

ENFORCEABLE UNDERTAKING

Part 4, Health and Safety at Work Act 2015

The commitments in this undertaking are offered to the regulator by:

Person/entity name: Earthcare Environmental Limited (**EARTHCARE**)

(the person)

This enforceable undertaking is given on the day and date that it is accepted and signed by the regulator. The undertaking and its enforceable terms will operate as a legally binding commitment on the part of the person from the date it is given.

Contravention means an alleged contravention or an acknowledged contravention.

HSMS means a Health and Safety Management System.

Person means an individual who or a legal entity which has a duty under the Health and Safety at Work Act 2015 and can give a written undertaking. The term includes individuals, each partner in a partnership, corporations, trustees of trusts, and crown organisations.

Regulator means WorkSafe New Zealand, Maritime New Zealand or the Civil Aviation Authority.

Safety legislation means the Health and Safety at Work Act 2015 and associated regulations.

Enforceable undertaking means a written undertaking given under Part 4 of the Health and Safety at Work Act 2015 by a person in connection with a matter relating to a contravention by the person of the Health and Safety at Work Act 2015 and includes all of the contents of that document including the general information, general and enforceable terms.

WorkSafe respects your privacy and is committed to protecting personal information.

The information provided in this document is for the purpose of an undertaking given to the regulator under Part 4 of the Health and Safety at Work Act 2015. This information will be managed within the requirements of the Privacy Act 1993.

WorkSafe will publish the undertaking in full on its website. WorkSafe may be required to disclose personal information to other agencies such as the New Zealand Police in accordance with enforcement activities that may be conducted as part of an investigation.

SECTION 1: GENERAL INFORMATION

Details of the person giving the undertaking

Nominated person: (point of contact for WorkSafe communications)

Mike Jones, Managing Director

Street address:

5 Zelanian Drive, East Tamaki, Auckland

Mailing address:

PO Box 259 091, Botany, Manukau 2163

Work phone: 021 828 838

Email: mike@earthcare.co.nz

Type of legal entity: Limited company

Industry: Waste Management

Workers: (enternumbers) Full time: 16

Part time: 11

Casual/ Contractors 13

Products and services: Waste recycling and refuse collection and processing for green waste, food waste and household refuse. Refuse services cover from kerbside and on-property collections for private consumers, businesses and councils, through to running materials recycling facilities (MRFs) and clean fill operations.

Comments:

Detail the contravention

It is alleged that Earthcare, being a PCBU, failed to ensure, so far as was reasonably practicable, the health and safety of workers who worked for the PCBU, while at work in the business or undertaking, namely while operating a Sinobaler Auto-tie Horizontal Baler, an automatic waste cardboard baler, and that failure exposed the workers to a risk of death or serious injury, arising from exposure to an entanglement hazard.

Detail the events surrounding the contravention

Earthcare operates a 'MRF' (Material Recycling Facility) in Masterton under contract for the Masterton District Council. Part of the operation of the MRF receives paper and cardboard for recycling. The recyclable material is loaded onto a conveyor and fed into the hopper of the Sinobaler. The Sinobaler is a machine that automates the process of:

- Compressing the recyclable material into a bale
- Tying the bale with wires feeding from a roll and twisting the wires together to create a secure bale of recyclable material
- Pushing bales along the conveyor to be moved, stacked and stored for transport.

The Sinobaler was purchased new in 2012 from a New Zealand importer. Earthcare paid for a turnkey solution which included paying additional costs and expenses for three representatives (an Engineer, trainer and translator) from Sinobaler to install, commission and train Earthcare representatives in the setup, operation and routine maintenance of the automated equipment. The Sinobaler carries the CE mark for conformity of machinery safety.

During the routine operation of the Sinobaler, workers only interact with the loading of the recyclable material at the start and the stacking and storage of the recyclable material once baled. If the bale does not have sufficient wires twisted, the wires are removed and the bale is broken and baled again.

On the morning of the 13 July 2016, the injured party was working in the Material Recycling Facility at the recycling centre. He was operating the Sinobaler and was wearing gloves because his hands were cold.

