

Agreement

On Cement and Concrete Products Common Criteria

Between Thailand Green Label Scheme and

Singapore Green Labelling Scheme

Thailand Environment Institute (TEI) and Singapore Environment Council (SEC),

BASED ON the “Mutual Recognition Agreement Between Thailand Green Label Scheme (TGL) and Singapore Green Labelling Scheme (hereinafter “Basic Agreement”)” with the “Rules of Mutual Recognition Procedure (hereinafter “Rules”)” attached to the Basic Agreement signed on 19 May 2025.

RECOGNIZING the substances as set forth below;

1. TEI and SEC agree on Common Criteria for Cement and Concrete Products specified in the Annex to this agreement.
 - Singapore Green Labelling Scheme (SGLS) Category 22 Cement and Concrete Products
 - Thailand Green Label (TGL)- 99-R2-25 Cement and Cement Products
 - Thailand Green Label (TGL)-126-24 Concrete Pipe
 - Thailand Green Label (TGL)-130-24 Precast Prestressed Concrete Floor Slabs
2. The Annex is listed in the “**1.0 Target product category**” of the Rules.
3. This Agreement follows the certification procedure and the operation rule described in the Rules.

This Agreement comes in effect on the date of signing by both parties.

SIGNED by for and on behalf of
Thailand Environment Institute



Mr. Wijarn Simachaya, Ph.D.
President

14 Oct, 2025

SIGNED by for and on behalf of
Singapore Environment Council



Mr. Cheang Kok Chung
Executive Director

14 Oct, 2025

WITNESSED by for and on behalf of
Thailand Environment Institute



Ms. Chuttree Phurat, Ph.D.
Director of Green Label and
Environmental Label Program

14 Oct, 2025

WITNESSED by for and on behalf of
Singapore Environment Council



Ms. Isabella Huang-Loh
Chairman

14 Oct, 2025

ANNEX I

Bipartite Common Criteria on Cement Products

(*) Corresponding standard of each program as follows:

- Thailand Green Label (TGL)-99-R2-25 Cement and Cement Products
- Singapore Green Labelling Scheme (SGLS) Category 22 Cement and Concrete Products

No.	Element	Criteria Items of Standard (*)		Remarks
		TGL-99-R2-25	SGLS 22 v7.1	
1	Extraction of Raw Materials	Environmental Impact Assessment (EIA); National Environmental Quality Promotion and Conservation Act B.E. 2535	Environmental Protection and Management Act (EPMA)	Common criteria
2	Social Responsibility	Occupational health and safety management systems according to ISO 9001, 14001, and 45001	Occupational health and safety management systems according to ISO 9001, 14001, and 45001	Common criteria
3	Use of Alternative Raw Materials	At least 10%	At least 10%	Common criteria
4	Energy management	Implement Energy efficiency management policies and procedures	Use of alternative fuels for kiln/furnace	Common criteria only for TGL→SGLS applied
5	Control of Air Pollutants	Ministry of Industry on Ventilation Value from Cement Factories, B.E. 2549 CO < 600 mg/Nm ³ NO _x < 800 mg/Nm ³ SO ₂ < 500 mg/Nm ³ (for Grey cement), < 80 mg/Nm ³ (for White cement) PM < 50 mg/Nm ³	Environmental Protection and Management (Air Impurities) Regulations (No. S 595/2000) CO < 600 mg/Nm ³ NO _x < 700 mg/Nm ³ SO ₂ < 500 mg/Nm ³ PM < 100 mg/Nm ³ (Compliance with National Regulations per ISO 14001)	Common criteria Only CO and SO ₂ (for Grey cement), NO _x common limit for SGLS →TGL applied SO ₂ (for White cement), PM common limit for TGL→SGLS applied Refer test method to US EPA
6	Control of Water Pollutants	Wastewater Quality Specification B.E 2560	NEA's Allowable Limits for Trade Effluent Discharge to Watercourse or Controlled Watercourse, Environmental Protection and Management Act 1999	Common criteria Only Arsenic, Hexavalent chromium, Lead, and Selenium Cadmium and Mercury common limit for SGLS →TGL applied

		<p>Arsenic < 0.01 ppm Cadmium < 0.01 ppm Hexavalent chromium < 0.05 ppm Lead < 0.1 ppm Mercury < 0.005 ppm Selenium < 0.01 ppm</p>	<p>Arsenic < 0.01 ppm Cadmium < 0.003 ppm Hexavalent chromium < 0.05 ppm Lead < 0.1 ppm Mercury < 0.001 ppm Selenium < 0.01 ppm (Compliance with National Regulations per ISO 14001)</p>	<p>Refer test method to AWWA method 3120B</p>
7	Control of Waste	<p>Waste management policies and procedure comply ISO 14001</p>	<p>Waste management policies and procedure comply ISO 14001</p>	<p>Common criteria</p>
8	GHG reduction and Carbon Footprint product	<ul style="list-style-type: none"> ● Implement GHG reduction measure ● Limit CO2 emission by product type 	<p>NA</p>	<p>Not Common criteria</p>
9	Hazardous Substances	<p>Concentration of heavy metals from Toxicity Characteristics Leaching Procedure (TCLP)</p> <p>Arsenic <2 mg/L Cadmium <1 mg/L Lead <2 mg/L Mercury <0.2 mg/L Hexavalent chromium <2 mg/L</p> <p>Selenium <1 mg/L</p>	<p>Concentration of heavy metals from Toxicity Characteristics Leaching Procedure (TCLP)</p> <p>Arsenic <5 mg/L Cadmium <1 mg/L Lead <5 mg/L Mercury <0.2 mg/L Hexavalent chromium <5 mg/L</p> <p>Selenium <1 mg/L</p>	<p>Common criteria Only Cadmium, Mercury, and Selenium</p> <p>Arsenic, Hexavalent chromium, and Lead, common limit for TGL→SGLS applied</p> <p>Refer test method to US EPA, Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Test Methods 1311</p>
10	Packaging	<p>Instructions for managing the packaging after use</p>	<p>Instructions for managing the packaging after use</p>	<p>Common criteria</p>
11	Packaging	<p>NA</p>	<p>Primary packaging paperboard ≥70% recycled content</p>	<p>Not Common criteria</p>
12	Packaging	<p>Limit contamination from heavy metal</p>	<p>NA</p>	<p>Not Common criteria</p>

