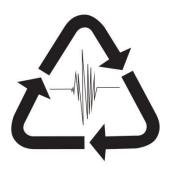


# ENVIRONMENT MANAGEMENT POLICY March 2023

3/28 Tanya St, Bromley, Christchurch Tel. 03 384 4302 www.southerngeophysical.com

# **TABLE OF CONTENTS**

Section	Title	
1.0	Commitment to Environmental Management	
	1.1 Environmental Management Policy	
2.0	General Environmental Policies	
	2.1 Paper	
	2.2 Energy and Water	
	2.3 Purchasing	
	2.4 Transportation	
	2.5 Maintenance and Cleaning	
	2.6 Monitoring and Improvement	
	2.7 Culture	
3.0	Specific Environmental Policies	
	3.1 Non-intrusive Methods	
	3.2 Intrusive Methods	



#### 1.0 COMMITMENT TO ENVIRONMENTAL MANAGEMENT

# 1.1 Environmental Management Policy

Southern Geophysical Ltd. (SGL) recognises that it has a responsibility to the environment beyond legal and regulatory requirements. SGL is committed to reducing environmental impacts and continually improving environmental performance as an integral part of our business strategy and operating methods, with regular review points. SGL will encourage customers, suppliers and other stakeholders to do the same.

#### This is achieved by

- In so far as work is conducted within New Zealand boundaries, SGL will comply with the Resource Management Act 1991, and use the Resource Management Act as a primary source for regulations and laws relating to environmental management in New Zealand.
- 2. Identifying and complying with any other relevant regulatory requirements and environmental laws, in addition to voluntary commitments to which SGL subscribes.
- 3. Eliminate, or reduce to the maximum practical extent, the release of contaminants into the environment, first through pollution prevention (material substitution and source reduction), then recycling, and finally through treatment and control technologies.
- 4. Continually reducing and assessing environmental impacts.
- 5. Effectively communicating with employees, suppliers, regulators, and clients, as well as the surrounding community, regarding EMP performance.
- 6. Conduct regular review of the Environmental Management Policy (EMP) and demonstrate continuous improvement in environmental performance.

Signed:	Date:
Position:	

#### 2.0 GENERAL ENVIRONMENTAL POLICIES

# 2.1 Paper

- We will minimise the use of paper in the office.
- We will reduce packaging as much as possible.
- We will seek to buy recycled and recyclable paper products.
- We will reuse and recycle all paper where possible.

# 2.2 **Energy and Water**

- We will seek to reduce the amount of energy used as much as possible.
- Lights and electrical equipment will be switched off when not in use.
- Heating will be adjusted with energy consumption in mind.
- The energy consumption and efficiency of new products will be taken into account when purchasing.

# 2.3 **Purchasing**

- We will evaluate if the need can be met in another way.
- We will evaluate if renting or sharing is an option before purchasing equipment.
- We will evaluate the environmental impact of any new products we intend to purchase.
- We will favour more environmentally friendly and efficient products wherever possible.
- We will reuse and recycle material where possible.

# 2.4 Transportation

- We will reduce any unnecessary travel.
- We will promote the use of travel alternatives and efficiency of travel.
- We will use established tracks and paths wherever possible when travelling offroad, and ensure drivers are appropriately trained to minimize the environmental impacts of offroad driving.
- We will make additional efforts to accommodate the needs of employees using public transport or bicycles.

Page **4** of **6** 

#### 2.5 Maintenance and Cleaning

- Cleaning materials used will be as environmentally friendly as possible.
- Materials used in office refurbishment will be as environmentally friendly as possible.
- We will only use licensed and appropriate organisations to dispose of waste, including batteries and chemicals.

# 2.6 Monitoring and Improvement

- We will comply with and exceed all relevant regulatory requirements.
- We will continually improve and monitor environmental performance.
- We will continually improve and reduce environmental impacts.
- We will incorporate environmental factors into business decisions.

#### 2.7 Culture

- We will involve staff in the implementation of this policy, for greater commitment and improved performance.
- We will review this policy annually, in consultation with staff and other stakeholders where necessary.
- We will provide staff with relevant environmental training.
- We will work with suppliers, contractors and sub-contractors to improve their environmental performance.
- We will use local labour and materials where available.

#### 3.0 SPECIFIC ENVIRONMENTAL POLICIES

#### 3.1 Non-intrusive methods

Most geophysical operations conducted by SGL are non-intrusive. Environmental impacts of these systems are generally caused by towing equipment across the ground, striking the ground with hammers or weights, planting sensors in the ground, or using boreholes or excavations that have been installed by other parties, and by the use of non-renewable fossil fuels to operate vehicles.

Systems that fall under this category include ground penetrating radar (GPR), electromagnetic systems, multi-channel analysis of surface waves (MASW), seismic refraction and reflection, and resistivity systems.

Page **5** of **6** 

The environmental management of non-intrusive methods involves discussion of environmental impacts with the client and stakeholders prior to conducting survey works, and remediation of any adverse impacts if possible. Where systems emit noise from machinery or striking plates with weights, SGL will work with clients and local authorities to meet prescribed noise emission standards. Any waste material produced by survey works will be removed by SGL staff prior to the completion of the project.

#### 3.2 Intrusive methods

Intrusive methods generally fall under the categories of manual and mechanical. Manual methods involve excavations of small pits or holes, less than 1.5 m depth, for the purposes of planting sensors, geological correlation, or installation of other equipment. Environmental management procedures involve returning the site as close to its pre-survey condition as possible. This will be undertaken by collaborating and working with clients and other stakeholders.

The only mechanical intrusive method used by SGL is the hydraulic auger rig (HAR). The HAR is capable of drilling to 10 m depth. The environmental management procedures for the HAR are as follows –

- All holes are infilled with arisings where appropriate. If the arisings are believed to be contaminated, an appropriate plan will be arranged with the client for an alternate method of infilling and disposal of the contaminated material.
- Take appropriate measures to ensure that no waste material enters stormwater systems or natural water systems.
- If a spill occurs or contaminated material is encountered, cease drilling and follow procedures. Contact the local authority where appropriate.

Page **6** of **6**