

Environmental Emergency (E2) Information

Teck Trail Operations

JUNE 2023



Teck

At Teck Trail Operations, safety is a core value. Our priority is to keep employees and the community safe while protecting the environment. We take the safe management and storage of our process materials very seriously, and we have operational and emergency response procedures in place to manage and mitigate potential emergencies that may occur.

Teck Trail Operations meets the requirements of the Federal Environmental Emergency (E2) regulation. This regulation focuses on environmental emergencies, identified as an uncontrolled, unplanned or accidental release of an E2 substance into the environment (or the reasonable likelihood of such a release). We wish to build awareness in the community and educate residents of the rigorous steps taken by Teck Trail Operations to prevent, prepare for, respond to, and recover from the unlikely event of an environmental emergency.

At Teck Trail Operations, we have six regulated E2 substances on site which require an Environmental Emergency Plan (E2 Plan): Anhydrous Ammonia, Ammonia Solution (Aqua Ammonia), Hydrochloric Acid, Sulphur Dioxide, Sodium Dichromate and Mercury.

Prevention

Teck Trail Operations is designed and operated to prevent incidents from occurring in the first place. Teck follows best practices which include safe system design, training, continuous monitoring, spill containment and back-up systems with multiple levels of redundancy.

Preparation

Teck Trail Operations hosts joint emergency response exercises every five years, which involve full-scale mock exercises with our Regional District of Kootenay Boundary (RDKB) Emergency Program partners. Emergency Services personnel undergo regular training, including simulation exercises for E2 substances, on an annual basis. The Emergency Services Superintendent (Fire Chief) is a member of the Emergency Services Committee through the RDKB. The group of stakeholders meets on a bi-annual basis where the E2 plan is communicated.

Response

Teck Trail Operations has well-established procedures and protocols to ensure substances are handled safely. Trail Operations also maintains extensive emergency response capability for both on-site and off-site emergency response. An on-site Emergency Control Centre (ECC) is operated by Emergency Services personnel 24 hours per day, 365 days per year. Teck Trail Operations operates a highly trained Emergency Response Team (ERT) with a primary role of responding to issues related to the transportation of Trail Operations' products and supplies. The team can aid and advise on a 24-hour basis in the event of rail and truck emergencies. Trail Operations also operates a highly trained, full-time, on-site fire department. Members are fully trained in firefighting and hazardous materials emergency response.

Recovery

In the unlikely event of an environmental emergency, Teck Trail Operations works closely with local authorities to immediately respond to the incident and notify the public. The post-incident recovery plan would also include close coordination with local authorities.



Teck Trail Operations hosts joint emergency response exercises which involve full-scale mock exercises with our Regional District of Kootenay Boundary Emergency Program partners.

What should I do if an environmental emergency occurs?

Teck Trail Operations works closely with local emergency services. Notification methods will depend upon the event, but may include in-person, local radio and/or social media communication. Local authorities will communicate and provide direction in the event of an emergency.

E2 Substance Information

While there is the potential for an environmental emergency involving air, water or land as the result of a containment issue, Trail Operations has strict procedures for the safe storage of E2 substances and our related detailed emergency response procedures. At Trail Operations, we focus on continuous improvement when it comes to identification of hazards and assessment of risks, training and education, emergency preparedness and incident investigation.

Anhydrous Ammonia is used on site for our fertilizer production and sulphur processing. Anhydrous ammonia is also used in the preparation of ammonia solution, used in the production of ammonium sulphate fertilizer.

- The highest health risk comes from inhalation. In low concentration, it can lead to irritation of the eyes, nose and respiratory system as well as chemical and freezing burns on the skin. At high concentrations, breathing Anhydrous Ammonia can be fatal.
- Secure ammonia storage facilities at Teck Trail Operations are routinely inspected and have leak detection monitors connected to related operating plant control rooms.

Sulphur Dioxide (SO₂) is a highly reactive, colourless gas. Mine concentrates processed by Teck Trail Operations contain sulphur. SO₂ is produced by Teck Trail Operations as a by-product of converting mine concentrates into metal and other products.

- Short-term exposures to elevated SO₂ levels can cause the air passages in the lungs to constrict or tighten,

leading to breathing difficulties and tightening in the chest. It may also irritate the nasal passage, throat and eyes.

- Teck Trail Operations currently captures more than 99% of the sulphur and converts it to by-products, such as fertilizer.
- Ambient SO₂ levels are monitored throughout the Greater Trail area.

Hydrochloric acid is a water-based solution of hydrogen chloride gas used in germanium refining.

- In its concentrated, liquid form, hydrochloric acid has a strong irritating odor and is very corrosive. It can cause eye damage if splashed in the eyes, and severe injury to the mouth, throat, esophagus and stomach if ingested.

Sodium Dichromate is used in the zinc refining process.

- Like all hexavalent chromium compounds, sodium dichromate is carcinogenic.
- Inhalation can cause irritation of the respiratory tract and exposure may lead to eye damage.

Mercury is a naturally occurring element and a by-product of the zinc/lead smelting and refining process.

- Mercury is classified as a heavy metal and can be toxic to living organisms.
- It can be absorbed through the skin and vapors are toxic.

Everyone going home safe and healthy every day

At Teck Trail Operations health and safety are core values. Nothing is more important than the health and safety of our employees and the community. We also work hard to take care of our environment. The best response to any emergency is prevention, and therefore Teck Trail Operations follows stringent safety management standards.

Contact: Teck Trail Operations Environment and Community Feedback Line at 250-364-4817



Teck Trail Operations' Emergency Services demonstrates our stewardship of the transportation of our products and supplies, regardless of who owns, or has care and control of, the material at the time of transport or who is responsible for the transport. The team is highly specialized and conducts full-scale training exercises as illustrated in this photo.