

1 Problem

What	Problem(s)	Heavy metal detected in samples of moss
When	Date	Ongoing
	Different, unusual, unique	Glass factories nearby
Where	Facility, site	Portland, OR
	Task being performed	Testing moss to demonstrate how trees add value in an urban setting

Impact to the Goals

Safety	Potential health impacts from exposure to heavy metals
Environmental	Heavy metals detected in moss samples
Customer Service	Residents concerned about presence of heavy metals
Regulatory	Glass factories not required to test emissions
Production/ Schedule	Residents told not to eat vegetables grown in gardens
Property/ Equipment	?
Labor/ Time	Significant investigation required

HEAVY METAL DETECTED IN MOSS IN PORTLAND

Cause Map

The city struggles to determine path forward

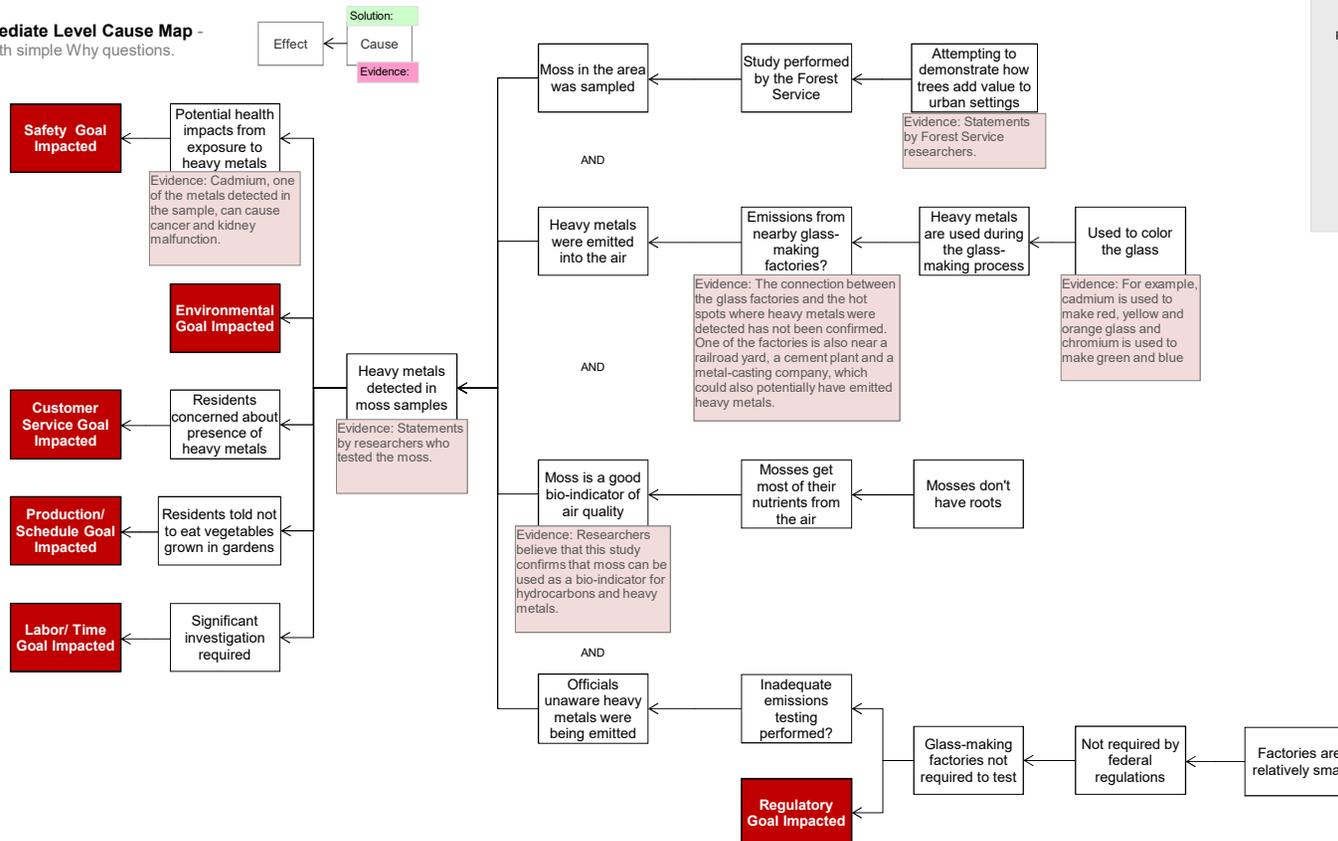
Residents and officials are struggling to find a path forward after toxic heavy metals were unexpectedly found in samples of moss in Portland, Oregon. According to the U.S. Forest Service, the moss was sampled as part of an exploratory study to measure air pollution in Portland. The objective of the study was to determine if moss could be used as a "bio-indicator" of hydrocarbons and heavy metals in air in an urban environment. Researchers were caught off guard when the samples showed hot spots of relatively high chromium, arsenic, and cadmium levels in the moss. Portland officials and residents are working to determine the full extent of the problem and how it should be addressed.

"We are an example to the world of the green, sustainable city, and so it's all the more dissonant."

- Charlie Hales, mayor of Portland

2 Analysis

Intermediate Level Cause Map - Start with simple Why questions.

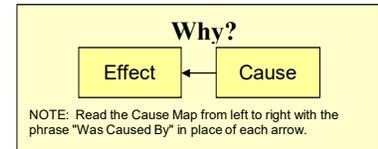


Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 Problem** - What's the Problem?
- Step 2 Analysis** - Why did it happen?
- Step 3 Solutions** - What will be done?



For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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