At about 7.45am the injured party noticed that a wire on a bale was not picked up by one of the twisters on the Sinobaler. He tried to 'flick' it back into place with his hand and his glove became entangled with one of the rotating cams which hooks and twists the wires. This caused his right hand to be drawn into the machine. As a result of this the injured party lost his ring finger and little finger and sustained de-gloving on the back of his right hand.

The baler was purchased on the understanding and the expectation that it was safe for all workers to operate. Earthcare genuinely believed that the 'CE' mark for conformity of machinery safety for which the Sinobaler was built and designed by meant the machine was compliant to machinery safety standards at the time of installation. With the post incident information we have to hand, we understand that it would have been possible to improve existing guards or fit new guards in some areas:

Earthcare worked with the local supplier and paid for the manufacturer to travel to New Zealand to commission the baler and provide training to our team. The manufacturer provided extensive training on the safety aspects and areas of the machine that could cause harm but we have found that the information, instruction and training provided was not enough as there were areas the supplier and manufacturer had not covered.

Earthcare acknowledges and accepts that an independent assessment by a suitably qualified and competent machinery safety expert would, most likely, have identified the need for the existing guarding to be improved.

The underlying cause of the accident was a gap in the guard which allowed a worker's hand to reach an entanglement hazard. A reduction in the gap size would have eliminated the risk of the entanglement hazard and prevented the incident and resulting harm to the injured party and deeply regrets the harm and suffering that was caused.

Detail any enforcement notices issued that relate to the contravention

A Non-Disturbance Notice WSNZ 09201 dated 13 July 2016 was applied to Sinobaler and work area and was lifted on the 15 July 2016.

A Prohibition Notice WSNZ 19841 dated 14 July 2016 was also issued for the Sinobaler. On 27 July 2016 the Prohibition Notice was lifted on the basis the identified entanglement hazard had been guarded.

Detail the rectifications to the workplace or work practices made as a result of the contravention, events and the enforcement notices issued

Following the incident, Earthcare sought expert subject matter advice from PILZ New Zealand (Certified Machinery Safety Experts) and Safety Associates on the adequacy of guarding and safe systems of work for the Sinobaler.

As a result of that advice, safety improvements were made in the following areas:

- An interlocked guard/cage was installed to isolate workers from the particular entanglement hazard on the Sinobaler.
- An interlock was fitted to the hopper access panel on the Sinobaler.
- Barriers and interlocked gate were fitted to prevent unauthorised access to the sides and rear of the Sinobaler and conveyor system.
- The conveyor system was modified/upgraded to improve guarding and reduce pinch points.
- A Sinobaler 'safe operating procedure' was developed to sit with the safety improvements and for use in the re-induction and training of workers.
- We reviewed all machines and fitted additional interlocks to replace the previous proximity sensors that are no longer best practice.

Total amount of money spent on rectifications

Expert advice, guarding, interlocks, barriers, and gates	\$9,699
Work to eliminate potential pinch points and refresh tolerances to as new condition	
50 % of \$41,607 improve system to support area guarding	\$20,803
50 % of \$41,607 maintenance brought forward	
Sinobaler safe operating procedure and site specific safety plan	\$8,354
	Total \$40,056
	(including GST)

Internal Costs incurred by us other than Engineering have not been costed

Note: The Company also -

- Put the injured party and 6 others through a health and safety rep course run by Sitesafe; and
- Re-identified all hazards in the MRF in associate with support and oversight from a third party;
- Improved lock out and safety procedures including operator specific lock out tags;
- Conducted a full upgrade of the machine to improve all tolerances;
- Installed chains and signs to reduce foot traffic;
- Commenced a specific tool box meeting to include the MRF;
- Reviewed the use of gloves used in MRF including specialist gloves for the injured party.

Detail the injury sustained or illness suffered by victim(s) or other(s) as a consequence of the contravention

The injured party lost his right ring finger and little finger and sustained de-gloving on the back of his right hand.

In August 2016 the injured party commenced physiotherapy and hand therapy, with treatment 2-4 times a week. In general terms this involved Physiotherapy twice a week reducing to once a week before no longer being needed.

