



## VERIFICATION OPINION DECLARATION GREENHOUSE GAS EMISSIONS

To: Stakeholders of Greif, Inc.

APEX Companies LLC, (Apex) was engaged to conduct an independent verification of the greenhouse gas (GHG) emissions reported by Greif, Inc. (Greif) for the period stated below. This Verification Opinion Declaration applies to the related information included within the scope of work described below.

The determination of the GHG emissions is the sole responsibility of Greif. Greif is responsible for the preparation and fair presentation of the GHG emissions statement in accordance with the criteria. Apex's sole responsibility was to provide independent verification opinion on the accuracy of the GHG emissions reported, and on the underlying systems and processes used to collect, analyze and review the information. Apex is responsible for expressing an opinion on the GHG statement based on the verification. Verification activities applied in a limited level of assurance verification are less extensive in nature, timing and extent than in a reasonable level of assurance verification.

### **Boundaries of the reporting company GHG emissions covered by the verification:**

- Operational Control
- Worldwide, with the exception of facilities in India
- Exclusions from the scope of Greif's GHG emissions assertion are:  
Scope 1 fugitive emissions from refrigerants; Scope 1 emissions from leased vehicles outside the United States; Scope 1 emissions from diesel fuel and propane/LPG combustion in forklifts and for non-manufacturing uses outside the United States; and, Scope 1 and Scope 2 emissions from warehouse locations.

**Types of GHGs:** CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>

### **GHG Emissions Statement:**

- **Scope 1:** 692,900 metric tons of CO<sub>2</sub> equivalent
- **Scope 2 (Location-Based):** 589,500 metric tons of CO<sub>2</sub> equivalent
- **Scope 2 (Market-Based):** 596,900 metric tons of CO<sub>2</sub> equivalent
- **Scope 3:**
  - Category 1, Purchased Goods and Services – 2,323,000 metric tons of CO<sub>2</sub> equivalent
  - Category 2, Capital Goods – 83,000 metric tons of CO<sub>2</sub> equivalent
  - Category 3, Fuel and Energy Related Activities – 291,000 metric tons of CO<sub>2</sub> equivalent
  - Category 4, Upstream Transportation and Distribution – 253,000 metric tons of CO<sub>2</sub> equivalent
  - Category 5, Waste Generated in Operations – 153,000 metric tons of CO<sub>2</sub> equivalent
  - Category 6, Business Travel – 3,000 metric tons of CO<sub>2</sub> equivalent
  - Category 7, Employee Commuting – 26,000 metric tons of CO<sub>2</sub> equivalent
  - Category 12, End-of-Life Treatment of Sold Products – 1,016,000 metric tons of CO<sub>2</sub> equivalent

Data and information supporting the Scope 1 and Scope 2 GHG emissions statement were in most cases historical in nature, but in some cases estimated.

Data and information supporting the Scope 3 GHG emissions statement were in most cases estimated rather than historical in nature.

**Period covered by GHG emissions verification:**

- Fiscal Year 2020: November 1, 2019 to October 31, 2020

**Criteria against which verification conducted:**

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard, Revised Edition (Scope 1 and 2) and the GHG Protocol Scope 2 Guidance, an amendment to the GHG Protocol Corporate Standard
- WRI/WBCSD Corporate Value Chain (Scope 3) Accounting and Reporting Standard

**Reference Standard:**

- ISO 14064-3: Second edition 2019-04: *Greenhouse gases -- Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements*

**Level of Assurance and Qualifications:**

- Limited
- This verification used a materiality threshold of  $\pm 5\%$  for aggregate errors in sampled data for each of the above indicators.
- Qualifications: Scope 1 emissions for some sites may be incomplete due to not including all types of fuel being consumed. Scope 2 emissions for some sites may be incomplete due to not including purchased electricity for non-manufacturing uses.

**GHG Verification Methodology:**

Evidence-gathering procedures included but were not limited to:

- Interviews with relevant personnel of Greif and their consultant;
- Review of documentary evidence produced by Greif and their consultant;
- Review of Greif data and information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- Audit of sample of data used by Greif to determine GHG emissions.

**Verification Opinion:**

Based on the process and procedures conducted, there is no evidence that the GHG emissions statement shown above:

- is not materially correct and is not a fair representation of the GHG emissions data and information; and
- has not been prepared in accordance with the WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard (**Scope 1 and 2**), and WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain Accounting and Reporting Standard (**Scope 3**).

It is our opinion that Greif has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of these GHG emissions for the stated period and boundaries.



**Statement of independence, impartiality and competence**

Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

No member of the verification team has a business relationship with Greif, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the verification of greenhouse gas emissions data.

**Attestation:**

A handwritten signature in blue ink, appearing to read 'Mary E. Armstrong-Friberg'.

Mary E. Armstrong-Friberg, Lead Verifier  
Principal Consultant  
APEX Companies, LLC  
Cleveland, Ohio

A handwritten signature in blue ink, appearing to read 'David Reilly'.

David Reilly, Technical Reviewer  
Principal Consultant  
APEX Companies, LLC  
Santa Ana, California

April 5, 2021

*This verification opinion declaration, including the opinion expressed herein, is provided to Greif, Inc. and is solely for the benefit of Greif, Inc. in accordance with the terms of our agreement. We consent to the release of this statement by you to CDP in order to satisfy the terms of CDP disclosure requirements but without accepting or assuming any responsibility or liability on our part to CDP or to any other party who may have access to this statement.*