispose of PCB contaminated sediments did not include fish or other commercial or industrial waste.

24. At the public meeting, WDNR claimed landfilling PCB contaminated sediments, as allowed under the proposed approval, was one of several disposal tools which could be selected by WDNR for a sediment cleanup project. WDNR denied that it was locked into landfilling PCB contaminated sediments despite the newly adopted § NR 722.07, which allows Potentially Responsible Parties (PRP) to landfill contaminated sediments regardless of the availability of other practicable alternatives. A statement in the WDNR application referencing the applicability of Ch. NR 157, Wisc. Adm. Code, regarding selection of methods of disposal tends to support WDNR's claim that they are not locked in to landfilling. However, PCB contaminated sediment is not a PCB product under NR 157. If disposal of PCB contaminated sediment includes the disposal of PCBs then our concern for alternative selection is somewhat reduced. The issue of disposal alternative selection should be clarified as part of the approval process.

RESPONSE:

The selection of disposal methods for WDNR sediment remediation projects is outside the scope of this Approval. This Approval represents one option, or tool, available to WDNR for the disposal of PCB contaminated sediments. Any disposal method selected by WDNR for sediments at PCB concentrations of 50 ppm or greater must comply with TSCA. This Approval is for landfills authorized under ch. NR 157, Wis. Adm. Code, not § NR 722.07, Wis. Adm. Code. The WDNR's May 6, 1994, application calls for the disposal of PCB contaminated sediments in landfills complying with chs. NR 500-520, Wis. Adm. Code, which are authorized under § NR 157.07, Wis. Adm. Code (Approval Finding #1). The Approval, at page 7, only allows the disposal of PCB contaminated sediments in landfills authorized under § NR 157.07, Wis. Adm. Code. Section NR 157.07, Wis. Adm. Code, regulates disposal methods and facilities for PCBs and products containing PCBs and is similar to U.S. EPA's procedures under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) for selecting disposal methods. In addition, it is U.S. EPA's understanding that § NR 722.07, Wis. Adm. Code, has not been adopted.

25. The landfill option should not minimize the consideration of other options under the EPA Superfund process.
26. Storage of such waste in landfills tends to undercut the development and use of degradation technologies to decontaminate PCBs.
27. The following options could be applied to PCB cleanups toward virtual elimination rather than merely moving or containing them: bioremediation, incineration, thermal desorption, chemical dehalogenation, solvent extraction, and soil washing.
28. By simplifying the approval process for the disposal of sediment contaminated with PCBs above 50 ppm in a WDNR-approved landfill, the current proposal provides a disincentive for using other techniques some of which offer a more final solution. All means should be taken to ensure that long-term storage in a landfill does not become the only option simply because it offers the path of least resistance.

RESPONSE TO COMMENTS 25 THROUGH 28:

U.S. EPA agrees that the full range of TSCA disposal methods should be considered for PCB contaminated sediments; landfilling under this Approval is one of these methods. In issuing this Approval, U.S. EPA is not requiring WDNR to landfill PCB contaminated sediments, and does not agree that the Approval will undercut the use or development of other appropriate PCB disposal methods. U.S. EPA has authority to approve landfilling of PCB contaminated sediments under 40 C.F.R. § 761.60(a)(5), and it has been our experience that authority to approve landfills has not prevented consideration of existing destructive PCB disposal methods or development of new PCB disposal techniques.

29. Economics should not be part of the remedy selection process criteria. The burden should rest on the WDNR to prove there is no better option than landfilling without economics entering the picture. The WDNR should also prove risks to public health, safety, and the environment have been minimized to the greatest extent possible.
30. As long as economics are included in the criterion for selecting a remediation process, short-term cleanup measures, like containment in landfills, will continue to discourage the investigation, demonstration and use of innovative, permanent remediation technologies and will continue to be the cleanup option of choice.

RESPONSE TO COMMENTS 29 AND 30:

Remedy selection is outside the scope of this Approval. The Approval requires that only landfills authorized under ch. NR 157, Wis. Adm. Code, which regulates disposal methods and facilities for PCBs, may be used for the disposal of PCB contaminated sediments. When U.S. EPA selects disposal methods for PCBs, the primary consideration is protection of human health and the environment. However, economics along with other factors, are an appropriate consideration in selecting among protective disposal methods under existing CERCLA procedures and under TSCA disposal requirements for dredged material in determining whether disposal in a TSCA incinerator or TSCA chemical waste landfill is reasonable and appropriate.

31. **We do not want one pollution problem traded for another.**
32. **The proposal merely changes the nature of the threat from one of current surface water contamination to one of potential air and groundwater contamination.**
33. **In general, it is not sound policy to simply move contaminated sediments from one location to another.**
34. **PCBs will merely be stored, not destroyed in the landfill environment.**

RESPONSE TO COMMENTS 31 THROUGH 34:

It is true that landfilling is not a destructive process. However, under this Approval, the disposal of PCB contaminated sediments in chs. NR 500-520, Wis. Adm. Code, landfills is not simply moving contaminated sediments from one location to another or changing pollution problems. Presently, PCB contaminated sediments continue to degrade Wisconsin waters. Aquatic ecosystems are highly sensitive to PCB contamination and may readily transport PCB contaminated sediment. In dynamic aquatic systems, tributaries may transport PCB contaminated sediments to the larger Great Lakes where opportunities for remediation will be lost. Disposal in chs. NR 500-520, Wis. Adm. Code, landfills will dramatically reduce risks to human health and aquatic ecosystems by providing a controlled, monitored environment.

35. All landfills leak and as a result, storing of PCB contaminated sediments in a landfill will inevitably lead to PCB contaminated groundwater, soil and leachate problems.
36. PCB's leach downward in the ground water affecting local wells as well as the surrounding municipalities' water supply. There is no treatment possible for the removal of these chemicals once they have contaminated the water source.
37. Can you guarantee further contamination will not occur by moving the waste? Moving the hazardous waste to a new area may cause further problems such as groundwater contamination, etc.
38. Scooping out PCB sludge, loading it into trucks and then unloading and burying it in a landfill has the potential to spread PCBs through the air, over land and on other waters.

RESPONSE TO COMMENTS 35 THROUGH 38:

Under the terms of this Approval, only those landfills with an approved plan of operation under § 144.44(3) Wisc. Stats. that comply with chs. NR 500-520, Wis. Adm. Code, and are authorized under § NR 157.07, Wis. Adm. Code, are eligible to accept PCB waste. These landfills have had to meet siting, construction and monitoring requirements which guard against the release of PCBs to the environment. In addition to the Wisconsin requirements, there are conditions in the Approval designed to prevent PCB releases. Testing of leachate and, if necessary, groundwater for PCBs is required. The dewatering and solidification of PCB contaminated sediments at the landfill is prohibited.

