

# EPA Proposes Cleanup Plan For Contaminated Soil

## St. Regis Paper Co. Superfund Site

Leech Lake Reservation—Cass Lake, Minnesota

June 2019

### Share your opinions

EPA encourages you to comment on this proposed cleanup plan. The Agency will only select a final cleanup plan after reviewing comments received during the public comment period, which runs from **June 17 – August 15, 2019**.

There are several ways to submit written comments:

- Orally or in writing at the public meeting (*see below*).
- Fill out and mail the enclosed comment sheet or hand it in at the public meeting.
- Send an email to Heriberto León at [leon.heriberto@epa.gov](mailto:leon.heriberto@epa.gov).
- Online at [www.epa.gov/superfund/st-regis-paper](http://www.epa.gov/superfund/st-regis-paper).

### Attend a public meeting

There will be public meeting **Tuesday, July 30 at 6:00 p.m.**, Cass Lake-Bena Elementary School, 15 Fourth St. NW, Cass Lake.

After a brief presentation, EPA will accept comments on the proposed plan. A court reporter will record all public comments.

### EPA contact information

#### Heriberto León

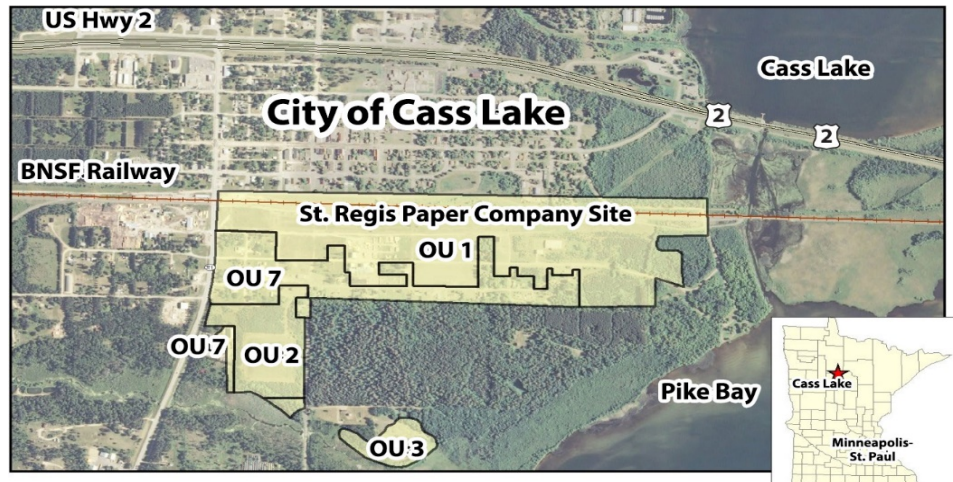
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800-621-8431  
8:30 a.m. – 4:30 p.m., weekdays



*St. Regis Paper Co. Superfund site showing cleanup areas called operable units.*

U.S. Environmental Protection Agency (EPA), in consultation with the Leech Lake Band of Ojibwe and the Minnesota Pollution Control Agency, is proposing a plan to clean up soil contamination in the residential areas at the St. Regis Paper Co. site on the Leech Lake Reservation. EPA refers to the residential areas as “operable unit” 7, or OU7 (*see map above*). To help keep track of the different cleanup sections at the site, areas were assigned operable unit numbers.

The proposed cleanup plan<sup>1</sup> involves:

- Removing contaminated soil from affected residential areas and replacing it with clean soil or applying a clean-soil cover.
- Managing most of the removed soil at an on-site facility.
- Disposing of the heavily-contaminated soil at an off-site facility.
- Monitoring soil stored on-site.

EPA arrived at this recommendation after extensive study of the site, and after considering several cleanup alternatives. EPA’s recommended alternative is Alternative S15-B (*see “Chart of cleanup alternatives” on Page 4*). EPA recommends Alternative S15-B because it protects people and the environment, meets the applicable regulations, is cost-effective and will be effective in the long term.

Before making a final decision, EPA will hold a public meeting and seek comments from the public (*see box, left*). In consultation with the Leech Lake Band and MPCA, EPA may modify its cleanup plan or choose a new one based on public comments or new information, **so your opinion is important**.

<sup>1</sup>Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, known as the Superfund law) requires the publication of a notice announcing the proposed plan. It also requires a public hearing and public comment period. This fact sheet summarizes the technically written proposed plan and other site-related environmental reports that can be viewed at the information repositories listed in the box on the back page and the EPA Region 5 office in Chicago.