Hand Therapy started the week after he left hospital as 1 day a week, then up to two days a week then dropped back to one day a week before being no longer needed

Within 15 weeks of the incident the injured party was able to return to work on light duties and resumed full duties with us on the 6th November 2016.

Detail any offer of amends or payments made to the victim(s) who sustained injury

Earthcare arranged for the injured party's mother to travel to Wellington and funded accommodation for her next door to the hospital. Airfares were offered for his mother but not taken up as another family member preferred to drive her down.

Earthcare made ACC top up payments of \$3,836.15 to the injured party

Earthcare made an additional payment of \$1,500 to the injured party in respect of his injury.

Earthcare made other payments of \$1,000 to cover costs of treatment, travel, accommodation and topped up his ACC to 100% during his recovery.

The person(s) detailed: (describe victim's relationship to the person)

The injured party remains employed by Earthcare.

Detail the support provided or proposed by the person to the victim(s), other(s)

The Earthcare Manager at the Masterton MRF and the Earthcare Managing Director were in regular contact with the injured party during his recovery, Earthcare were delighted that the injured party's recovery went well and he was able to return to work within 15 weeks to his role which he enjoys.

Either the Earthcare Manager or Managing Director took him to his Wellington hospital check-ups to ensure he had transport and support when meeting the doctor. They ensured he understood what the doctor was saying and the choices that were needed were made in his best interests (There was no one more suitable).

Once the injured party returned to work the Earthcare Manager and Managing Director kept in touch with the injured party and ensured that all was going well and to check if anything specific was needed.

Detail any current HSMS implemented and maintained by the person (Describe how health and safety risks are managed, including types of procedures or policies or standards)

Earthcare is a member of WasteMINZ (Waste Management Institute New Zealand) and we were a member of the health and safety sector group. We contributed to the development of the Health and Safety Guidelines for the Solid Waste and Resource Recovery Sector published in 2014.

Earthcare has maintained a documented Health and Safety Management System, (HSMS) based on the critical elements of AS/NZS 4801 and the WasteMINZ Health and Safety Guidelines for the Solid Waste and Resource Recovery Sector.

The Health and Safety system is visible in each of the Earthcare businesses with managers maintaining the system requirements. Employees are encouraged to participate in improving the health and safety by reporting incidents and hazards along with being involved in regular H&S safety meetings and safety discussions. The OFI (Opportunity for Improvement) system is used to identify hazards and near misses and incidents to encourage employee participation.

Earthcare Managers meets monthly with an external subject matter expert for coaching and mentoring on health and safety.

Earthcare Management recognised a need to improve the safety information to make it more understandable and useable for the diverse workforce Earthcare employs.

Detail the level of auditing undertaken on the HSMS, including compliance audits and audit frequency

At the time of the incident Earthcare was reviewing the requirements, needs and improvements required to enter into the ACC WSMP (Workplace Safety Management Programme) at primary level.

Although entry into this ACC WSMP programme has ended, Earthcare has undertaken a series of improvements to the HSMS to meet critical elements of AS/NZS4801 and we await the introduction in late 2017 of the new Health and Safety Performance Improvement Toolkit Safe+ from WorkSafe NZ, ACC and MBIE to evaluate our compliance achievement against the online toolkit.

We have a number of checks and inspections depending on the type of equipment used (plant, machinery, vehicles)

- Daily and Weekly Workplace Inspections – local Manager
- Scheduled Servicing and inspection – Mechanic
- Monthly inspections by Managing Director (with local team)

We have contracted Safety Associates to work with Earthcare on a monthly basis to support and audit the compliance system. We have entered a 12 month contract for Quarterly HSMS Audits from Safety and Associates.

Detail the consultation undertaken or proposed to be undertaken, in relation to this undertaking

Earthcare has consulted with the injured party in relation to this application on a few occasions now.

The injured party whole heartedly supports the application and has suggested that he would like us to do something to support his hand therapist as he feels this was key to his recovery both physically and mentally.

SECTION 2: GENERAL TERMS

The person acknowledges and commits to the general terms set forth in the sub-terms below.

Acknowledgement that the regulator alleges a contravention occurred

Earthcare acknowledges that WorkSafe alleges a contravention occurred.