39. We are not willing to risk possible birth defects, reproductive problems, jaundice, and cancer from PCB's to future generations.

RESPONSE:

Neither is the U.S. EPA. That is why the U.S. EPA is supporting Wisconsin in their effort to remove PCB contaminated sediment from waterways. PCBs have a tendency to persist in the environment and accumulate in sediments and aquatic organisms and wildlife. Removing PCBs from an uncontrolled, unpredictable environment where they can contaminate large eco-systems and placing them into a controlled, managed environment will reduce these risks.

40. **Moving these contaminated soils to a place other than a hazardous waste facility would be irresponsible.**

RESPONSE:

As part of the 40 C.F.R. 761.60(a)(5) application review process, the chs. 500-520, Wis. Adm. Code, landfill requirements were carefully scrutinized and compared to TSCA landfill requirements. After meticulous study and consideration, it was determined that chs. NR 500-520, Wis. Adm. Code, landfills will provide adequate protection to health and the environment. The U.S. EPA is providing Wisconsin an additional tool to achieve remediation of contaminated sediments in a timely, cost-effective manner and thereby eliminating adverse impacts to health and the environment.

41. **Chemicals need to be tested and proven safe to human and other life before they are allowed to be spread all around us without our consent.**

RESPONSE:

U.S. EPA evaluates all pesticides and industrial chemicals both before and after they are made to determine the amount of risk they present to human health and the environment. One way U.S. EPA evaluates these chemicals is to make sure they are adequately tested. U.S. EPA does not allow any of these chemicals to be manufactured, used, or disposed of in any way that presents an unreasonable risk to human health or the environment.

42. **This whole plan is foolishness unless steps are taken to discourage PCB pollution in the future.**

RESPONSE:

U.S. EPA agrees that steps must be taken to discourage PCB pollution and the PCB program is aggressively pursuing this goal. Region 5 PCB program personnel are actively working with major utilities to establish phasedown plans for the safe removal and disposal of PCB electrical equipment before there are any releases to the environment. In the future, smaller utilities will also be invited to participate in the phasedown program. In the meantime, PCBs in rivers are accessible to aquatic-based food chains and humans. U.S. EPA believes that not only does the U.S. EPA have the responsibility to remove the threat of PCB pollution in the future but also has the obligation to actively pursue remediation of PCB-contaminated waterways before the PCBs migrate to larger lake systems where recovery and remediation is impossible.

43. Transporting and burying PCBs only carries the problems to other regions.

RESPONSE:

This Approval provides an opportunity to dispose of PCB contaminated sediments locally instead of transporting PCB contamination out of State to areas which do not share in the environmental benefit from remediation of Wisconsin waters.

44. If the parties responsible for contaminating the sediment conduct the cleanup, then offering a less expensive way of dealing with toxic wastes would provide less incentive for preventing the pollution in the first place.

RESPONSE:

Removal of PCB contaminated sediments from lakes and river beds, dewatering sediments, transportation, and landfilling in a chs. NR 500-520, Wis. Adm. Code, landfill is far more expensive than preventing PCB contamination of waterways in the first place.

45. The storage of PCB contaminated sediments is a tax-payer subsidy of pollution cleanup of Superfund sites. The polluters responsible for the contamination should pay the full costs of cleanup.
46. Who will be paying for the removal and remediation of the contaminated sediment? Will it be the state or those parties who originally released the PCBs into the environment?
47. The costs of excavation to remove the sediments in an environmentally acceptable manner have not been specifically addressed.
48. The proposal does not consider the full cost accounting in terms of maintenance, leachate processing, liability, etc.
49. Who has paid for the research done to date, who will bear the burden of removing and transporting the wastes and ultimately pay for their safe transport and disposal in a landfill? The businesses that are responsible for discharging PCBs in the first place should be held accountable for the costs involved in this project, not taxpayers.

50. Industries have been taking advantage of FREE dumping over the years by dumping in municipal land fills and then finding other cheaper places to dump. By leaving the landfills, they avoided paying landfill closing costs. Now it appears they will again avoid paying their share of the cost of removing their contaminated materials. They can form coalitions to lobby on their behalf while tax payers get the bill for the clean up.

RESPONSE TO COMMENTS 45 THROUGH 50:

Funding of Wisconsin's sediment remediation programs and cost recovery are issues to be addressed by WDNR. Tipping fees are issues for the qualified landfills which choose to participate in this program. Each of these issues is outside the scope of this Approval. Under CERCLA, the Responsible Parties pay the cost of cleanup including the disposal costs. TSCA disposal facilities charge for disposing PCB wastes and incorporate costs for long term monitoring and closure of the disposal facility.

51. Contaminated sediments should be stored at landfill sites on the property of the responsible polluters rather than in public landfill sites. In that way, it is the polluters, not the public, who will have to accept the liability for it in perpetuity.

RESPONSE:

The Approval does not prevent construction of a chs. NR 500-520, Wis. Adm. Code, landfill on property owned by a Responsible Party or selection of that landfill for disposal of PCB contaminated sediments, as long as the landfill complies with the terms and conditions of this Approval.

52. Who will pay for the operation and maintenance of the landfills that do accept PCBs once the operator's responsibilities have expired? In some states, 30 years after the landfill has opened, maintenance and monitoring duties revert to the state. Is Wisconsin ready to accept the ongoing task of maintaining an aging landfill containing toxic waste?

RESPONSE:

Under TSCA, the landfill owner's responsibilities for operation and maintenance do not expire. If, under Wisconsin law, maintenance and monitoring responsibilities revert to the State at some point in time, WDNR is fully aware of these facts and ready to accept these responsibilities.

53. The cost estimates provided in the EPA proposal seem to be inflated. Transportation and land disposal of 60,000 cubic yards would possibly cost \$16 million, but certainly not \$50 million.
54. The \$50-55 million dollar figure cited for a "small" cleanup of 75,000 cubic yards equates to \$666/ton for the cost of transportation, landfill disposal and any associated disposal taxes. This \$666 figure is far from the actual market cost. It has been our experience during the course of 1994 that the total cost of transportation, tax and disposal is more typically in the range of \$150-225/ton from projects in excess of 5,000 tons.

