

EPA Proposes Cleanup Plan for Amcast Industrial Corporation

May 2023

Amcast Industrial Corporation Superfund Site Cedarburg, Wisconsin

You are invited

U.S. EPA invites you to discuss the proposed cleanup plan for the Amcast Superfund site. See the "Upcoming Meeting" heading on page 2 for details.

For more information

If you have questions or comments, please contact:

Phil Gurley

U.S. EPA Community Involvement Coordinator 312-886-4448 gurley.philip@epa.gov

Zack Sasnow

U.S. EPA Remedial Project Manager 312-886-0258 sasnow.zachary@epa.gov

Kevin McKnight

Wisconsin DNR Project Manager 920-808-0170 kevin.mcknight@wisconsin.gov

You may also call EPA toll-free: 800-621-8431, weekdays, 8:00 a.m. to 4:30 p.m.

Website

https://www.epa.gov/superfund/amcast-industrial



U.S. Environmental Protection Agency, working with the Wisconsin Department of Natural Resources (WDNR) has proposed a plan to clean up the Amcast Industrial Corp. Superfund Site in Cedarburg, Wisconsin (see map below). The site is located at N39 W5789 Hamilton Road in Ozaukee County, Wisconsin. The site consists of the Amcast facility (north and south properties), sewers near and beneath the former plant areas, a stormwater retention pond southeast of Amcast (Wilshire Pond), the quarry pond in nearby Zeunert Park, and some private properties to the southeast.

Public Comment Period for Amcast

EPA will accept comments on the proposed cleanup plan from May 12 to June 12, 2023. This fact sheet provides background information, describes cleanup options, and explains EPA's recommendations. EPA may modify the plan or select another solution based on new information or public comments, so your opinion is important. There are several ways to offer comments:

- Complete and mail the enclosed comment form.
- Attend the public meeting (see "Upcoming Meeting," page 2) and submit an oral statement.
- Go to: https://www.epa.gov/superfund/amcast-industrial and click on the "Public Comment Form."



IMAGE 1: THE PROPOSED CLEANUP AREAS AT THE AMCAST INDUSTRIAL CORP. SUPERFUND SITE.

Upcoming Meeting

EPA will host a public meeting on May 31, 2023. After a brief presentation, EPA will answer questions about the proposed plan before taking public comments. A court reporter will record the meeting and all comments.

The public meeting will be conducted at the Cedarburg Community Gym. A livestream will also be available on Microsoft Teams.

Date: May 31, 2023 **Time**: 6 – 8 p.m.

Location: Cedarburg Community Gym, W63 N641

Washington Ave., Cedarburg, WI 53012

To attend remotely visit:

https://www.epa.gov/superfund/amcast-industrial and click on the posted link.

About the Amcast Industrial Corp. Site

Amcast was a local automotive industry supplier that produced car parts by die-casting—a process that forces molten metal into a mold. Die-casting facilities like Amcast historically used hydraulic fluids and cutting and grinding oils containing polychlorinated biphenyls (PCBs) because of their heat resistant properties.

The Amcast site is divided between two properties (Amcast North and Amcast South). The present site of the Amcast South office building was formerly the Meta-Mold Aluminum Company, an aluminum diecast facility that started operating around 1939. The original foundry facility, formerly located east of the office building, was demolished between 1975 and 1980. The demolition debris were placed in the southeast portion of the Amcast South property, which also received demolition debris from previous site structures, scrap metals, and general office and factory refuse (e.g., paper and wood). The Amcast North site was used primarily for manufacturing aluminum castings. In 1993, the facility changed its name to Amcast Industrial Corporation.

In February 2003, Amcast signed a legal agreement with the U.S. EPA to investigate the facility. But, in

November 2004, Amcast filed for bankruptcy before the investigation was completed. In 2005, the sewers and soil under the site buildings were investigated, and soil samples were taken from nearby private properties. The analytical results of those samples found PCB contamination above what EPA considers safe levels.



IMAGE 2: VIEW SOUTHEAST OF AMCAST NORTH, SHOWING THE PARTIALLY DEMOLISHED BUILDING, OLD UNDERGROUND PARKING ACCESS, AND PAVED AREAS.

Why is Cleanup Needed?

