



*On this day, November 18, 2004,*  
the U.S. Environmental Protection Agency (U.S. EPA)

*Determines that the*



*Southern Maryland Wood Treating Site  
Is Ready for Unrestricted Use*

*U.S. EPA Region 3  
Director, Hazardous Site Cleanup Division*

*Maryland Department of the Environment  
Director, Waste Management Administration*

---

This Ready for Reuse (RfR) Determination is for the 94.2-acre Southern Maryland Wood Treating Superfund Site ("Site") located in the Town of Hollywood, St. Mary's County, MD. This RfR Determination provides that EPA and the Maryland Department of the Environment (MDE) have made a technical determination that the Site is ready for unrestricted use and the remedy will remain protective of human health and the environment. These conclusions are summarized in the attached Ready for Reuse Determination report for the Southern Maryland Wood Treating Superfund Site, November 18, 2004. This RfR Determination remains valid unless new information becomes available to suggest that conditions at the Site are no longer protective of human health and the environment.

EPA's Preliminary Close Out Report confirms the successful removal of all hazardous wastes at the Southern Maryland Wood Treating Site. All threats at the Site have been addressed. The types of uses identified as protective in this RfR Determination remain subject to (i) applicable federal, state, and local regulation, including, but not limited to, zoning ordinances and building codes, and to (ii) title documents, including, but not limited to, easements, restrictions, and institutional controls.

This Ready for Reuse Determination is an environmental status report and does not have any legally binding effect, nor does it expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities and/or any potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including but not limited to instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the response and/or the conditions at the Site are no longer protective of human health or the environment for the uses identified in the Ready for Reuse Determination.

# READY FOR REUSE DETERMINATION SOUTHERN MARYLAND WOOD TREATING SUPERFUND SITE

## I. Executive Summary

This Ready for Reuse Determination (RfR Determination) is for the Southern Maryland Wood Treating Superfund Site (Site) located in the Town of Hollywood, Saint Mary's County, Maryland. The Site comprises the 94.2 acres and is depicted on tax map 26, grid 4, parcel 2.

The U.S. Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE) have made a technical determination that the Southern Maryland Wood Treating Site is ready for unrestricted land use and that the cleanup done there is protective of human health and the environment. Because all hazardous wastes were removed from the Site, there are no operation and maintenance requirements or limitations associated with the reuse of the Site.

The conditions summarized in this RfR Determination can be found in EPA decision documents for the Site including the 1995 Record of Decision (ROD), Remedial Action Plan, and Preliminary Close-Out Report (PCOR). This RfR Determination remains valid unless new information arises that questions whether unrestricted use is appropriate at the Site.

Prior to the cleanup by EPA, the health risks posed by the Southern Maryland Wood Treating Site were primarily to future workers and residents exposed to mostly polynuclear aromatic hydrocarbons and benzene in soils and ground water. Non-cancer risks were posed to future residents using ground water. All hazardous wastes were removed from the Site and risks to workers and residents have been eliminated. Therefore, the Site is ready for unrestricted use and the cleanup implemented at the Site will remain protective of human health and the environment.

Documents pertaining to the Site and the RfR Determination are part of the Administrative Record for the Site which are available for review at:

- United States Environmental Protection Agency, U.S. EPA Region III, Docket Room, 1650 Arch Street, Philadelphia, PA 19103-2020;
- EPA's website at <http://epa.gov/reg3hwmd/super/sites/MDD980704852/index.htm>.

Additional information regarding the Southern Maryland Wood Treating Superfund Site can be obtained from the Site's Remedial Project Manager (RPM), Robert Sanchez (3HS23) at U.S. EPA Region III, 1650 Arch Street, Philadelphia, PA 19103; Telephone number: (215) 814-3451;

Email address: [sanchez.robert@epa.gov](mailto:sanchez.robert@epa.gov).

The types of uses identified as protective for the Site in this RfR Determination are subject to state and local regulation, including, but not limited to, zoning ordinances and building codes.

Additional provisions regarding this RfR Determination are provided on page 9.  
EPA Region III and the Maryland Department of the Environment are issuing this Ready for Reuse Determination, effective November 18, 2004.