RESPONSE TO COMMENTS 53 AND 54:

The referenced cost estimates for disposal of 60,000 cubic yards in a TSCA Chemical Waste Landfill are from a WDNR/U.S. EPA information document accompanying the announcement of the Approval public meeting. The cost estimates in this document are based on a WDNR analysis. U.S. EPA's most current cost data is a 1991 PCB disposal price survey conducted for U.S. EPA by ICF, Incorporated. According to this 1991 survey, the cost for solids disposal in a TSCA chemical waste landfill range from \$92.64 to \$456.46 per cubic yard or \$110 to \$542 per ton. This 1991 survey did not specifically address the cost for sediment disposal which, among other things, would require dewatering prior to landfilling.

55. If landfills used by WDNR for management of PCB contaminated sediments become Superfund sites, those companies legitimately managing their solid waste would be potentially responsible parties to the sites's environmental problems.

RESPONSE:

Chapters NR 500-520, Wis. Adm. Code, landfills do not presently accept PCB waste at concentrations of 50 ppm or greater. A new Condition #17 has been added to the Approval which requires testing of the landfill's leachate for PCBs prior to accepting PCB contaminated sediments. This will establish a baseline showing whether the landfill has a PCB contamination problem. If a landfill becomes a Superfund site, liability rests with the responsible parties. In most cases, Superfund actions at landfills are at old, poorly designed facilities with a historic contamination problem and where there may be a host of potentially responsible parties. Though U.S. EPA believes there is a low potential for a chs. NR 500-520, Wis. Adm. Code, landfill becoming a Superfund site, under the Approval the cause for a Superfund action for PCBs would be the contaminated sediments, and the responsible parties would be known.

56. An Environmental Impact Statement (EIS) must be written, and made subject to public review, before a decision on issuing the approval is made.
57. An EIS should be prepared for every proposed permit to place contaminated sediments in a landfill.

RESPONSE TO COMMENTS 56 AND 57:

A formal Environmental Impact Statement (EIS) is not required. The TSCA PCB disposal approval process is the functional equivalent of an EIS.

58. The landfill's leachate must be analyzed during the approval process to determine the concentrations of PCBs that already exist.
59. As landfills have legally accepted PCBs from small electrical capacitors and fluorescent light ballasts, background leachate monitoring should be conducted to determine whether other sources are already contributing to PCB concentrations in leachate.

RESPONSE TO COMMENTS 58 AND 59:

A new Condition #17 has been added to the Approval which requires leachate testing for PCBs prior to a landfill's selection.

60. According to WDNR, at least two Wisconsin landfills which accepted PCB contaminated material in the past have detected PCBs in their leachate (Fauble 1993). The Kohler landfill, near Sheboygan, and the Waste Management Metro Landfill, near Milwaukee, both are having problems finding a wastewater treatment facility to accept their leachate because the treatment facility cannot discharge PCBs.

RESPONSE:

The Kohler landfill is an old facility which does not meet the design standards of chs. NR 500-520, Wis. Adm. Code, landfills. The Waste Management Metro (WMM) landfill is a disposal site for hazardous and municipal solid waste. The northern sixty acres of the site, which contains hazardous and PCB waste, does not meet the design standards of chs. NR 500-520, Wis. Adm. Code. The southern forty acres contains municipal solid waste only and was constructed in accordance with the design standards of chs. NR 500-520, Wis. Adm. Code, landfills.

Both the Kohler and WMM landfills received PCB material at concentrations much greater than allowed under this Approval. The WMM landfill was used for the disposal of PCB capacitors which typically contain dielectric fluid with 45% or greater (450,000 ppm) pure PCBs. The Kohler landfill is believed to have received PCB hydraulic fluids which contained 15% to 100% pure PCBs ($\geq 150,000$ ppm). This Approval allows disposal of PCB contaminated sediments at concentrations of 50 to 500 ppm. Disposal of sediments with PCB concentrations at 500 ppm or greater in chs. NR 500-520, Wis. Adm. Code, landfills requires WDNR and U.S. EPA concurrence and, if allowed, would require even greater environmental controls.

61. Possible impacts to the local waste water facility in the landfill's area are considered within the approval process and a maximum PCB concentration limit for accepting the leachate is established.
62. POTWs are not equipped to decontaminate leachate and this will result in contaminated sludge. The land-spreading of such sludge will result in PCBs in food produced on such lands and risks contamination of groundwater.
63. POTW discharges would likely contaminate surface waters.
64. The liability issue relating to leachate discharged to a POTW is not addressed. Leachate from PCB landfills may well be prohibited from POTWs. If allowed, the discharge could cause environmental and permit compliance problems while dispersing PCBs throughout the POTW and into water bodies and the environment.
65. Landfill operators interested in accepting PCB-contaminated sediment should be aware that the leachate resulting from disposal may contain detectable PCB concentrations. After closure, the state may have to contend with this potential problem. Municipal treatment facility operators are concerned that current regulations pertaining to PCB in municipal effluent and sludge make it unlikely that any municipality would accept leachate with detectable concentrations. Pretreatment of leachate might be necessary, adding to the disposal cost. WDNR should take this matter into consideration during the WPDES permitting process and cooperation between all interested parties is needed to address this matter.

66. The proposal does not address the possible impacts to the wastewater facility accepting the landfill's leachate. Prior to accepting the sediment, the DNR and/or the wastewater facility should evaluate potential impacts to the wastewater facility and its sludge management program. The wastewater facility should also establish a maximum PCB concentration limit for accepting the leachate.

RESPONSE TO COMMENTS 61 THROUGH 66:

Publicly owned treatment works (POTWs) are not required to accept leachate from landfills selected under this Approval. A POTW which accepts the leachate retains its liability for compliance with its National Pollutant Discharge Elimination System (NPDES) permit and all other applicable environmental laws and regulations. Under its pretreatment authority, a POTW which accepts the leachate may set limits on PCB concentrations it will accept, may require treatment of leachate before discharge to the POTW, may require additional monitoring, or other requirement the POTW believes necessary in meeting its NPDES discharge limitations.

The disposal of sludge at PCB concentrations of 50 ppm or greater is regulated by TSCA while land application of sludge at PCB concentration less than 50 ppm is regulated under the Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA). POTWs must comply with all regulatory requirements for sludge disposal. Because the landfills under this Approval will accept PCB contaminated sediments (50 to 500 ppm) based on bottom sampling of the waterway, and because, in most cases, the PCB concentration of the sediments actually placed in the landfills will be further reduced due to the inevitable over dredging and mixing of sediments during dewatering activities, it is not likely that the leachate from these landfills will present a significant PCB sludge contamination problem for the POTWs.

67. Air quality will likely be impacted from POTW sludge incineration or from volatilization from the sediments in landfills.

