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: Beenleigh Steel Fabrications

Targeting Level 2B ☐ **Targeting Level 3** ☒

Product Name: Fabricated Structural Steel

Description of product: All fabricated structural steel.

Steel fabrication involves the use of various chemicals, including cleaning agents, solvents, acids, and coatings, which help in the production, processing, and protection of steel members. These chemicals aid in the removal of impurities, corrosion resistance, and enhance the structural integrity of steel components. Steel profiles relevant to this declaration include: I-Beams, H-Beams, C-Channels, Angle (L-Shape), Tee (T-Beam), Z-Shapes, Hollow Structural Sections (in square, rectangular, and circular forms), Rails, Pipes, Plates, Bars, Rods, and Wire.

Submission Requirements

The lifecycle phases to be addressed in the credit are:

Please ensure you nominate the relevant lifecycle phase for each identified hazard in the Declaration.

- 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

II. Hazards and risks related to individual chemicals

Acids (e.g., hydrochloric, sulfuric, and phosphoric acids)

Hazards: corrosive, toxic, and irritant

Risks: skin, eye, and respiratory irritation, chemical burns, and long-term exposure can lead to respiratory issues

Solvents (e.g., acetone, xylene, and toluene)

Hazards: flammable, toxic, and irritant

Risks: dizziness, headaches, skin and eye irritation, and long-term exposure can lead to liver and kidney damage

Cleaning agents (e.g., degreasers, detergents, and alkaline solutions)

Hazards: irritant, corrosive, and toxic

Risks: skin, eye, and respiratory irritation, and long-term exposure can lead to dermatitis and respiratory issues

Coatings (e.g., zinc, epoxy, and polyurethane)

Hazards: irritant, toxic, and flammable

Risks: skin, eye, and respiratory irritation, and long-term exposure can lead to sensitization and respiratory issues

III. Hazard mitigation measures

Personal Protective Equipment (PPE): gloves, goggles, respirators, and protective clothing

Ventilation: proper ventilation systems to reduce exposure to chemical fumes and vapours

Storage: proper storage of chemicals, following Material Safety Data Sheet (MSDS) guidelines

Training: regular training for workers on the handling, storage, and disposal of chemicals

Spill management: having spill kits and procedures in place to manage chemical spills

Physical health impacts

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

Health Impact Identified	Method Of Identification	Relevant Safeguards	Transport	Installation	Use and Maintenance	End of life
Injury from handling heavy materials	Visual inspection and incident reports	Safe handling training, use of handling aids		✓	✓	✓
Noise-induced hearing loss from transport or installation machinery	Noise monitoring	Use of ear protection, regular machine maintenance	✓	✓		
Injury from falling materials during transport or installation	Visual inspection and incident reports	Safe handling training, use of helmets	✓	✓		
Injuries from sharp edges	Visual inspection and incident reports	Use of gloves, safe handling training	✓	✓		✓

Additional Information: The physical risks associated with steel products mainly revolve around the handling of heavy materials, exposure to high noise levels from machinery during transportation and installation, potential injuries from falling materials, and possible cuts from sharp edges. These risks can be mitigated by adhering to safe handling procedures and using appropriate personal protective equipment.

Additional Information:

Supporting documentation

Please provide documentation to support the above statements.

Supporting Documentation *Name of document and location in submission*	**Reference** *Page no. or section of supporting document*	**Description of Evidence**
Safe Handling and Storage Guidelines	Material Handling Procedures	This document outlines the standard operating procedures for safe handling and storage of materials. It details the methods for safely lifting and transporting heavy objects, as well as guidance for handling sharp edges.
Noise Monitoring Reports	Noise Exposure Levels	These reports contain the results of regular noise monitoring. They include data on noise levels around transportation and installation machinery and identify areas or times of heightened noise exposure.
Incident Reports	Incident Details and Analysis	Incident reports record details of any safety incidents or near misses that occur. They provide insights into how incidents occurred and suggest improvements to prevent similar occurrences in the future.
Personal Protective Equipment (PPE) Guidelines	PPE Selection and Use	This guide details the different types of PPE available, their intended uses, and instructions for proper usage. It explains the importance of PPE in reducing physical health risks.

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**
Inhalation of residual chemicals	Chemical residue testing	Adequate cleaning and sealing before transportation	✓			
Inhalation of fumes/particulates during installation	Air quality monitoring	Use of masks/respirators, proper ventilation		✓		
Exposure to off-gassing VOCs	Air quality monitoring	Use of low-VOC or VOC-free coatings			✓	
Inhalation of dust/particulates during demolition	Air quality monitoring	Use of masks/respirators, wet demolition methods				✓
Skin irritation from residual chemicals	Incident reports, medical examination	Adequate cleaning and sealing before transportation, use of gloves	✓	✓	✓	✓
Inhalation of residual chemicals	Chemical residue testing	Adequate cleaning and sealing before transportation	✓			

Additional Information:

Additional Information: The chemical health risks associated with steel products primarily occur during the transportation, installation, use, and end-of-life phases. They can stem from residual chemicals left from the fabrication process, fumes and particulates released during installation, off-gassing of volatile organic compounds (VOCs) from coatings during use, and dust and particulates released during demolition. Furthermore, direct skin contact with residual chemicals can cause irritation. These risks can be mitigated by cleaning and sealing products before transportation, using appropriate PPE and ventilation during installation and demolition, and opting for low-VOC or VOC-free coatings.

Supporting documentation

Please provide documentation to support the above statements.

Supporting Documentation *Name of document and location in submission.*	**Reference** *Page no. or section of supporting document.*	**Description of Evidence**
Chemical Residue Testing Reports	Residue Quantification and Analysis	These reports contain the results of testing for chemical residues on steel products. They provide quantification of any detected residues and interpret these findings in terms of potential health impacts.
Air Quality Monitoring Reports	Airborne Chemical Concentrations	These reports present data on the concentrations of chemicals in the air during different lifecycle phases, such as during installation or demolition.
Material Safety Data Sheets (MSDS) for all used chemicals	Health Hazard Information	MSDS provide comprehensive information on chemicals used, including potential health hazards, recommended PPE, and first aid measures.
Guidelines on the Safe Use of Coatings	Safety Measures and Precautions	This document provides guidance on safely applying and handling coatings. It includes information on potential hazards, necessary PPE, and safe disposal methods.

Dust Control Guidelines	Dust Suppression Methods	This document provides guidelines on how to suppress dust during demolition, including methods like wet demolition, to reduce airborne particulates.
Incident Reports and Medical Records	Incident Analysis and Medical Findings	These records detail any incidents related to chemical exposures, including the circumstances of exposure and the medical outcomes. They can inform understanding of chemical hazards and help in formulating prevention strategies.

Version control

Version	Document Name	Date	Changes	Author	Reviewer
1	Health Impacts Declaration	13/12/22	For use	KJ	JB