

## Credit 2.3 Health Impacts Declaration

### Glossary of terms

#### Biological Hazards

Any organic substance that presents a threat to the health of people or other living organisms. Biological hazards can include viruses, biological toxins, fungi, or bio-active substances etc.

#### Chemical Hazards

Any non-biological substance that can cause harm to life or health. Chemical hazards can be solid, liquid, or gas, and can cause harm to anyone directly exposed, usually through inhalation, ingestion, or direct contact to the skin.

#### Health Hazards

A health hazard is a biological, chemical, or physical factor that can have either short or long-term negative impacts on human health. This could include contaminated drinking water, exposure to toxic or carcinogenic toxins, exposure to dust or mould, exposure to viruses or contagious diseases etc.

#### Physical Hazards

A hazard that can cause physical harm with contact. This could include working in conditions that are too hot or too cold, vibration and noise hazards, working with explosive or flammable materials, manual handling, sharp objects, trip hazards etc.

#### Safety Data Sheet (SDS)

A safety data sheet contains comprehensive information about the properties of hazardous substances, the potential risks to health and safety, and how to manage these risks.

### Guidance on using this template

This template has been developed for use by Applicants targeting Credit 2.3 Health Impacts Declaration from the SSA Certification Program. Use of the template is mandatory. If existing documentation is already in place in an organisation (for example a hazardous chemicals register), Applicants are encouraged to use this in the submission as well.

When filling out the template Applicants should ensure that all existing and potential chemical and physical health impacts have been identified and addressed. The intent of the declaration is to ensure the safety of all downstream users once the product is ready for use. Applicants are not required to address the fabrication of the product in this credit.

Supporting information should be provided justifying all claims made in the submission. Applicants should avoid using jargon, and all hazards and mitigating actions should be clearly explained in everyday language. Text boxes have been provided to allow for clear and detailed explanations to be provided for all required safeguards. Please note that known hazards must be addressed, even if these have not been included in the SDS (if available).



## General Information

**Applicant Name:** LIGHTHOUSE ENGINEERING PTY LTD

**Targeting Level 2B**  **Targeting Level 3**

**Product Name:** [STRUCTURAL STEEL]

### Description of product:

Lighthouse Engineering offers a range of innovative steel solutions tailored to meet the diverse needs of businesses in Western Australia. Specializing in the fabrication of components and structural steels structures for buildings, roads, bridges, and mining applications, etc. to name a few but not limited too.

Our products are crafted with precision by a skilled team of experienced steel designers, engineers, project managers, welders, fabricators, and steel riggers. Each item is manufactured in our state-of-the-art facility in Wangara, ensuring adherence to strict quality standards. Galvanization and painting activities are outsourced including erection of fabricated structures.

Lighthouse Engineering maintains important quality, environmental, health and safety controls over operations and all other business activities by maintaining a holistic systems and process approach to the realisation of objectives and outcomes.

## Submission Requirements

### Lifecycle phases to be assessed

Please assess and identify physical and chemical hazards of your product in each of the following lifecycle phases in the Physical Health Impacts and Chemical Health Impacts tables below:

- Transport
- Installation
- Use and maintenance
- End of life

### Safety Data Sheet

Is a Safety Data Sheet (SDS) available for the product?

Yes – a copy has been attached to the submission and all hazards and risks have been clearly explained

No – If an SDS cannot be provided Applicants must clearly describe any identified hazards and how these have been addressed.

## Ensure all hazards and risks have been clearly described

**Slip hazards** in the steel fabrication industry pose significant risks to workers and can lead to serious injuries. These hazards often arise from wet or oily surfaces, debris accumulation, and uneven flooring commonly found in fabrication shops. The presence of steel shavings, water from cleaning processes, or lubricants used in machinery can create slippery conditions. Additionally, improper footwear lacking adequate traction can exacerbate these risks. To mitigate slip hazards, it is essential to implement rigorous housekeeping practices, ensure proper drainage, and provide slip-resistant footwear. Regular safety training and awareness programs can further enhance employee vigilance regarding potential slip hazards, ultimately fostering a safer work environment.