RESPONSE:

Chapters NR 500-520, Wis. Adm. Code, landfill regulations require six inches of daily cover over the waste. Under the terms of the Approval, the PCB contaminated sediment cannot be used as daily cover and the PCB contaminated sediments must be dewatered or solidified prior to arrival at the landfill. The selected landfill must also notify the POTW that the landfill accepts PCB contaminated sediments. This must be done prior to the discharge of leachate to the POTW.

68. We are not convinced that disposal of PCB contaminated sediments in a solid waste landfill is superior to disposal in an in-lake confined disposal facility (CDF). The EPA approval should also allow the WDNR to dispose PCB contaminated sediments in CDFs.
69. Confined disposal facilities (CDFs) in aquatic environments should be expressly excluded from the approval.

RESPONSE TO COMMENTS 68 AND 69:

The WDNR application for PCB contaminated sediment disposal was for landfills under chs. NR 500-520, Wis. Adm. Code, and not for in-water Confined Disposal Facilities (CDFs). A new Condition #23 has been added to the Approval which prohibits selection of a landfill located in the 100-year floodplain.

70. The re-entrainment of PCB laden sediments into the water column is a serious concern. Sediment control via the use of sediment curtains, sheet piling, etc. is expensive. In areas with PCB containing sediment, new PCB free sediment continually is deposited over old sediments. This essentially forms a vault, ultimately isolating those contaminated sediments from the sediment-water interface. Only when the sediment is disturbed, are the PCBs available for uptake. The wholesale excavation of 7-8 million cubic yards of sediment threatens to reactivate sediments that may have been naturally isolated.
71. Dredging PCB contaminated sediment re-suspends the particles in the water column and can pose a greater threat than leaving it alone.
72. Removing PCB-contaminated sediments from Wisconsin waters presents more dangers to the health of state residents than leaving the deposits at the bottom of waterways and lakes.

RESPONSE TO COMMENTS 70 THROUGH 72:

There is no guarantee that PCB-free sediment will continually be deposited over older, PCB contaminated sediment. Rivers are not static environments and areas of deposition can be areas of erosion in the future. In addition, rivers flood and flooding events disturb and resuspend buried sediment. The sediment can be transported into larger lake systems where they are unrecoverable and cannot be remediated. Removal and isolation of the PCBs from the waterways into a controlled environment is preferable to leaving the sediments in place subject to the whims of nature.

73. The proposal does not comply with the virtual elimination principle and goals of the Great Lakes Water Quality Agreement and, therefore, will not sufficiently protect the health of people, fish, and wildlife in the Great Lakes.

RESPONSE:

U.S. EPA believes removing PCB contaminated sediments from Wisconsin's rivers, lakes, and harbors in the Great Lakes Basin and placing these sediments in the controlled environment presented by chs. NR 500-520, Wis. Adm. Code, landfills, located outside the 100-year floodplain, complies with the principle of virtual elimination and the goals of the Great Lakes Water Quality Agreement.

74. Studies (Chou 1981, Constable 1979) have concluded that the migration of PCBs could occur in a landfill if organic solvents were disposed in the same landfill.
75. The term "potentially incompatible waste" is not defined. The question of what wastes may be potentially incompatible with the sediments should be fully defined in the final EPA approval.
76. Emphasis should be placed on prohibiting the commingling of sediments with MSW by requiring discrete cells for sediment disposal at landfills which accept MSW.

RESPONSE TO COMMENTS 74 THROUGH 76:

Potentially incompatible wastes are those wastes that have the capacity to mobilize PCBs. This includes organic solvents. The PCB regulations require the segregation of incompatible waste from PCB waste throughout the waste handling and disposal process. In addition, Condition #12 of the Approval specifically prohibits the commingling of PCB contaminated sediments placed in a chs. NR 500-520, Wis. Adm. Code, landfill with any potentially incompatible waste.

77. The definition of sediment should be broad enough to include floodplain soil. Sampling of the river floodplain has shown that previous high flow events have carried contaminated sediment over the banks.

RESPONSE:

In our interpretation, sediments includes floodplain soil and, therefore, PCB contaminated floodplain material would be eligible to be placed in chs. NR 500-520, Wis. Adm. Code landfills in accordance with this Approval.

78. Provide a sun-setting timeline for landfilling with alternative technologies pilot tested and ready for implementation at its conclusion. A strict timeline for sun-setting landfilling needs to be developed that is not subject to renewal or extension.
79. So that the development and commercialization of innovative PCB disposal technologies will not be discouraged, the approval should be issued for a period of 3 to 5 years. After this period, the EPA should re-evaluate the status of alternative destruction technologies and should renew this approval only if viable alternatives to landfilling can not be identified.

RESPONSE TO COMMENTS #78 AND #79:

The PCB Program issues a TSCA landfill approval under 40 C.F.R. § 761.75 or an alternative disposal approval under 40 C.F.R. § 761.60(a)(5) for a five year period with the provision that the permitted facility may apply for a renewal of the approval 180 days prior to the end of the approval period. It is beyond the scope of a TSCA landfill or alternative disposal approval to require implementation of alternative destruction technologies after the five year approval period has terminated. Each alternate destructive technology for dredged material requires an approval under 40 C.F.R. § 761.60 (e) which is distinct from a TSCA landfill or alternative disposal approval. The alternative disposal Approval to Wisconsin is only relevant to the use of chs. NR 500-520, Wis. Adm. Code, landfills for disposal of PCB contaminated sediment. The State of Wisconsin has statutes which require the evaluation of other disposal methods and technologies before landfilling can be considered an option.

80. Wildlife uptake of PCBs from landfilled sediment is a concern as long as the sediment is exposed. The NR 500 requirement of daily cover should be enforced for sediment disposal. This may require operational changes for the landfill as it may not be possible to use the traditional method of covering the waste with soil using heavy equipment. Other methods, such as covering the sediment with a fabric, may be necessary to meet the daily requirement.
81. Sanitary landfills accepting the material should not use the sediments for daily cover.

RESPONSE TO COMMENTS #80 AND #81:

The chs. NR 500-520, Wis. Adm. Code landfill regulations require six inches of daily cover. U.S. EPA has added a new Condition #25 to the Approval which prohibits the use of the PCB contaminated sediments as daily cover.

82. Determine the levels of all other contaminants, such as heavy metals, in the sediment along with the PCBs. Insure that sediments containing unacceptable levels of other contaminants are not landfilled with the PCBs.

RESPONSE:

The TSCA Approval regulates the disposal of PCB contaminated sediments. Regulation of sediments contaminated with heavy metals and other hazardous waste falls under the Resource Conservation and Recovery Act (RCRA). In conducting their sediment remediation activities, WDNR is responsible for complying with both TSCA and RCRA requirements. WDNR's sediment remediation procedures require characterization of sediment for PCBs and hazardous waste.