EPA has studied the site's risks to human health and the environment. During the remedial investigation from 2009 to 2015, the Agency identified PCBs as the primary contaminant of concern. PCBs are carcinogenic, man-made organic chemicals. They were used in many industrial and consumer products because of their fire-resistant and insulating properties. PCBs do not readily break down in the environment and can be easily carried in air, water, and soil. The Amcast site and certain off-site areas—including previously identified residential yards, and Wilshire and Quarry ponds—have elevated levels of PCBs that require cleanup. Exposure to these chemicals has been proven to cause cancer and negatively impact health.

For more information about PCBs and their related health risks, visit:

https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.a spx?id=142&tid=26

Information Repositories

EPA maintains a record of site related information and reference materials for the Amcast Industrial Corp. site. The public can read this information online at

https://www.epa.gov/superfund/amcast-industrial under "Site Documents & Data." Electronic site documents can also be accessed at the information repositories below:

Cedarburg Public Library

W63 N583 Hanover Ave. Cedarburg, WI

Cedarburg City Hall

W63 N645 Washington Ave. Cedarburg, WI

EPA's Evaluation Criteria

These criteria guide EPA as it weighs different cleanup alternatives. These criteria are separated into three categories: Threshold, Balancing, and Modifying Criteria. Threshold Criteria determine if a cleanup alternative protects human and environmental health while complying with all applicable or relevant and appropriate requirements (ARARs). More generally, ARARs are the federal and state regulations that EPA must follow during a cleanup. In cases where the federal and state regulations are slightly different, EPA will follow the stricter regulations. Balancing Criteria are used to identify trade-offs between cleanup alternatives. **Modifying Criteria** are based on public comments and can prompt modifications to the recommended cleanup alternative (see figure on page 6). The final two modifying criteria, state and community acceptance, will not be evaluated until after the comment period and public meeting.

Cleanup Alternatives

EPA considered different options for the cleanup areas at the Amcast site. EPA developed these alternatives using combinations of different technologies and evaluated each option in detail against criteria established by federal law. EPA's recommended alternatives provide the best balance of the evaluation criteria among all the alternatives. A recommended alternative would be protective of human health and the environment, meet all federal and state ARARs, meet cleanup objectives, be cost effective, and be effective in the long term.

EPA is required to include no-action alternatives for each cleanup area as a basis for comparison with other cleanup options. Under no action alternatives, EPA would take no additional action. No cost is associated with these alternatives.

Amcast North:

Alternative 1: No action.

Alternative 2 (EPA's Recommended Alternative): Excavating and disposing of contaminated soil offsite. The excavated area would be backfilled with clean soil and restored to existing condition. The estimated cost is \$2,986,482.

Alternative 3: Excavating soils with the highest contamination of PCBs (greater than 10 milligrams per kilogram [mg/kg]) and installing an isolation cover over the remaining soils. Annual inspections, maintenance, and deed restrictions to limit future site access, zoning, and land/groundwater use would be required for the isolation cover. The estimated cost is \$2,136,622.

Recommended Alternative: Alternative 2 would provide the greatest protection by removing and disposing of contaminated material without the need for deed restrictions.

Residential Yards:

Alternative 1: No action.

Alternative 2: Excavating and disposing of contaminated soils off-site. Soils with PCB levels above the Toxic Substances and Control Act (TSCA)

standard for unrestricted use (1 mg/kg) would be removed. The excavated area would be backfilled and restored to its existing condition. The estimated cost is \$3,137,495.

Alternative 3 (EPA's Recommended Alternative): Excavating and disposing of contaminated soils offsite. Soils with PCB levels above the site-specific residential risk level (0.22 mg/kg) would be removed. The excavated area would be backfilled and restored to its existing condition. The estimated cost is \$3,503,000.

Recommended Alternative: Alternative 3 would provide the greatest degree of protection by removing and disposing of contaminated material to achieve a higher standard of cleanup, allowing for future residential development by the City of Cedarburg.

Amcast South:

Alternative 1: No Action.

Alternative 2: Excavating and disposing of contaminated soils off-site. Excavation depths may reach 21 feet below ground level, and soils with PCB levels above the TSCA standard for unrestricted use (1 mg/kg) would be removed. The excavated area would be backfilled and restored to its existing condition. The estimated cost is \$8,822,056.

Alternative 3: Excavating soils with the highest contamination of PCBs (greater than 10 mg/kg) and installing an isolation cover over the remaining soils. Annual inspections, maintenance, and deed restrictions would be required for the isolation cover. The estimated cost is **\$5,347,040**.

Alternative 4 (EPA's Recommended Alternative): Excavating and disposing of contaminated soils off-site. Excavation depths may reach 21 feet below ground level, and soils with PCB levels above the site-specific residential risk level (0.22 mg/kg) would be removed. The excavated area would be backfilled and restored to its existing condition. The estimated cost is \$7,933,312.