ANNEX II

Bipartite Common Criteria on Concrete Products

(*) Corresponding standard of each program as follows:

- Thailand Green Label (TGL)- TGL-126-24 Concrete Pipe
(Refer cement used for concrete pipe shall comply with TGL-99-R2-25)
- Singapore Green Labelling Scheme (SGLS): Category 22 Cement and Concrete Products

No.	Element	Criteria Items of Standard (*)		Remarks
		TGL-126-24	SGLS 22 v7.1	
1	Extraction of Raw Materials	Environmental Impact Assessment (EIA); National Environmental Quality Promotion and Conservation Act B.E. 2535 (refer to TGL-99)	Environmental Protection and Management Act (EPMA)	Common criteria
2	Social Responsibility	Occupational health and safety management systems according to ISO 9001, 14001, and 45001 (refer to TGL-99)	Occupational health and safety management systems according to ISO 9001, 14001, and 45001	Common criteria
3	Use of Alternative Raw Materials	at least 3%	at least 10%	Common criteria only for SGLS→TGL applied
4	Energy management	Implement Energy efficiency management policies and procedures	Use of alternative fuels for kiln/furnace	Common criteria only for TGL→SGLS applied
5	Control of Air Pollutants	Ministry of Industry on Ventilation Value from Cement Factories, B.E. 2549	Environmental Protection and Management (Air Impurities) Regulations (No. S 595/2000) (Compliance with National Regulations per ISO 14001)	Common criteria
6	Control of Water Pollutants	Wastewater Quality Specification B.E 2560	Compliance with National Regulations per ISO 14001	Common criteria
7	Control of Waste	Waste management policies and procedure comply ISO 14001	Waste management policies and procedure comply ISO 14001	Common criteria

8	Hazardous Substances	Concentration of heavy metals from Toxicity Characteristics Leaching Procedure (TCLP) (refer to TGL-99)	Concentration of heavy metals from Toxicity Characteristics Leaching Procedure (TCLP)	Common criteria
9	Hazardous Substances	<ul style="list-style-type: none"> • Not containing of • Asbestos • Phosphogypsum • Formaldehyde • Pentachlorophenol • Carcinogenic substances listed in IARC Group 2A and Group 2B • Cat 44 of Hazardous Substance Act, B.E. 2535 	NA	Not Common criteria
10	Packaging	NA	<ul style="list-style-type: none"> • Instructions for managing the packaging after use • Primary packaging paperboard $\geq 70\%$ recycled content 	Not Common criteria

ANNEX III

Bipartite Common Criteria on Concrete Products

(*) Corresponding standard of each program as follows:

- Thailand Green Label (TGL)- 130-24 Precast Prestressed Concrete Floor Slabs
- Singapore Green Labelling Scheme (SGLS): Category 22 Cement and Concrete Products

No.	Element	Criteria Items of Standard (*)		Remarks
		TGL-130-24	SGLS 22 v7.1	
1	Extraction of Raw Materials	NA	Environmental Protection and Management Act (EPMA)	Common criteria
2	Social Responsibility	Occupational health and safety management systems according to ISO 9001 and 14001	Occupational health and safety management systems according to ISO 9001, 14001, and 45001	Common criteria for ISO 9001 and 14001 only
3	Use of Alternative Raw Materials	NA	at least 10%	Not Common criteria
4	Energy management	NA	Use of alternative fuels for kiln/furnace	Not Common criteria
5	Control of Air Pollutants	Ministry of Industry on Ventilation Value from Cement Factories, B.E. 2549	Environmental Protection and Management (Air Impurities) Regulations (No. S 595/2000) (Compliance with National Regulations per ISO 14001)	Common criteria
6	Control of Water Pollutants	Wastewater Quality Specification B.E 2560	Compliance with National Regulations per ISO 14001	Common criteria
7	Control of Waste	Waste management policies and procedure comply ISO 14001	Waste management policies and procedure comply ISO 14001	Common criteria

8	GHG reduction	Reduce by 2% of base year not longer than 3 years or lower than the benchmark value for products of the same category	NA	Not Common criteria
9	Hazardous Substances	Concentration of heavy metals from Toxicity refer to US EPA SW 846	Concentration of heavy metals from Toxicity Characteristics Leaching Procedure (TCLP)	Common criteria
10	Packaging	NA	<ul style="list-style-type: none"> • Instructions for managing the packaging after use • Primary packaging paperboard $\geq 70\%$ recycled content 	Not Common criteria
11	End of life Management	Guide or Manual for demolition	NA	Not Common criteria