Statement of regret that the contravention occurred and the reasons the person considers this undertaking is the most appropriate response to the contravention

Earthcare deeply regrets the injury to the injured party and acknowledges that it has had a significant impact on him.

Earthcare is committed to our obligations under the Health & Safety at Work Act 2015.

But we know that compliance is not sufficient to justify WorkSafe accepting this undertaking in lieu of proceeding with a prosecution.

We view this undertaking as an opportunity to demonstrate leadership in Health & Safety in which recycling machinery plays an important role in the waste industry.

Earthcare understands that the stated purpose of an enforceable undertaking in WorkSafe's policy is to benefit the workers or the workplace, the wider industry or sector and/or the community while also taking into account the nature of the misconduct, submissions from any interested party (including any victims), past history of compliance and current commitment to remedy the misconduct.

By reference to those purposes / criteria, in summary:

- 1 Earthcare is a 100% New Zealand owned and run company which has been in the business of waste management since 1989. Earthcare has branches in Auckland, Wairarapa and Marlborough employing up to 40 local staff.
- 2 Earthcare has no record of previous convictions.
- 3 Earthcare has co-operated fully with WorkSafe in its investigation of this incident. That included its detailed responses to enquiries as to the due diligence on the part of its officers. No charge has been laid alleging breach of duty of any officer.
- 4 The Prohibition Notice was lifted.
- 5 Earthcare will make an additional payment of \$42,800 to clear the mortgage debt held by The injured party for his private home. This will increase the injured parties disposable income by \$180 per week and will see long term benefits for the worker.
- 6 As for all workers, the workplace and industry, Earthcare has engaged with the machinery and manufacturing industry group EMA Northern Inc. (Employers and Manufacturers' Association) and machinery safety subject matter specialist - Safety Associates - to discuss how it could improve machinery safety practices across industry. It is proposed that if this undertaking is accepted, Earthcare will co-fund Safety Associates to develop for EMA Northern Inc. a two day Machinery Safety Risk Management course which identifies the significant safety issues that arise in the use of machinery and the good practices and standards (AS/NZS 4024:2014) that are needed to provide a safe working environment for workers. Attendees of the course will be able to have their competency in machinery safety assessed against the NZQA (New Zealand Qualification Authority) Unit Standard 18410 (Manage Hazard ID and Control plant and machinery) and if achieved earn four level four credits applied to their personal record of learning. Earthcare will also fund the course cost

- of 15 individuals from the Waste Industry (possibly from a spectrum of the industry) to attend the course over 2 days at no cost. The specific "need", the industry support and stakeholder consultation is described in further detail in Section 3: Activities to be undertaken to promote the objects of the safety legislation that will deliver benefits for workers/others. That is a cost to Earthcare of \$34,500 inclusive of GST.
- 7 Earthcare will also train 2 workers to become 'competent' in the risk assessment of machinery by attending the 2 day machinery safety course. The cost of this course will be \$2,875 inclusive of GST but excluding costs of travel, accommodation and expenses.
 - 8 Earthcare will commission an article for publication in the WasteMINZ "Revolve" magazine which is published quarterly in New Zealand identifying that this Enforceable Undertaking has been given and in promotion of the Machinery Safety Risk Management course and in support of the wider waste industry and private sector need for good safety guidance with machinery risks.
 - 9 Earthcare will commission an article to be published in the EMA Business Plus magazine. The article will summarise the Enforceable Undertaking and emphasise the importance of managing machinery safeguarding and the need to have trained and competent people to undertake machinery risk assessments.
 - 10 If this undertaking is accepted, in support of the community, Earthcare will make a donation of \$10,000 to AT Hand Therapy in Greytown towards improving hand therapy outcomes. This is something that the injured person suggests as a really positive step. This money might possibly be utilised to fund patient reviews or to improve the facilities at their practice. AT Hand Therapy has identified to us the following types equipment that could be obtained and the benefits to clients;
 - a. Wax bath

Used to provide heat and relieves pain for a variety of different client groups. Heat also relaxes muscles, ligaments and improves blood flow (if compromised) and it is a useful treatment to help restore movement of stiff joints. Currently they have no heat treatments available other than wheat packs which do not provide adequate heat and therefore have limited effect on pain and movement. Clients who would benefit from this are post-surgical patients following surgeries such as traumatic amputations and tendon surgeries, fracture fixations, arthritis, the list is endless. Helping to improve pain management and decreased movement helps people increase the amount of use they have in their hand and return to activities they cannot currently do faster.
 - b. Splint bath

Splinting is a very common treatment in the rehab process. It allows them to protect structures if damaged and also to facilitate safe movement when the injury is healing.