### Cleanup alternatives

EPA considered six alternatives for cleaning up the residential surface soil at the St. Regis site, each of which was evaluated against seven of the nine criteria required by the Superfund law (see “Explanation of evaluation criteria” box on Page 4). The table below gives a description of each alternative.

### Cleanup goals

EPA established cleanup goals, or preliminary remedial goals (PRGs) for the site. These are separated into two levels. Level 1 sets cleanup goals near the stricter end of EPA’s acceptable risk range, which are consistent with the soil dioxin cleanup level established by the Leech Lake Band for properties within the reservation. Level 2-R is a set of cleanup levels in the middle of EPA’s acceptable risk range.

**Table of cleanup alternatives**

<b>Alternative</b>	<b>Description of Alternative</b>	<b>Estimated Cost Option A (Contaminated soil taken offsite)</b>	<b>Estimated Cost Option B (Contaminated soil stored onsite*)</b>
S10	No action. The “no action” alternative is evaluated to establish a baseline for comparison. Under this alternative, EPA would take no action to clean up the soil.	\$0	
S11	Dig up soil on properties exceeding Level 2-R cleanup levels.	\$12.1 million	\$8 million
S12	Dig up soil on properties exceeding Level 2-R cleanup levels and place a 12-inch clean soil cover on properties exceeding Level 1 cleanup levels.	\$14.3 million	\$10 million
S13	Dig up soil on properties currently in residential use exceeding Level 1 cleanup levels and place a 12-inch clean soil cover on other properties exceeding Level 1 cleanup levels.	\$13.6 million	\$10.3 million
S14	Dig up soil on properties not owned by International Paper exceeding Level 1 cleanup levels and place 12-inch clean soil cover on properties owned by International Paper exceeding Level 1 cleanup levels.	\$22.5 million	\$15.4 million
<b>S15</b>	<b>Dig up all soil exceeding Level 1 cleanup levels. (See bulleted list on Page 1.)</b>  <b>EPA’s recommended alternative.</b>	\$30 million	<b>\$18.5 million</b> <b>EPA’s recommended alternative.</b>

\*Note: any soil that is too contaminated to be stored onsite will be taken offsite for disposal.

## Common features

All the alternatives except for Alternative S10, the no action alternative, share the following common features:

- Digging up soil on some or all properties in the residential area to the depth needed to reach the selected cleanup level. The areas dug up will have clean soil put back in the space. The section would then be replanted.
- Each of the alternatives have two options for managing the removed soil.
  - Option “A” involves trucking all the contaminated soil to an offsite landfill. The dirt would be tested to determine the appropriate type of approved landfill or disposal facility.
  - Option “B” involves storing most of the contaminated soil onsite. The soil would be tested to be sure it could be stored onsite. Any soil that is too contaminated to be stored onsite, will be taken offsite for disposal.
- Upon cleanup, all residential properties would be suitable for future residential use.
- Monitoring and control of air quality (dust) will be done during the cleanup.
- Soil samples will continue to be taken from the residential area until the soil is cleaned up in OU1 and OU2 (the former operations areas) to confirm that no recontamination is occurring. In addition, some or all of the actions required by the 2005 interim OU7 remedy for potentially contaminated dust will continue to be required.

Alternatives S12, S13 and S14 (both A&B) also share the following features:

- A clean soil cover will be used instead of digging up some areas. The cover will be made of marker material that indicates where any remaining contamination starts, covered by a layer of uncontaminated fill and top soil, followed by vegetation.
- Activities in the covered portions of the residential area will be restricted to preserve the soil cover. For example, a deed notice might be filed on a covered property that notifies future owners of the contamination below the cover. It would also prohibit any digging below the cover unless proper precautions are taken.

## Evaluation of EPA’s recommended alternative

EPA recommends Alternative S15-B because the Agency believes this alternative has the best balance of the evaluation criteria.

Alternative S15-B protects people and the environment, and it meets applicable rules and regulations by removing all contaminated soil in the residential area that is above Level 1 PRGs, putting in clean dirt and managing the soil onsite. There will not be a need for any deed restrictions to be placed on properties in the residential area.

Alternative S15-B provides long-term and permanent protection against exposure to site-related contaminants by removing the contaminated soil. Onsite management of the dug-up soil significantly reduces short-term impacts due to increased truck traffic that would be needed if the contaminated soil was taken offsite. Alternative S15-B does not treat the soil to reduce toxicity, mobility or volume of the contamination. This is because effective alternative treatment technologies or resource recovery technologies are not practical for large amounts of soil containing low levels of contamination. (*None of the alternatives use treatment of soil to reduce toxicity, mobility or volume of contamination for the same reason.*) Alternative S15-B is implementable. Finally, Alternative S15-B meets the evaluation criteria at a much lower cost than alternatives that dispose of soil offsite.

