Tailings are the fine grained material remaining after the valuable minerals are separated in hard rock mining and ore processing. After removal of the valuable minerals, the remaining milled rock tailings are typically pumped or flow by gravity to an engineered impoundment area.

Tailings Stewardship Program
In 2014, Hecla began a formalized tailings stewardship program with the intent to ensure best practices were being implemented and a risk-based approach was being followed. In addition, the company adopted a structured internal company-wide tailings management standard. The Hecla program is benchmarked against industry leading tailings management frameworks of the Canadian Dam Association and Mining Association of Canada’s Toward Sustainable Mining and includes:

- Third party review and assessment of design, construction, operation and monitoring systems.
- High level risk assessments in design and operations
- Operation, maintenance and surveillance plans
- Standardized design criteria considerations with a focus on geotechnical stability and water management
- Assigned responsibilities for the third-party engineer and designer of record as well as Hecla’s tailings management team
- Tailings reclamation plan reviews
- Emergency response planning
- Quality assurance, documentation, and other controls

Dry Stack Method
Hecla was an early adopter of the dry stack method of tailings management at our Greens Creek operation in Alaska. Here, tailings are filtered to a low moisture content and then trucked and placed into a “dry stack” which is not an impoundment. This method minimizes the tailings surface footprint, reduces the amount of water retained in the tailings, and lessen the consequences of any potential failure. It also allows the opportunity for concurrent reclamation that further enhances the site’s stability.

A High Percentage of Tailings are Reused
At both our mines at Greens Creek and Lucky Friday in Idaho, nearly 50% of the volume of tailings produced in the milling process is returned to the underground mine as structural fill. This increases stability, improves safety, and reduces surface storage requirements.

In addition, in 2018 more than 31% of the total tailings produced company-wide were returned to the mine rather than stored on the surface.
Q. What type of tailings dams does Hecla have?
A. We have six active tailings storage facilities (Greens Creek, Lucky Friday, Casa Berardi, Midas and Aurora), and we lease the Velardena tailings facility in Mexico. The Casa Berardi tailings facility is our only active facility that utilizes the upstream construction method. Our planning for the next tailings expansion at Casa Berardi will include transition to the downstream method of construction. As a 128 year-old company, we have inherited several other tailings facilities which have been closed or are no longer considered jurisdictional dams by the authorities.

Q. Are there specific groups dedicated to tailings management within the company?
A. Both our tailings management system and our safety and environmental management system include assigned responsibility and accountability. Our tailings stewardship program mandates the formation of tailings management teams that bring our internal experts and external stakeholders together to ensure open communication. This includes assigning a specific person or champion at each site.

Q. What happens to the tailings facilities at the end of the mine life?
A. Before we begin, we think of the finish. The initial tailings design process includes planning for final reclamation and closure of our tailings facilities. However, we perform concurrent reclamation where feasible. For example, we have closed two older facilities and are in the process of closing a third facility at the Lucky Friday Mine in Idaho. Also, the tailings facility at Grouse Creek in Idaho is no longer considered a jurisdictional dam, has been reclaimed, and the financial assurances released. At the Troy Mine in Montana, we are actively reclaiming the tailing facility with soil cover and revegetating the surface to create post mining wildlife habitat. Use this link to see what we are doing at Troy Mine.
Tailings Facility Factsheet

This factsheet was prepared in response to a request from the Investor Mining and Tailings Safety Initiative (https://www.churchofengland.org/investor-mining-tailings-safety-initiative) received August 21, 2019.