A splint bath allows them to make more complex and bigger splints than they currently make in the frying pan. A bath heats more consistently and therefore the material moulds better. It would also allow them to make stronger splints as different splinting materials heat and mould at different temperatures and the splint bath allows them to control that process better. With better fitting and stronger splints, it allows the hand rehab to progress faster and therefore clients



are able to return to work and or things that they haven't been able to do quicker.

c. Higher quality heat gun

Makes the task of splinting easier, currently their heat gun heats too quickly which means the Velcro tabs and joins in the splint sometimes do not unite properly. This means peoples splints often break and a broken splint slows down the rehab process. The heat gun they are currently looking at getting heats to higher temperatures with a slower fan to control the heating process and therefore making the splints stronger, this means less breakages and better rehab for the patient.

d. Monofilaments

This is equipment used to test nerve recovery improvements. Gives clients objective feedback about the sensation of the nerves, with the added benefit of seeing improvement it gives positive reinforcement for the client to continue on with their rehab programme.

e. Other improvements

There are a number of other items and improvements that AT Hand Therapy consider would improve their outcomes as they are newly established.

- 11 As to the nature of the misconduct, the guarding vulnerability on the Sinobaler has been resolved.
- 12 Having formulated this application, Earthcare has consulted with the injured party to seek his support. The injured party has given his unconditional support to this Enforceable Undertaking including some changes specifically around the injured parties view that hand therapy is an area that he would like to see have additional support.

Earthcare's wide-ranging proposal above is not of a kind that can be achieved by prosecution alone and, if agreed, it achieves tangible benefits to workers which could not addressed elsewhere and at zero cost to other industry workers.

Earthcare maintains that the interest in machinery safety is genuinely increasing in the industry.

It is submitted that the steps Earthcare proposes are proportionate in this particular case.

Statement of commitment that the behaviour, activities and other factors which caused or led to the contravention has ceased and will not reoccur

Earthcare confirms that the behaviour, activities and other factors which caused or led to the contravention have ceased and will not reoccur.

Acknowledgment of the policy published by the regulator for the acceptance of an undertaking

This policy has been read and understood:

Enforceable Undertakings Operational Policy

Worksafe Version: Dated: December 2016



Acknowledgement that this undertaking will be published and publicised in full

Earthcare acknowledges that the undertaking will, if accepted, be published on WorkSafe's website in full and may be referenced in WorkSafe material.

Statement of the person's ability to comply with the terms of this undertaking and meet the projected costs of the activities

Earthcare has the ability to comply with the terms of this undertaking and meet the costs of the activities. If further assurance is requested, please clarify what is required.

In the event of impending receivership, liquidation or sale of the entity, Earthcare will advise WorkSafe of the relevant circumstances and its capacity to comply with the outstanding terms of this undertaking.

Statement outlining any relationship between the person and any corporations, officers, employees, contractors, proposed beneficiaries of donations or scholarship or other recipient of financial benefit contained in this undertaking

None save the worker as employee.

Statement regarding Intellectual Property

Earthcare grants WorkSafe a perpetual, non-exclusive, worldwide and royalty-free licence to use, for any purpose, all Intellectual Property Rights in relation to any material developed as a result of this undertaking.

This licence includes the right to use, copy, modify and distribute the materials on the sole condition that Earthcare is notified in advance of any proposed additional use.

Acknowledgement that the person may be required to provide a statutory declaration

Earthcare acknowledges that it may be required to provide a statutory declaration outlining details of any prior convictions (safety related) outside of New Zealand and that it will provide such declaration if required by WorkSafe.