Recommended Alternative: Alternative 4 would provide the greatest degree of protection by removing and disposing of contaminated materials without the need for future site restrictions or maintenance.

Quarry Pond:

Alternative 1: No Action.

Alternative 2: Dredging pond sediment and excavating bank soils for off-site disposal. Contaminated soils and sediments with PCB concentrations above the site-specific ecological risk level (1.9 mg/kg) would be removed. The pond bank areas would be backfilled and restored to their existing conditions. The estimated cost is \$8,398,937.

Alternative 3: Constructing a permeable barrier to contain PCB-contaminated sediment and excavating bank soils for off-site disposal. The pond bank areas would be backfilled and restored to their existing conditions. Periodic fish tissue sampling would be required to monitor PCB levels in fish. Monitoring and maintenance of the permeable barrier would be required. The estimated cost is \$8,271,796.

Alternative 4 (EPA's Recommended Alternative): Dredging pond sediment and excavating bank soils for off-site disposal. Contaminated soils and sediments with PCB concentrations above 1 mg/kg would be removed, with a long-term goal of reducing the average PCB levels remaining in sediment to 0.25 mg/kg. The pond bank areas would be backfilled and restored their existing conditions. After dredging, an additional layer of 3 to 6 inches of clean sand will be used to reduce PCB concentrations. Periodic fish tissue sampling would be required to monitor PCB levels in fish, with the future goal of safe fish consumption. The estimated cost is \$12,140,519.

Recommended Alternative: Alternative 4 would provide the greatest degree of protection by removing and disposing of contaminated materials without the need for future site restrictions or maintenance.

Wilshire Pond:

Alternative 1: No action.

Alternative 2 (EPA's Recommended Alternative): Excavating and disposing of contaminated sediment and bank soils off-site. The slopes of the basins would be restored. This alternative assumes that the berms separating each basin are not contaminated and would not be removed. The estimated cost is \$1,772,880.

Alternative 3 (EPA's Recommended Alternative): Excavating and disposing of contaminated sediment and bank soils off-site. The slopes of the basins would be restored. This alternative assumes that the berms separating each basin are contaminated and would be removed. The stormwater retention basin would also be restored in consultation with the City of Cedarburg. The estimated cost is \$2,058,198.

Recommended Alternative: Alternatives 2 and 3 would provide equivalent degrees of protection as they both would remove contaminated material. If the berms are found to be contaminated during remedial design sampling, then Alternative 3 is recommended.

Amcast North Storm Sewers:

Alternative 1: No action.

Alternative 2: Cleaning and disposing of the building storm sewers. The sewers would be pressure washed and sewer sediment and water waste would be washed into the ponds, where they would then be removed for off-site disposal. Sewer ends would be plugged with concrete after pressure washing. Contaminated soils and sediments surrounding the storm sewers would also be removed for off-site disposal. The excavated area would be backfilled and restored to its existing condition. The estimated cost is \$3,007,513.

Alternative 3 (EPA's Recommended Alternative): Cleaning and disposing of the building storm sewers. The sewers would be pressure washed and sewer sediment and water waste would be washed into the

ponds where they would then be removed for off-site disposal. An estimated 20 feet of non-building storm sewer would be removed to disconnect on-site sewers from the surrounding city sewer network. Sewer ends would be plugged with concrete after pressure washing. Contaminated soils and sediments surrounding the storm sewers would also be removed for off-site disposal. The excavation area would be backfilled and restored to its existing condition. The estimated cost is \$3,122,871.

Recommended Alternative: All alternatives achieve protection of human health and the environment. But, Alternative 3 would provide the greatest degree of protection by removing and disposing of sections of sewer pipes and contaminated sediment.

Amcast South Storm Sewers:

Alternative 1: No action.

Alternative 2: Pressure washing non-building storm sewers and removing sediment and water waste. If contaminated soils and sediments surrounding the storm sewers are found, then these would also be removed for off-site disposal. The excavation area would be backfilled and restored to its existing condition. The estimated cost is \$2,463,136.

Alternative 3: Cleaning and disposing of the building storm sewers. The sewers would be pressure washed and sewer sediment and water waste would be removed for off-site disposal. Sewer ends would be plugged with concrete after pressure washing. If contaminated soils and sediments surrounding the storm sewers are found, then these would also be removed for off-site disposal. The excavation area would be backfilled and restored to its existing condition. The estimated cost is \$2,218,400.