## Chart comparing cleanup alternatives

Evaluation Criteria	Alternatives										
	S10	S11-A*	S11-B*	S12-A	S12-B	S13-A	S13-B	S14-A	S14-B	S15-A	S15-B**
Overall Protection of Human Health and the Environment	☐	■	■	■	■	■	■	■	■	■	■
Compliance with ARARs	☐	■	■	■	■	■	■	■	■	■	■
Long-Term Effectiveness and Permanence	☐	■	■	❖	❖	❖	❖	❖	❖	■	■
Reduction of Toxicity, Mobility, or Volume through Treatment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Short-Term Effectiveness	■	■	■	❖	■	❖	■	❖	■	❖	❖
Implementability	■	■	■	■	■	■	■	■	■	■	■
Cost (in millions)	\$0	\$12.1	\$8	\$14.3	\$10	\$13.6	\$10.3	\$22.5	\$15.4	\$30	\$18.5
Tribal and State Acceptance	LLBO supports S15-A and does not support S15-B; MPCA conditionally supports S15-B										
Community Acceptance	Will be evaluated after the public comment period ends.										

■ – Meets criterion    ☐ – Does not meet criterion    ❖ – Partially meets criterion    N/A – Not applicable

\*Although S11 meets the overall protection of human health and the environment criterion, it does not achieve the cleanup levels EPA selected.

\*\*EPA's recommended alternative      Cost is in millions.

### Explanation of evaluation criteria

EPA compares each cleanup option or alternative with these nine criteria established by federal law:

- Overall protection of human health and the environment** examines whether an option protects living things. This standard can be met by reducing or removing pollution or by reducing exposure to it.
- Compliance with applicable or relevant and appropriate requirements, or ARARs**, ensures options comply with federal, tribal, and state laws.
- Long-term effectiveness and permanence** evaluate how well an option will work in the long term, including how safely remaining contamination can be managed.
- Reduction of toxicity, mobility or volume through treatment** determines how well the option reduces the toxicity (the chemical makeup of a contaminant that makes it dangerous), movement and amount of pollution.
- Short-term effectiveness** compares how quickly an option can help the situation and how much risk exists while cleanup is done under this option.
- Implementability** evaluates how feasible the option is and whether materials and services are available in the area.
- Cost** includes not only buildings, equipment, materials and labor but also the cost of maintaining the option for the life of the cleanup.
- State and tribal acceptance** is whether the state environmental agency, in this case the Minnesota Pollution Control Agency, and the tribal government, the Leech Lake Band of Ojibwe, agree or disagree with EPA's recommended alternative.
- Community acceptance** considers the opinions of nearby residents and other stakeholders about the proposed cleanup plan. EPA evaluates this standard after a public comment period.



# St. Regis Superfund Site – Comment Sheet

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Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

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## Site background

The St. Regis site is in the city of Cass Lake and is fully within the exterior boundaries of the Leech Lake Reservation (*see map, right*). The site is located on 125 acres of commercial and railroad property that was used by a wood treatment facility as well as some surrounding residential properties. The wood treatment facility operated from about 1958 until 1985. Creosote and other chemicals were used to treat wood, and wastewater was placed in ponds and occasionally used for irrigation. Sludge from the wood treatment process was disposed of on the eastern edge of the site and was also burned in a waste pit at the Cass Lake city dump. EPA placed the St. Regis Paper Co. site on the National Priorities List, a list of the nation's Superfund sites, in 1984.

Between 1985 and 1988, the former owner/operator, Champion International Corp., conducted an investigation and several cleanup actions at the site under MPCA oversight. Champion removed visibly contaminated soil and sludge and placed it into a vault designed for hazardous waste, which had been built onsite. Champion also built and began operating a groundwater pump and treat system to clean contaminated groundwater. Champion was subsequently acquired by International Paper.