83. EPA proposes there would be increased risk due to transportation of PCB contaminated sediment to approved chemical waste facilities. Wisconsin business and industry comply with strict Department of Transportation requirements for the shipment of PCBs and other hazardous materials. While it is true that transportation is a major portion of the waste management costs, industry has been paying this bill for years. Why is it now too much to expect from the Department of Natural Resources?
84. There is no undue or unreasonable hardship presented by the compliance of the WDNR with existing state and federal regulations. Cost alone can not be the sole reason for a variance or waiver from the regulations.

RESPONSE TO COMMENTS 83 AND 84:

WDNR must comply with the TSCA disposal requirements just as industry does. Under the TSCA disposal rules, there is a special provision for the disposal of municipal wastewater treatment sludges and dredged material contaminated with PCBs at concentrations of 50 ppm or greater. The Approval for WDNR to dispose of PCB contaminated sediments in a chs. NR 500-520, Wis. Adm. Code landfill is done under this TSCA authority, which applies equally to private industry. If industry has PCB contaminated sediments to dispose of they may apply to U.S. EPA for approval of an alternate disposal method under 40 C.F.R. § 761.60(a)(5)(iii). The TSCA disposal rules have separate and more strict requirements for PCB liquids, PCB solids, and PCB articles, etc., which can also be found at 40 C.F.R. § 761.60 and which apply equally to WDNR.

Economic considerations are one factor, and not the main consideration, in determining whether disposal in an existing TSCA incinerator or chemical waste landfill is

reasonable and appropriate under 40 C.F.R. § 761.60(a)(5)(iii). Environmental and technical considerations are also factors in this decision. The main consideration is reduction of risk and protection of health and the environment. The Approval Findings address these considerations at pages 2 and 3.

85. **If Landfills in Wisconsin meet the stringent standards set forth in the Toxic Substances Control Act (TSCA) regulations for chemical waste landfills, then those specific facilities should apply for a permit to manage PCB and PCB contaminated materials. If Wisconsin landfills do not meet the stringent criteria in TSCA, disposal of PCB materials in Wisconsin will have a detrimental effect on the environment.**

RESPONSE:

WDNR has applied for an alternate disposal approval for dredged material under 40 C.F.R. § 761.60(a)(5). U.S. EPA has reviewed this application and found that WDNR's disposal of PCB contaminated sediment in landfills complying with chs. NR 500-520 and NR 157, Wis. Adm. Code, and the conditions of this Approval will provide adequate protection to health and the environment. Chapters NR 500-520, Wis. Adm. Code, landfills meet, and in some cases exceed, the structural requirements listed in the TSCA PCB regulations at 40 C.F.R. § 761.75 for TSCA chemical waste landfills. However, WDNR has not applied for a TSCA chemical waste landfill, and U.S. EPA has not evaluated ch. NR 500-520, Wis. Adm. Code, landfills as to whether they meet all present additional requirements for a TSCA chemical waste landfill approval.

86. **The assertion that shipping long distances would "increase the risk of shipping accidents" is a generalization not likely to be supported by fact. Rail has an excellent safety record and a careful study of long haul rail vs. short truck haul truck shipments to local landfills might well show a higher incident rate for such local truck traffic than for long haul rail.**

RESPONSE:

The risk from long distance transportation of PCB waste was one of several factors leading U.S. EPA to consider the alternate disposal method presented in WDNR's application. U.S. EPA is not contesting the good safety record for rail shipment of PCB wastes or comparing the risks of rail versus truck transport. One benefit from the Approval is that it allows the disposal of PCB contaminated sediment locally within the area that will benefit from the remediation of the waterway. PCB contaminated sediments would be trucked

to these local landfills. While it is possible that a PCB sediment remediation site will be located adjacent to a rail loading point, in most cases PCB sediments would also be trucked to a local rail point. Despite rail's good safety record, if rail shipment is in addition to necessary local trucking, there is additional risk.

87. The community or industry proposing to dispose of contaminated sediments must prove they have implemented a pollution prevention strategy before any landfilling can occur.

RESPONSE:

Pollution prevention is essential to U.S. EPA's mission to protect human health and the environment. However, U.S. EPA does not believe it is wise to delay much needed sediment remediation while an industry or community develops a pollution prevention plan.

88. The solution to the issue of management of PCB materials in Wisconsin is to have the facilities that meet the criteria outlined in TSCA apply for a permit. Once the permit(s) is issued, the entire state would benefit from safe and economical management of PCBs and PCB contaminated materials.
89. The presence of permitted PCB facilities in Wisconsin would not only benefit the WDNR, but also Wisconsin business and industry, who spend millions of dollars to transport and dispose PCB and PCB materials in out of state facilities. These materials not only include transformers, capacitors, ballasts, and oil, but also contaminated media from remediation activities conducted with private funds.

RESPONSE TO COMMENTS 88 AND 89:

U.S. EPA will consider all applications for a TSCA chemical waste landfill made under 40 C.F.R. § 761.75. Applications should be sent to the Regional Administrator of the Region in which the landfill would be located.

90. We urge you to issue a TSCA approval to the Wisconsin DNR that would allow them to remove PCB contaminated sediment from Wisconsin waterways and dispose of it in approved landfills. We also urge that PCB contaminated sediment from other states not be allowed in Wisconsin landfills.

RESPONSE:

This Approval applies only to the disposal of PCB containing sediments remediated under the authority and supervision of WDNR. Refer to Condition #2 and page 7 of the Approval.

91. An upper limit on the concentration of PCBs in the landfilled wastes should be imposed as a condition of this approval and such a limit should be stated in the approval.

RESPONSE:

Under Condition #1 of the Approval, disposal of sediment at PCB concentrations of 500 ppm or greater would require the concurrence of both U.S. EPA and WDNR.

92. We believe that there should be a limit of 50 ppm PCB as the maximum allowable concentration in any given load of contaminated sediment disposed at a Subtitle D facility. This is consistent with the regulatory threshold and act as a means of control to prevent disposal of higher level material which might have problematic downstream consequences in terms of leachate management and impact on the environment.
93. Material over 50 ppm should be shipped to permitted PCB disposal facilities which have the design, engineering, financial and operating practices expressly instituted to manage such wastes. These facilities also have RCRA part B permits and have conducted extensive environmental assessments of air, surface water, groundwater, transportation, geology, etc. to examine all conceivable disposal scenarios. They maintain closure, post-closure, and in some cases perpetual care funds running into the tens of millions of dollars as additional financial safeguards. These facilities have survived long and difficult permitting processes involving extensive public comments and participation focussed on the merits of each individual facility.
94. We would submit that the public has the right to expect the same degree of safeguards and involvement for disposal of PCB's over 50 ppm as they have demanded and been afforded in the permitting of the licensed PCB disposal facilities. While that sets a difficult standard, it also accomplishes the objective of long term protection.