By: \_\_\_\_\_

Abraham Ferdas, Director  
Hazardous Site Cleanup Division  
U. S. Environmental Protection Agency  
Region III

\_\_\_\_\_

Horacio Tablada, Director  
Waste Management Administration  
Maryland Department of the Environment

## II. Site and Parcel Location

The Southern Maryland Wood Treating Site (SMWT or the Site) in Saint Mary's County, MD, is located one mile north of Hollywood, MD off of Route 235. The Site is bounded by residential, agricultural and wooded tracts of land. The Site encompasses 94.2 acres and the terrain across the Site is relatively flat. The map below shows the approximate Site boundary and the location of the Site in relation to Route 235. The Site is depicted on tax map 26, grid 4, parcel 2.

Aerial map  
with  
site



of the Site  
approximate  
boundaries

### **III. Site Conditions Prior to Cleanup**

#### *Site and Contaminant History*

The Southern Maryland Wood Treating facility was owned and operated by the Southern Maryland Wood Treating Company from 1965 to 1978. Wood was pressure treated using creosote and pentachlorophenol (PCP). Liquid process wastes were disposed of in six unlined lagoons (waste ponds). As a result of this disposal practice, onsite soils and ground water beneath the lagoons became contaminated. Additionally, due to ground water discharge from the lagoon area, surface water and sediments in the onsite pond and the sediments in Old Tom's Run (east and west tributaries) became contaminated. Storage of treated wood on site resulted in surface soil contamination.

The primary contaminants, volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs), were both components of creosote and PCP, wood-treatment chemicals. In 1982, the State of Maryland ordered the Site owner to clean up the Site by spraying water from the lagoons on a wooded portion of the Site, and by land-farming the lagoon sludge on a 3-acre field previously used to store untreated wood. Land farming seeks to use native bacteria to treat the contamination by spreading the sludge on the ground, plowing it in, and adding minerals, nutrients, and/or moisture to enhance the breakdown. The land-farming was done improperly which caused the shallow soil in that section of the Site to be contaminated. Shallow soil in the land farming area and deep soil in the former lagoon area were highly contaminated. Other areas of the Site were contaminated by drippings from treated wood, or by spills of wood treating chemicals. The Site operators abandoned the Site in the early 1980s leaving behind the process equipment, deteriorating tanks containing creosote and PCP, and contaminated soils, sediments, and ground water.

The land immediately adjacent to the SMWT Site consists mainly of forest and fields. Residents rely on ground water as a source of drinking water; however, residential wells in the Site vicinity have not been found to be contaminated. Monitoring wells at the perimeter of the Site confirmed that shallow ground water contamination remained in the vicinity of the Site property. The deep aquifer, which is the source of local drinking water, was never contaminated by the Site because of a clay layer which acted as a barrier between the contaminated shallow aquifer and the deep aquifer.

#### *Description of Risks Prior to Cleanup*

Prior to cleanup, the primary threats to the public included long-term exposure to contaminated shallow soil and ingestion of contaminated shallow ground water from the former lagoon area. Carcinogenic polynuclear aromatic hydrocarbons and benzene were the primary contaminants of concern in soils and ground water.

Those who might have been exposed to the contaminated shallow soils and shallow ground water were primarily future workers and residents. Future onsite residents were likely to be

exposed mainly to surface soil. The greatest cancer risk was to children ( 1 to 6 years) and to residents who lived in the area for a lifetime (70 years). Significant cancer risks were also associated with all ages under the plausible maximum exposure scenario. The plausible maximum case assumes the highest estimates of exposure (frequency of exposure and duration of exposure) and uses the highest concentrations of contaminants found in each media. The assessment of risk from ground water did not include exposure to contaminated ground water by routes other than ingestion. Nevertheless, risks from ingestion of contaminated ground water alone exceeded the upper bound of the target risk range of one additional cancer risk in ten thousand exposed.

Table 1 below shows the media, exposure pathways, and contaminants of concern for the Site prior to cleanup.