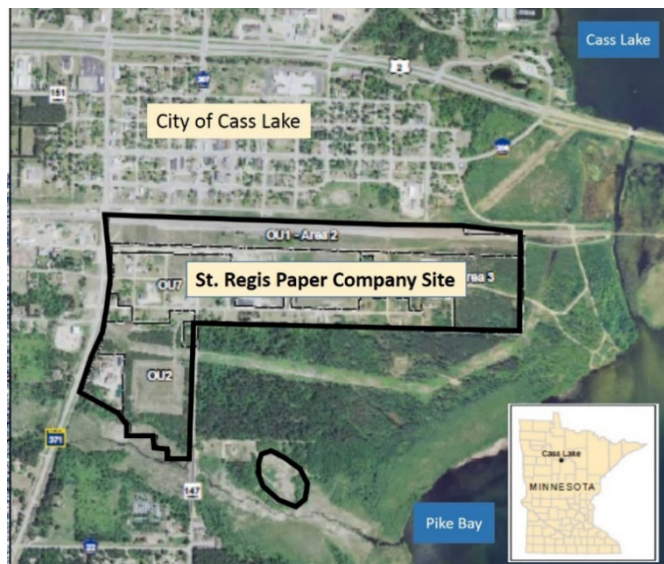
## Previous EPA actions

In 1995, EPA became the lead agency for the St. Regis site. In 2000, EPA issued a report for the site in which the Agency raised concerns about contamination remaining in site soil. In 2001, EPA sampled site soil, sediment (mud), surface water, fish and groundwater to find out what contamination was there.

EPA required International Paper to collect additional samples and prepare a report called a human health and ecological risk assessment to find out what effects the contamination may have on people and the environment.

Between 2004 and 2006, more than 3,900 tons of contaminated soil were removed from the site on city-owned, BNSF Railway and commercial property. Clean soil was put in the areas where contaminated soil was removed. Other areas were covered or fenced to reduce contact with the contaminants.

In 2005, EPA found that indoor dust samples collected from five homes were above EPA's approved levels. EPA issued a cleanup plan that called for cleaning the interiors of residences, putting a 3-inch layer of clean soil and grass on yards and applying dust suppressant to unpaved roads. International Paper continues to periodically clean the interiors of the affected homes and apply the dust suppressant to the unpaved roads as required.



*St. Regis Paper Company Superfund site approximate boundaries.*

In 2011, International Paper completed a study that estimated the potential health risks for exposure to site contaminants. EPA then issued a proposed cleanup plan to address these potential health risks posed by the contaminated soil. However, a final cleanup plan was not issued because of public comments received. EPA worked with the Leech Lake Band of Ojibwe, MPCA, International Paper and other stakeholders to take further soil samples to better determine the extent of contamination. International Paper took additional samples in 2013 and 2014 and submitted its findings in December 2015. Based on those findings, EPA, MPCA and the Leech Lake Band of Ojibwe worked on developing a proposed plan in 2016. EPA is issuing this proposed cleanup plan after carefully considering public comments received in 2016.

## Summary of site risks

The main way people in and around the St. Regis site are exposed to potentially harmful pollutants is by direct contact with dioxin-contaminated soil in the residential areas.

The contaminants of concern include dioxin and polycyclic aromatic hydrocarbons, or PAHs. PAHs are a group of chemicals formed during the incomplete burning of coal, oil, gasoline, wood, garbage or any plant or animal material. They are also found in cigarette smoke, soot and creosote. Breathing or lengthy periods of skin contact to PAHs can cause cancer. Animal studies have shown some PAHs can cause birth defects and decreased body weight. Dioxin was used in the wood treatment process as a preservative and as an insecticide at the site. Dioxin affects the skin and has been shown to be very toxic in animal studies and probably causes cancer. PAHs and dioxin are of concern because they are in soil at levels above what EPA considers safe.

## Next steps

Before EPA makes its decision final, the Agency, in consultation with the Leech Lake Band and MPCA, will review comments received during the public comment period. EPA may modify its recommended alternative or choose another based on new information presented in the comments.

EPA encourages you to review and comment on the proposed cleanup plan. Much more detail on the cleanup alternatives is available in the Proposed Plan and other official documents on file at the information repositories (*see box, right*) or EPA's website at [www.epa.gov/superfund/st-regis-paper](http://www.epa.gov/superfund/st-regis-paper).

EPA will respond to the comments in a document called a "Responsiveness Summary." This will be part of another document called the "Record of Decision," or ROD, that describes the final cleanup plan selected. The Agency will announce the final cleanup plan in a local newspaper and will place a copy in the information repositories and post it on EPA's website.


## Information repositories

To find more detailed information about the site and to view technical documents, visit one of the information repositories below.

**Leech Lake Band of Ojibwe**  
Division of Resource Management  
6530 Highway 2 NW  
Cass Lake

**Cass Lake City Clerk**  
332 Second St. NW  
Cass Lake

**Cass Lake Library**  
223 Cedar Ave.  
Cass Lake

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