RESPONSE TO COMMENTS 92 THROUGH 94:

Disposal of PCB contaminated sediments under the terms and conditions of this Approval will provide adequate protection to health and the environment and complies with the TSCA requirements at 40 C.F.R. § 761.60(a)(5)(iii).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)
)
THE STATE OF WISCONSIN)
DEPARTMENT OF NATURAL RESOURCES) APPROVAL TO DISPOSE
OF POLYCHLORINATED
BIPHENYLS (PCBs)

AUTHORITY

This approval is issued pursuant to Sections 6(e)(1) and 18(a)(2)(B) of the Toxic Substances Control Act of 1976 (TSCA), Public Law No. 94-469, 15 U.S.C. §§ 2605 and 2617, and the Federal PCB Regulations, 40 C.F.R. § 761.60(a)(5).

EFFECTIVE DATE

This approval shall be effective upon the signature of the Regional Administrator.

BACKGROUND

Section 6(e)(1)(A) of TSCA requires the United States Environmental Protection Agency (U.S. EPA) to promulgate rules for the disposal of polychlorinated biphenyls (PCBs). The rules implementing section 6(e)(1)(A) were published in the Federal Register of May 31, 1979 (44 FR 31514) and recodified in the Federal Register of May 6, 1982 (47 FR 19527). Those rules require, among other things, that various types of PCBs and PCB Articles be disposed of in U.S. EPA-approved landfills (40 C.F.R. § 761.75), incinerators (40 C.F.R. § 761.70), high efficiency boilers (40 C.F.R. § 761.60), or by alternative methods (40 C.F.R. § 761.60(e)) that demonstrate a level of performance equivalent to U.S. EPA-approved incinerators. Those rules also allow for the approval to dispose of dredged materials by an alternate method (40 C.F.R. § 761.60(a)(5)) that provides adequate protection to health and the environment, provided that disposal in a U.S. EPA-approved incinerator (40 C.F.R. § 761.70) or chemical waste landfill (40 C.F.R. § 761.75) is not reasonable and appropriate based on technical, environmental, and economic considerations. The May 31, 1979 Federal Register designated Regional Administrators as the approval authority for PCB disposal facilities.

Section 18(a)(2)(B) of TSCA prohibits any State or political subdivision of a State from establishing or continuing in effect any requirement applicable to any chemical substance or mixture or article containing such substance or mixture regulated under

Sections 5 or 6 of TSCA, except that a State may regulate the disposal of such chemicals, mixtures, and articles as described at Section 6(a)(6) of TSCA. U.S. EPA has determined that under TSCA, State requirements regarding disposal of PCBs are completely exempt from Federal preemption insofar as they prescribe what may be done within the State boundaries, but that a State may not require PCBs generated within its boundaries to be disposed of by a method less restrictive than prescribed by TSCA (43 FR 7153, February 17, 1978).

FINDINGS

1. On May 6, 1994, the Wisconsin Department of Natural Resources (WDNR) submitted a written application to the Regional Administrator of Region 5 to dispose of sediments containing PCBs at concentrations of 50 ug/g (ppm) or greater from remediation projects authorized and supervised by the WDNR in landfills within Wisconsin which comply with Wisconsin Administrative Code (Wis. Adm. Code) chapters (chs.) NR 500-520 and have been authorized under § NR 157.07, Wis. Adm. Code, to accept PCB contaminated sediments.
2. In 1989, the Wisconsin State Legislature recognized the serious problem contaminated sediments present to the State by providing funding to establish WDNR's sediment remediation program. The goal of the program is to restore the surface waters of the state where the resource uses have been impaired or damaged by the presence of contaminated sediments.
3. Sediments contaminated with PCBs represent a serious risk to human health through consumption of contaminated fish; represent risks to aquatic ecosystems, which include endangered species; and present limitations to economic well-being by impairing commercial fisheries, recreational uses, and commerce through increased dredging costs.
4. The WDNR sediment remediation program has set goals to fully restore aquatic environments with cleanup standards for PCBs in the parts per billion range where environmentally and technically feasible.
5. The PCB contaminated sediment problem in Wisconsin is large in scope. There are approximately seven million cubic yards of sediments contaminated with PCBs which need to be remediated to restore full beneficial uses of impaired overlying waters.
6. Presently, there is no U.S. EPA-approved PCB disposal facility within the State of Wisconsin.

7. The disposal of PCB containing sediments from WDNR remediation projects in existing out of state PCB disposal facilities is not reasonable and appropriate because the WDNR's cleanup goals and the technical constraints of sediment remediation will likely generate a significantly larger volume of TSCA regulated sediments during remediation than existed in situ; because of the risk presented by delaying remediation efforts in dynamic, often high energy, and ecologically sensitive aquatic environments and the additional risk of spills presented by long distance shipping of such large quantities of contaminated sediments; and because increased disposal costs could limit planned State sediment remediation efforts and would prevent much needed sediment remediation and risk reduction in the State of Wisconsin.
8. Based on technical, environmental, and economic considerations, disposal of PCB contaminated sediments within the scope of the WDNR application in a TSCA incinerator or TSCA chemical waste landfill is not reasonable and appropriate.
9. PCBs are regulated in the State of Wisconsin by ch. NR 157, Wis. Adm. Code. Section NR 157.07, Wis. Adm. Code, authorizes the WDNR to approve the disposal of PCB contaminated sediments into chs. NR 500-520, Wis. Adm. Code, landfills as an alternate disposal option.
10. The disposal of sediments contaminated with PCBs at concentrations of 50 ppm or greater in a landfill which fully complies with chs. NR 500-520, Wis. Adm. Code, and with the additional conditions of this approval, as set out herein, provides adequate protection to human health and the environment as required under 40 C.F.R. § 761.60(a)(5).
11. Under the supervision of the WDNR, the disposal of sediments contaminated with PCBs at concentrations of 50 ppm or greater in a landfill which fully complies with chs. NR 500-520, Wis. Adm. Code, and with the additional conditions of this approval set out herein, provides the same level of protection required for these sediments by U.S. EPA, Region 5, and therefore is not less restrictive than TSCA.