**Table 1**  
**Possible Exposure Pathways Evaluated by the Risk Assessment for Human Health**

Media	Exposure Pathway	Contaminants Posing Unacceptable Risks
Air	Inhalation of Air	None
Surface Soil	Dermal absorption of chemicals in surface soil; incidental ingestion of chemicals in surface soil	Carcinogenic Polynuclear Aromatic Hydrocarbons
Surface Water	Dermal absorption of chemicals in surface water; incidental ingestion of chemicals in surface water; ingestion of fish contaminated with chemicals from surface water	None
Sediment	Dermal absorption of chemicals in sediment; incidental ingestion of chemicals in sediment	None
Ground water	Ingestion of contaminated ground water	Benzene, Carcinogenic Polynuclear Aromatic Hydrocarbons

Remedies, or cleanup methods, are chosen to clean up sites to the levels tested under the exposure pathways. In the case of the Southern Maryland Wood Treating Site, the exposure pathways were for future workers and residential use of the Site. The remedy required that the Site be cleaned to residential standards.

#### **IV. Summary of Cleanup and Post Cleanup Activities**

The aerial photograph below shows the Site before cleanup. The photo was obtained from the Remedial Action Plan, dated February 2000.

**Aerial  
Southern Maryland  
Before Completion of**



**Photograph of the  
Wood Treating Site  
Remedial Action**

The photo was obtained from the Remedial Action Plan, dated February 2000.

#### *Removal or Short-Term Cleanup Activities*

Using Superfund authorities, EPA began an emergency cleanup at the Site on March 14, 1985, after contaminated material was discovered seeping into the onsite freshwater pond. Contaminated sediments were excavated from the pond and stabilized with cement kiln dust and encapsulated onsite awaiting final treatment. In 1986, the Site was placed on the National Priorities List of Superfund sites eligible for federal cleanup. By late June of 1988, studies were completed and a cleanup method was selected by EPA. As this remedy was being designed, community opposition to onsite incineration grew. When it became clear that the remedy would need to be revised, EPA conducted a second emergency removal action to stabilize conditions further.

This action included: demolishing several buildings that were in danger of collapse; offsite disposing of liquid and solid waste cleaned out from numerous tanks and retorts; maintaining the pile of previously excavated and stabilized sediment; constructing an underflow dam to reduce the amount of contaminated material migrating from the onsite pond into the stream; constructing a trench upgradient of the pond to collect contaminated ground water; and constructing a water treatment facility. With the Site stabilized, an additional study was conducted to evaluate additional alternatives and a new remedy, thermal desorption, was selected by EPA.

*Remedial or Long-Term Cleanup Activities*

The new remedy involved treating contaminated soils and sediments in a thermal desorber. This technology heats up the soil and drives off the volatile compounds and allows the treated soil to be returned to the site with no further risk to the public. Highly contaminated soils and sediments not readily treated by the thermal desorber were shipped offsite for proper disposal. Shallow contaminated ground water was pumped and treated. Once the remedy was complete the water treatment plant was no longer needed and was dismantled. In addition to the onsite work, approximately 500 tons of contaminated sediment were removed from the stream area.

Soil treatment operations were completed in October 2000 after treating approximately 270,600 tons of contaminated soils and sediments. Backfilling of staged treated soils continued until the proper grading was achieved. Final Site grades were roughly based on initial Site contours and aesthetics.

Site cleanup activities performed at the Site have cost more than \$ 61 million. Approximately 90% of those costs were paid by EPA and 10% of the costs have been paid by the Maryland Department of the Environment.

Table 2 below shows a time line of EPA activities performed to date at the Southern Maryland Wood Treating Superfund Site.