Overview Questions

1. **Provide an overview of your tailings management system, and how you manage risk.**

Hecla Mining Company takes tailings management seriously. In 2014, prior to the Mount Polley incident, Hecla Mining Company established a Tailings Stewardship Program that included third-party expert reviews of all active tailings facilities within the company. This program has evolved and is now embedded within the company’s Environmental Management System with a specific Tailings Management Standard. This management system includes assigned responsibility and accountability for tailings management. In 2018 Hecla joined the Mining Association of Canada and is implementing the Towards Sustainable Mining Tailings Management and Protocol (TSM) for our Canadian sites and using TSM as a benchmark for tailings management under the Hecla Standard. For further information on our management, system and approach to managing risk see our most recent Sustainable Report, Tailings Management Fact Sheet, and corporate web site under Responsibility (www/Hecla-mining.com).

2. **Confirm whether your approach to tailings management has changed or will change in light of the recent tailings disasters at Brumadinho, Mariana, Mt Polley and others. Have you, for example, reviewed all tailings storage facilities with upstream dam construction, and taken steps necessary to protect local communities and the environment e.g. buttressing, evacuation?**

We had an internal review process, and Tailings Stewardship program in place prior to the Mount Polley incident. Hecla was an earlier adopter of the dry stack tailings management system at our Greens Creek Mine in Alaska. Hecla, as primarily an underground mining company, also seeks to place tailings back into the mine to the extent practicable and in 2018 about 31% of all tailings generated went back into the underground workings. Our upstream tailings facilities have been assessed and management systems are in place to protect the local environment and communities, which in general are very distant from our remote mining operations. Future tailings expansion at Casa Berardi Mine will involve downstream construction techniques.
<table>
<thead>
<tr>
<th>Mine Name / Tailings Facility</th>
<th>Location</th>
<th>Owned and Operated</th>
<th>Non-Operational</th>
<th>Closed</th>
<th>Opened</th>
<th>Impoundment Volume (m³)</th>
<th>Planned Tailings Storage (m³)</th>
<th>Most Recent Independent Expert Review</th>
<th>Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure?</th>
<th>What is your hazard categorization of this facility, based on consequence of classification system?</th>
<th>Has this facility, at any point in its history, failed to be confirmed or notable stability concerns, as identified by an independent engineer (even if later a different firm)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucky Friday MTIS #1</td>
<td>Republic</td>
<td>Yes</td>
<td>No</td>
<td>1940's</td>
<td>1981</td>
<td>26,650 M³</td>
<td>NA</td>
<td>Yes</td>
<td>Yes, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Lucky Friday MTIS #2</td>
<td>Troy</td>
<td>Yes</td>
<td>No</td>
<td>1988</td>
<td>1972</td>
<td>5,360,000 cubic meters</td>
<td>NA</td>
<td>Yes</td>
<td>Yes, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Lucky Friday MTIS #3</td>
<td>Republic</td>
<td>No, non-hazardous basic - ongoing water management</td>
<td>No</td>
<td>1994</td>
<td>1988</td>
<td>109 Million cubic meters</td>
<td>NA</td>
<td>No</td>
<td>No, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Casa Berardi Cell #1</td>
<td>Republic</td>
<td>No</td>
<td>No</td>
<td>1998</td>
<td>1979</td>
<td>170,000 cubic meters</td>
<td>NA</td>
<td>No</td>
<td>No, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Casa Berardi Cell #2</td>
<td>Republic</td>
<td>Yes</td>
<td>No</td>
<td>1998</td>
<td>1979</td>
<td>495,000 cubic meters</td>
<td>NA</td>
<td>No</td>
<td>Yes, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Casa Berardi Cell #3</td>
<td>Republic</td>
<td>No</td>
<td>No</td>
<td>1998</td>
<td>1979</td>
<td>212,376 cubic meters</td>
<td>NA</td>
<td>No</td>
<td>Yes, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
<tr>
<td>Hecla Operated Tailings Facilities</td>
<td>Republic</td>
<td>Yes</td>
<td>Yes</td>
<td>2016</td>
<td>2010</td>
<td>26,650 M³</td>
<td>NA</td>
<td>Yes</td>
<td>Yes, not since 5 years</td>
<td>NA</td>
<td>Yes, not since 5 years</td>
</tr>
</tbody>
</table>