**Trip hazards** in the steel fabrication industry are a critical safety concern that can lead to accidents and injuries among workers. These hazards often stem from uneven surfaces, protruding materials, and cluttered workspaces. Common trip hazards include scattered tools, unmarked changes in floor elevation, and loose cables or hoses. Additionally, the presence of fabricated steel components stacked or stored improperly can obstruct pathways. To reduce the risk of trips, it is vital to maintain organized work areas, implement clear walkways, and conduct regular inspections for potential hazards. Providing safety training focused on awareness and proper housekeeping practices can further enhance worker safety and minimize the incidence of trip-related injuries.

**Fall hazards** in the steel fabrication industry represent a significant risk to workers, particularly due to the elevated work environments common in this field. Employees often work at heights while erecting steel structures or using scaffolding, increasing the potential for falls from ladders, platforms, or beams. Contributing factors include inadequate fall protection systems, such as guardrails and safety nets, as well as the improper use of personal protective equipment (PPE) like harnesses. Additionally, environmental conditions such as wet or icy surfaces can further exacerbate fall risks. To mitigate these hazards, it is essential to enforce strict adherence to safety protocols, provide comprehensive training on fall protection measures, and ensure regular inspections of equipment and work sites.

**Material handling** in the steel fabrication industry presents several risks that can lead to injuries and accidents if not properly managed. Workers frequently deal with heavy and bulky steel components, increasing the likelihood of strains, sprains, and crush injuries. The use of equipment such as forklifts and cranes introduce risks related to machinery malfunctions or operator errors, which can result in serious accidents. Additionally, poor organization of materials can create tripping hazards and obstructed pathways, further heightening the risk of falls. Improper lifting techniques and inadequate training in safe handling practices can exacerbate these issues. To mitigate these risks, it is essential to implement comprehensive training programs, enforce the use of personal protective equipment (PPE), and establish clear protocols for material handling.

**Eye injuries** in the steel fabrication industry are a significant hazard due to the presence of flying particles, intense light, and various chemicals. Workers are frequently exposed to sparks, metal shavings, and debris from cutting, grinding, and welding processes, which can cause serious eye injuries or even permanent vision loss. Additionally, the bright arcs and flashes produced during welding can lead to conditions such as arc eye, resulting in painful inflammation. To mitigate these risks, it is crucial for employers to enforce the use of appropriate personal protective equipment (PPE), such as safety goggles and face shields, and to provide comprehensive training on safe practices. Regular safety audits and a culture of awareness can further enhance protection against these eye hazards in the workplace.

## Physical Health Impacts

Disclose all identified physical health impacts for the relevant lifecycle phases, an example is provided below:

Health Impact Identified	Method of Identification	Relevant Safeguards	Transport	Installation	Use and Maintenance	End of life
<b>Example:</b> <i>Body cuts from Sharp edges of steel</i>	<i>Onsite Risk Assessment</i>	<i>All staff members are provided with training and PPE Steel is covered with protective covering.</i>		✓	✓	
<b>Slips</b>	SWOP	All staff receive training and PPE.	✓	✓		
<b>Trips</b>	SWOP	All staff receive training and PPE.	✓	✓		
<b>Falls</b>	SWOP	All staff receive training and PPE.	✓	✓		
<b>Material handling</b>	SWOP	All staff receive training and PPE.	✓	✓		
<b>Risk of Eye Injury</b>	SWOP	All staff receive training and PPE.	✓	✓		

### Additional information:

**Crush hazards** in the steel fabrication industry pose significant risks to workers due to the heavy machinery and large materials involved in the processes. Equipment such as cranes, forklifts, and presses can create dangerous pinch points where workers may become trapped or crushed. Additionally, the handling of large steel components—often heavy—can lead to severe injuries if proper lifting techniques and safety protocols are not followed. To reduce the likelihood of crush injuries, it is essential to implement rigorous training programs that emphasize safe operation of machinery and awareness of surroundings.