**Table 2  
Site Time Line**

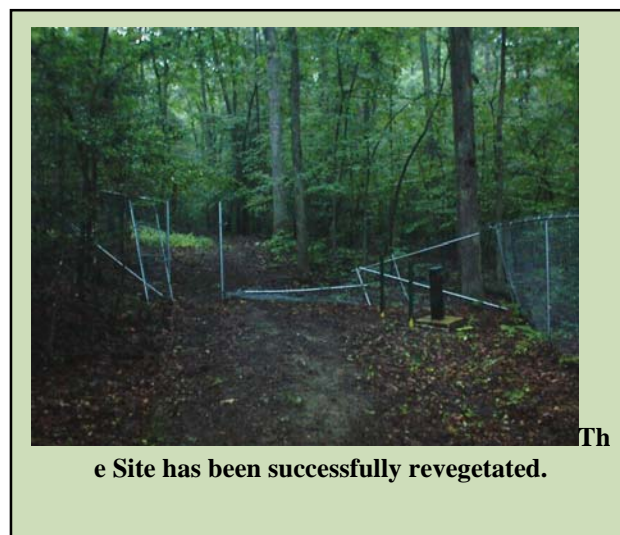
<b>Date</b>	<b>Description of Activity</b>
1965-1978	Site operated as pressure treatment wood preservation business
03/14/1985	U.S. EPA initiates first response action
06/10/1986	Site listed on the National Priorities List (NPL)
06/29/1988	Remedial investigation and feasibility study (RI/FS) completed
06/29/1988	First Record of Decision issued; community disapproval grew after issuance
06/29/1993	Second removal action
02/1995	Focused feasibility study to reevaluate remedy issued



Date	Description of Activity
09/08/1995	Amended Record of Decision (ROD)
10/07/1997	Construction activities begin on Site
09/30/1999	Five-Year Review conducted at the Site; remedy was still underway
02/2000	Excavation activities begin in stream
10/06/2000	Soil treatment operations completed
01/17/2001	Pre-final inspection
04/23/2001	Preliminary Close-Out Report
08/2001	Remedial Action Completion Report issued and will be used as basis for the development of the Site Final Close-Out Report
Winter 2004/2005	Deletion from NPL

*Redevelopment/Reuse History Post-Cleanup*

The Site has been cleaned up to levels that are safe for unrestricted use and unlimited access. In addition, there are no restrictions or controls needed to protect future users of the property. Currently, the Site is vacant and has been re-graded and re-vegetated with a diverse mixture of wildflowers and grains suitable for wildlife habitat. A perimeter fence was required to prevent access to the Site until all soil cleanup was completed. Although the fence remains in place, it is no longer required.



**The Site has been successfully revegetated.**

EPA future actions associated with this Site include: preparation of a Final Close Out Report and deletion of the Site from the National Priorities List. No further Five-Year Reviews will be performed by EPA since contamination has been completely removed from the Site. EPA expects to delete this Site from the National Priorities List during the Winter of 2004/2005.

**V. EPA’s Basis for Ready for Reuse Determination (RfR Determination)**

The Southern Maryland Wood Treating Site RfR Determination is based on EPA documents produced during the cleanup of the Site. These documents provide evidence that the Site is

ready for unrestricted use and unlimited access. The RfR Determination is based primarily on the Preliminary Close Out Report completed in April 2001 which verifies that the conditions of the Site comply with the 1995 Record of Decision (ROD) findings and design specifications and that activities performed at the Site are sufficient to achieve protection of public health and the environment. Additional documents providing information about the remedy include the 1995 Record of Decision and the 2001 Remedial Action Completion Report. These reports can be found in the Site's Administrative Record, which is available for review at the EPA Region III Docket Room in Philadelphia, Pennsylvania and on EPA's website at <http://epa.gov/reg3hwmd/super/sites/MDD980704852/index.htm>.

The risks associated with direct contact with soils, sediments, and onsite ground water have been eliminated. All treated Site soils were cleaned to the required performance standards and ground water monitoring confirms that the response action has been successful. The Site has been cleaned to standards which will allow for unrestricted use and unlimited access.

## **VI. Site Conditions After Cleanup: Ongoing Limitations and Responsibilities Previously Established by EPA**

### *Engineering and Institutional Controls*

A perimeter fence currently surrounds the Site although it is not necessary to protect human health and the environment. There are no institutional controls associated with the Site.

### *Operation and Maintenance Requirements*

Because all waste was removed from the Site and ground water pumping and treatment was completed in December 2000, there are no operation and maintenance requirements.

## **VII. Provisos**

This Ready for Reuse Determination is an environmental status report and does not have any legally binding effect, nor does it expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities and/or for any potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including but not limited to instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicates that the response and/or the conditions at the Site are no longer protective of human health or the environment for the types of uses identified in the Ready for Reuse Determination.