CONDITIONS OF APPROVAL

40 C.F.R. § 761.60(a)(5) provides that the Regional Administrator may set limitations in an alternate disposal approval. This approval is conditioned upon the WDNR sediment remediation program's compliance with the following conditions:

1. This approval applies only to sediments contaminated at PCB concentrations of 50 ppm or greater which have originated in Wisconsin waterways. Dilution of sediments to reduce the PCB concentration to below 50 ppm is not allowed. Disposal of sediments contaminated at concentrations of 500 ppm or greater is subject to concurrence by both U.S. EPA, Region 5, and the WDNR on a case by case basis.
2. This approval applies only to sediment remediation projects conducted under the authority and supervision of WDNR.
3. WDNR shall provide a written notice of project activity to U.S. EPA, Region 5 within 30-days following the selection of each sediment disposal landfill under this approval.
4. WDNR shall provide public notification at least 30-days prior to the selection of each sediment disposal landfill under this approval. If this notification generates sufficient public interest, WDNR shall hold a public meeting to discuss the selection of the landfill. WDNR shall consider all oral and written comments received prior to issuing a landfill plan modification to accept PCB contaminated sediments.
5. WDNR shall give full consideration to issues of environmental justice in selecting or siting the sediment disposal landfills under this approval.
6. WDNR shall issue a plan modification to the selected landfill requiring the landfill to comply with approval conditions numbered 11, 12, 14, 16, 18, 19, 21, 24, and 25, as set forth herein.
7. In issuing a plan modification to a chs. NR 500-520, Wis. Adm. Code, landfill for disposal of PCB contaminated sediments, WDNR shall specify to the selected landfill(s) the nature of the remediation and disposal project. This plan modification shall also include a statement that the facility may be used for the disposal of PCB containing sediments at 50 ppm or greater only if they originated from a specified WDNR project.
8. Prior to issuing a plan modification for a landfill to accept PCB contaminated sediment, WDNR shall review all past exemptions from chs. NR 500-520, Wis. Adm. Code, granted to said landfill and determine whether any exemption is relevant to TSCA and the conditions of this approval. If the exemption is relevant to TSCA or the conditions of this approval, WDNR shall receive U.S. EPA concurrence with the exemption before issuing the plan modification.
9. If WDNR issues additional exemptions from chs. NR 500-520, Wis. Adm. Code, relevant to this approval, after a landfill

has received a plan modification, WDNR shall obtain U.S. EPA concurrence before placing additional PCB contaminated sediments in the landfill.

10. WDNR shall provide written notice to each selected landfill that the landfill is required under 40 C.F.R. § 761.205(a)(1) to notify U.S. EPA of the landfill's PCB waste handling activities by filing U.S. EPA Form 7710-53.
11. Prior to placing any PCB contaminated sediment in a landfill, the selected landfill shall file U.S. EPA Form 7710-53, as required by 40 C.F.R. § 761.205(a)(1).
12. PCB contaminated sediments placed in a chs. NR 500-520, Wis. Adm. Code, landfill may not be commingled with any potentially incompatible waste. Potentially incompatible wastes are those wastes that have the capacity to mobilize PCBs.
13. WDNR shall conduct an annual evaluation of PCB (≥ 50 ppm) sediment disposal projects. WDNR shall submit an evaluation report to the Regional Administrator, U.S. EPA, Region 5, by July 1 of each year covering the previous calendar year's activities under the approval. The report shall include the total volume of PCB contaminated sediment disposed under this approval during the year. The conditions of this permit shall serve as a basis for this evaluation. Upon receipt of the WDNR annual evaluation report, U.S. EPA, Region 5 shall comment either by concurring with the evaluation or by indicating where U.S. EPA disagrees with the results.
14. In the event that this permit is terminated by either the U.S. EPA or WDNR, PCB contaminated sediments previously disposed in a landfill designated pursuant to this approval shall be considered by U.S. EPA to have been properly disposed of and in full compliance with 40 C.F.R. § 761.60 requirements, provided that the sediment was disposed of according to State regulatory requirements and the conditions of this approval and that the landfill continues to operate under the terms and conditions of this approval.
15. In the event that this approval is terminated, WDNR shall ensure that the landfill continues to comply with the monitoring and corrective action requirements of this approval.
16. Owners or operators of landfills accepting PCB contaminated sediments under this approval shall be required by WDNR to test for PCBs in the leachate on a quarterly basis for the first year following disposal. If no PCBs are detected in leachate, the WDNR may allow testing on an annual basis. The landfill owner or operator shall be required by WDNR to

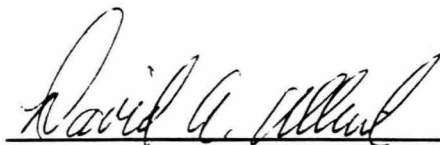
perform PCB sampling at site groundwater monitoring wells in the event of any significant change to PCB levels in the leachate. Leachate or groundwater known or suspected of having concentrations of 50 ppm or greater shall be managed as PCB waste in accordance with § NR 157.07, Wis. Adm. Code, and 40 C.F.R. § 761.60.

17. Prior to WDNR issuing a plan modification for a landfill to accept PCB contaminated sediment, the owner or operator of the landfill shall analyze their leachate for PCBs and shall provide WDNR with a copy of the analytical results.
18. Prior to the discharge of leachate to a publicly owned treatment works (POTW), and regardless of the actual PCB concentration in the leachate, a landfill selected under this approval shall notify the POTW that the landfill accepts PCB contaminated sediments.
19. Groundwater at any landfill accepting PCB contaminated sediments under this approval shall meet § NR 140.10, Wis. Adm. Code, groundwater preventive action and enforcement standards for PCBs, as defined in the point of standards application at § NR 140.22, Wis. Adm. Code.
20. The WDNR shall respond to exceedances of groundwater standards in accordance with §§ NR 140.24, NR 140.26, and ch. NR 708, Wis. Adm. Code.
21. Monitoring well water suspected or known to contain PCBs in excess of § NR 140.10, Wis. Adm. Code, groundwater standards for PCBs of 0.03 parts per billion shall not be discharged directly to the ground or to receiving waters and shall be contained, managed, and treated as leachate.
22. The Department shall provide written notice to Region 5 within 10 days of any state-ordered remedial action related to PCB waste at a landfill authorized to accept PCB contaminated sediments under this approval. Remedial response to spills or exceedances of groundwater standards shall be performed under §§ NR 140.24, and NR 140.26 and chs. NR 158 and NR 708, Wis. Adm. Code, authority and 40 C.F.R. § 761.125.
23. Landfills selected under this approval may not be located in the 100 year floodplain.
24. PCB contaminated sediments shall be dewatered or solidified prior to arrival at a landfill selected under this approval.
25. PCB contaminated sediments disposed under this approval may not be used as daily cover.