Alternative 4 (EPA's Recommended Alternative): Excavating and removing the onsite storm sewer outside of the building footprint. Pressure washing non-building storm sewers and removing sediment and water waste. If contaminated soils and sediments surrounding the storm sewers are found, then these would also be removed for off-site disposal. The excavation area would be backfilled and restored to

its existing condition. The estimated cost is **\$4,303,000**.

Recommended Alternative: Alternative 4 would provide the greatest degree of protection by removing and disposing of the sewer pipes and contaminated sediment.

Groundwater:

Alternative 1: No action.

Alternative 2 (EPA's Recommended Alternative): Monitoring groundwater for contamination and, if necessary, restricting groundwater use. Groundwater monitoring would begin after contaminated soils are removed from Amcast North and South. Although it is unlikely that site groundwater would be used as a drinking source, deed restrictions and/or a local groundwater management zone would prevent future use. There are no potable water wells in the area. The estimated cost is \$3,139,701.

Recommended Alternative: Alternative 2 is recommended as a short-term (interim) remedy. A final remedy (with a separate Proposed Plan and public comment period) will be prepared for site groundwater at a later date.

Next Steps

EPA, with input from WDNR and the community, will make the final decision on what cleanup alternatives

will be implemented. Public comments are important and could encourage EPA to modify or change its initial recommendations. EPA will review and compile responses to public comments in a document called a responsiveness summary. The final cleanup plan and responsiveness summary will be published in a document called a "record of decision" (ROD), which will be available for public review in the site's administrative record. The ROD and the administrative record will be available for review online at

https://www.epa.gov/superfund/amcast-industrial.



IMAGE 3: VIEW SOUTHEAST OF AMCAST SOUTH, SHOWING THE OFFICE BUILDING.



- 1. Overall protection of human health and the environment.
- Is it protective?
- How are risks eliminated, reduced, or controlled?

Threshold Criteria

must be met for an alternative to be eligible.



- 2. Compliance with ARARs.
- Does it meet environmental laws or provide grounds for a waiver?



- 3. Long-term effectiveness and permanence.
- Does it provide reliable protection over time?



- 4. Reduction of toxicity, mobility, or volume through treatment.
- Does it use a treatment technology? This is preferred, if possible.



- 5. Short-term effectiveness.
- Will the remedy be implemented fast enough to address short-term risks, and will there be adverse effects (human health or environmental) during construction/implementation?



- 6. Implementability.
- How difficult will it be to implement (e.g. availability of materials or coordination of Federal,



- 7. Cost effectiveness.



- 8. State acceptance.
- Does the State agree with, oppose, or have no comment on it?



- 9. Community acceptance.
- Does the community support, have reservations about, or oppose it?

Balancing Criteria

determines relative strengths and weaknesses among the criteria that meet threshold.

Modifying Criteria

implemented once all public comments are evaluated. They may prompt modifications to the preferred alternative to achieve the end result of a preferred alternative for cleanup in which EPA and the community can be confident.

Image 4: List with descriptions of EPA's evaluation criteria for weighing cleanup alternatives.

In-Person and Virtual public meeting/hearing

EPA will host a virtual public meeting and public hearing on May 31, 2023, to explain the cleanup alternatives considered for the Amcast Industrial Corp Site. The meeting will allow time for questions and for formal comments on the change to the proposed plan. The public meeting will be conducted at the Cedarburg Community Gym and via a livestream that will be available on Microsoft Teams.

Date: May 31, 2023

Time: 6 – 8 p.m.

Location: Cedarburg Community Gym

W63 N641 Washington Ave. Cedarburg, WI 53012

To attend remotely, visit: https://www.epa.gov/superfund/amcast-industrial and click on the posted link.

Public Comment Sheet

Use this space to write your comments

xt. 6444	8, 9 a.m. – 4:30 p.m., week	days.		
	Name:		<u> </u>	
	Affiliation:		<u> </u>	
	Address:		<u> </u>	
	City:			
	State:			

EPA is interested in your comments on the proposed change in the cleanup plan for the Amcast Industrial Corporation Site.

Amcast Industrial Corporation – Comment Sheet

Fold on dashed lines, staple, stamp, and mail	
Name	
AddressCity	
StateZip	

Phil Gurley Community Involvement Coordinator U.S. EPA Region 5 Community Involvement and Outreach Section (RE-19J) 77 W. Jackson Blvd. Chicago, IL 60604-3590