**Welding and cutting hazards** in the steel fabrication industry present serious risks, including exposure to harmful fumes, intense heat, and potential fire hazards. Additionally, workers are exposed to harmful ultraviolet (UV) and infrared (IR) radiation during welding, which can cause skin burns and eye injuries, such as arc eye. Fumes generated during welding can contain toxic metals and gases, posing respiratory health risks. To mitigate these hazards, it is essential to implement strict safety protocols, including proper ventilation, the use of personal protective equipment (PPE) like helmets and gloves, and regular safety training to ensure that workers are aware of the risks and know how to protect themselves effectively.

**Electrical hazards** in the steel fabrication industry are a critical concern due to the widespread use of powered tools and heavy machinery. Workers often face risks from exposed wiring, faulty equipment, and improper grounding, which can lead to electric shocks, burns, or electrocution. Additionally, the presence of water or metal dust in the environment can increase the likelihood of electrical accidents. It is essential for employers to ensure that all electrical equipment is regularly inspected and maintained, and that workers receive comprehensive training on safe electrical practices.

**Weather conditions** significantly impact operations in the steel fabrication industry, influencing both productivity and worker safety. Extreme temperatures—whether excessive heat or cold—can affect the performance of materials and machinery, leading to potential delays in production. For instance, high heat can cause metal expansion, while cold weather may lead to brittleness in certain alloys. Additionally, inclement weather, such as rain or snow, can create slippery surfaces, increasing the risk of accidents and injuries on-site. To counter these effects, it is essential to implement weather-related safety protocols, provide appropriate protective gear, and adjust work schedules as necessary to ensure a safe and efficient working environment.

### Supporting documentation

Please list documentation to support the above statements and upload the evidence in your audit record.

Supporting Documentation <i>Name of document and location in submission</i>	Reference <i>Page no. or section of supporting document</i>	Description of Evidence
<b>Safety Operating Procedures: (LHE-SOP-001, LHE-SOP-002, LHE-SOP-003, LHE-SOP-004, LHE-SOP-005, LHE-SOP-006, LHE-SOP-007, LHE-SOP-008, LHE-SOP-009, LHE-SOP-010, LHE-SOP-011, LHE-SOP-013, LHE-SOP-014, LHE-SOP-017, LHE-SOP-018, LHE-SOP-019, LHE-SOP-020, LHE-SOP-021, LHE-SOP-022, LHE-SOP-023, LHE-SOP-024).</b>	All Pages	OSHE-006 Risk Register, SOP Training Attendance Sheet.

### Chemical Health Impacts

Disclose all identified chemical health impacts for the relevant lifecycle phases:

Health Impact Identified	Method Of Identification	Relevant Safeguards	Transport	Installation	Use and Maintenance	End of life
<b>Respiratory hazard from chemical (gases).</b>	SDS	Adequate ventilation and appropriate PPE (masks) are required for anyone handling the product.		✓	✓	
<b>skin irritation hazard</b>	SDS	appropriate PPE (masks) are required for anyone handling the product		✓	✓	

**Additional information:**

Not Applicable

**Supporting documentation**

Please list documentation to support the above statements and upload the evidence in your audit record.

Supporting Documentation <i>Name of document and location in submission.</i>	Reference <i>Page no. or section of supporting document.</i>	Description of Evidence
<b>1. LHE-REG-025 Hazardous Substance Register</b>	Pages 1-1	Hazardous Substance Register
<b>2. Safety Data Sheet for Products</b>		Safety Data Sheets

**Version control**

Version	Document Name	Date	Changes	Author	Reviewer
1	Health Impacts Declaration	13/12/22	For use	KJ	JB
1.1	Health Impacts Declaration	17/11/23	Allowed permissions to edit all relevant areas	JB	nil
1.2	Health Impacts Declaration	22/11/23	Resized text boxes to fit text	JB	nil
1.3	Health Impacts Declaration	01/08/24	Revised permissions to edit relevant areas & formatting amendments	MC	nil