26. WDNR shall notify each landfill selected under this approval that the landfill shall provide U.S. EPA with an annual document log, complying with 40 C.F.R. § 761.180(b), for each year that the landfill accepts PCB contaminated sediments.
27. This approval will expire five (5) years from the date of the Regional Administrator's signature on the approval. This approval may be renewed upon the concurrence of both parties to the approval at five year intervals. Discussions on approval renewal will begin 180 days before the approval's next expiration date.

APPROVAL

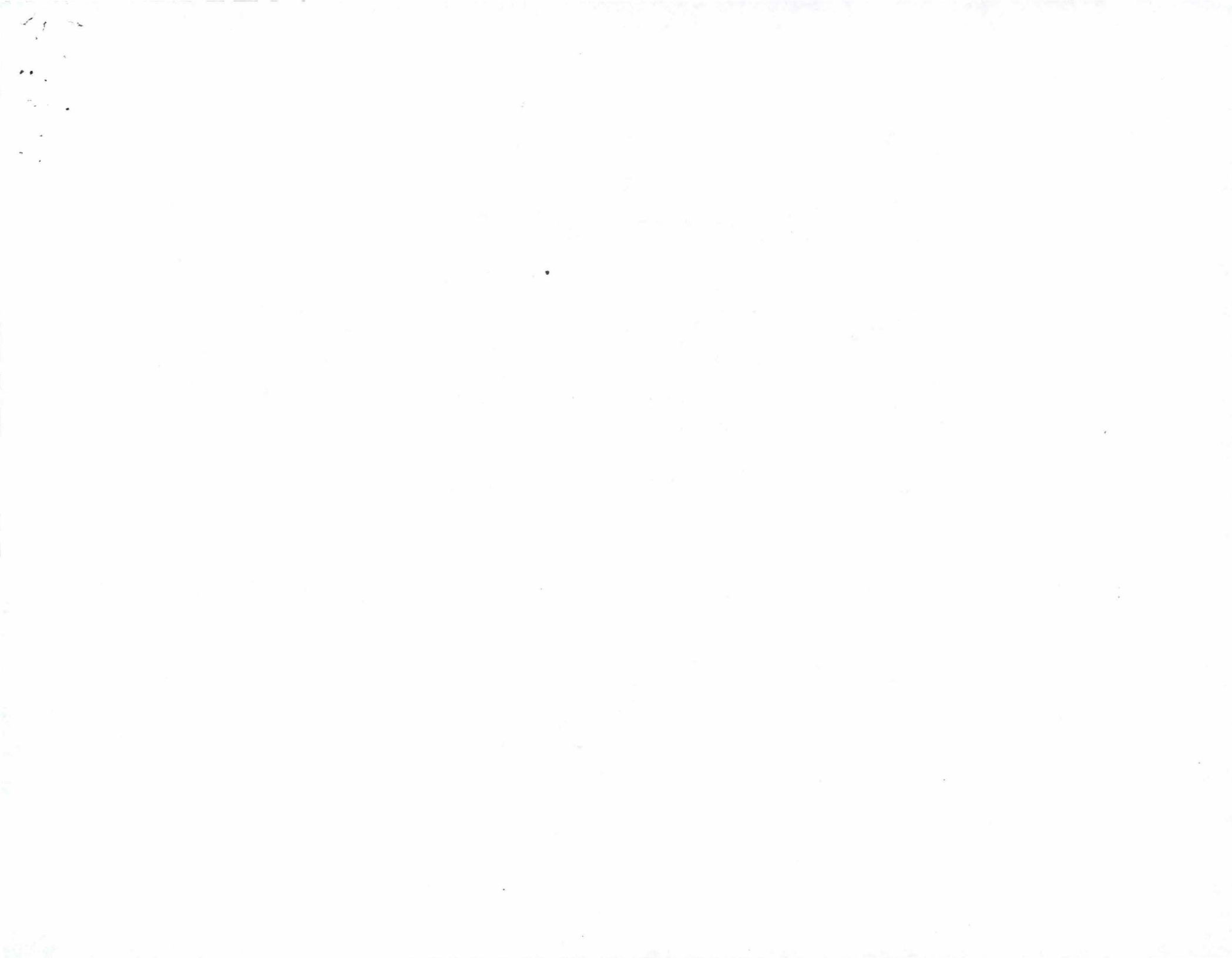
Providing the above mentioned conditions are met, and in accordance with 40 C.F.R. § 761.60(a)(5), and consistent with the WDNR's May 6, 1994 sediment disposal application and its attachments, the WDNR is granted an approval to select disposal facilities having approved plans of operation under § 144.44(3) Wis. Stats. that comply with chs. NR 500-520, Wis. Adm. Code, and are authorized under § NR 157.07, Wis. Adm. Code, for the disposal of sediments contaminated with PCBs at concentrations of 50 ppm or greater. This approval applies only to the disposal of PCB containing sediment originating in Wisconsin and remediated under the authority and supervision of WDNR. WDNR may not approve facilities within the State of Wisconsin to accept sediments containing PCBs at 50 ppm or greater from projects not conducted under the authority and supervision of WDNR. In addition to the terms and conditions of this approval, selected facilities shall comply with all applicable State and Federal environmental statutes and regulations. This approval may be terminated at any time by either the WDNR or U.S. EPA by written notice to the other party.



Valdas V. Adamkus
Regional Administrator
U.S. Environmental Protection Agency
Region 5

Date

1/24/95



95. The WDNR should maintain an inventory of PCB-wastes disposed of in Wisconsin landfills. Quantities and concentrations of PCBs in the wastes should be computed so that a reasonably accurate estimate of the total mass of PCBs residing in each landfill can be calculated. This information should be presented in an annual report to the public.

RESPONSE:

Landfills accepting PCB contaminated sediments under this Approval must file an annual document log under 40 C.F.R. § 761.180(b) with U.S. EPA, Region 5. The annual document log tracks the landfill's PCB waste handling activities over the calendar year. In addition, under Condition #13, WDNR will submit an evaluation report to U.S. EPA by July 1 of each year, covering the previous calendar year's activities under the Approval.

96. When selecting disposal sites, preference should be given to sites which will not appreciably reduce the state's available MSW airspace.
97. How do you plan to accommodate 8 million yds³ of waste in the ever shrinking landfill space available?

RESPONSE TO COMMENTS 96 AND 97:

Under this Approval, WDNR will select the individual landfills qualifying to accept PCB contaminated sediment. Management of Wisconsin's landfill capacity is the responsibility of WDNR.