Statement of commitment from the person to participate constructively in all compliance monitoring activities for this undertaking

It is acknowledged that responsibility for demonstrating compliance with this undertaking rests with the person.

Evidence to demonstrate compliance with the terms will be provided to WorkSafe by the due date for each term.

The evidence provided to demonstrate compliance with this undertaking will be retained by the person until advised by the regulator, that this undertaking has been completely discharged.

It is acknowledged that any failure to meet the due date for an enforceable term will result in the matter being escalated and may lead to enforcement action.

It is acknowledged that WorkSafe may undertake other compliance monitoring activities to verify the evidence and compliance with an enforceable term, and cooperation will be provided to WorkSafe.

It is acknowledged that WorkSafe may initiate additional compliance monitoring activities, such as inspections, as considered necessary at WorkSafe's expense.



ENFORCEABLE UNDERTAKING

It is acknowledged that details of all seminars, workshops and training conducted by a non-registered training provider must be notified to WorkSafe, by email, at least one week prior. Notification should include time, date, location and the trainer/facilitator.



SECTION 3: ENFORCEABLE TERMS

The person acknowledges all activities set forth in the enforceable terms below must be auditable and include a date for completion and an estimated cost for each activity.

The person commits to performing the activities below diligently, competently and by the respective completion date.

A commitment by the person to perform activities that will ensure the ongoing effective management of risks to health and safety in the future conduct of its business or undertaking

(Detail the management strategies to be employed that will satisfy and demonstrate to officer/s of the person that this commitment is being met)

Earthcare is committed to the performance of the activities as detailed in sections 3, 4 and 5.

These activities will ensure the ongoing effective management of the risks to health and safety in the future conduct of its undertaking.

The injured party will be paid the amends of \$42,800 within 28 days of acceptance of the undertaking.

A commitment by the person to disseminate information about this undertaking to workers, and other relevant parties

(This may include to work health and safety representatives and in the annual report, if applicable)

In the event the undertaking is accepted, it will be disseminated to workers through the regular worker health and safety meetings held in each branch.

Activities to be undertaken to promote the objects of the safety legislation that will deliver benefits for workers/others

ACTIVITIES	COST (\$ INCL GST)	TIMEFRAME
Earthcare will train 2 workers to become 'competent' in the risk assessment of machinery by attending the 2 day machinery safety course as described in activities for industry.	\$2,875	Within 6 months of course availability
Total estimated cost of benefits for workers/other, cost excludes travel, accommodation and expenses.	\$2,875	



Activities to be undertaken to promote the objects of the safety legislation that will deliver benefits for industry

There are four proposed activities;

1. Co-fund the development of machinery safety risk management course for wider industry benefit
2. Funding the course for 15 workers from the waste industry
3. Promoting the undertaking and industry benefits to the waste industry
4. Promoting the undertaking and industry benefits to the wider industry

Development of machinery safety risk management course

A. The Need

Having people trained and assessed as competent in managing machinery risks is a reasonably practicable step FOR ORGANISATIONS TO UNDERTAKE. However, there are limited avenues for public training courses on machinery safety risk management currently available. And during our engagement process we could not find a PTE (Private Training Enterprise) who could offer this level of training against the New Zealand Qualifications Authority Unit Standard 18410 (Manage Hazard ID and Control plant and machinery). This identified the need to develop a 2 day course on machinery safety risk management.

B. The Course

This course will be developed for organisations where plant and machinery is in operation, and for people who build, maintain, upgrade, buy, sell or use machinery, in other words, all industry, end-users and contractors. The course will cover:

- The need to manage machinery risks;
- Application of the Health and Safety at Work Act 2015 and associated regulations;
- The various roles of duty holders under safety legislation and regulations;
- Application of WorkSafe guidance, AS/NZ4024 and AS4024 series of Standards and Machinery directives;
- The lifecycle of machinery risks that arise in the installation, use, inspection, cleaning, maintenance, repair, modifications and decommissioning of plant and machinery;
- How to identify, assess and control the risks and hazards of machinery;
- The common types of controls available, including but not limited to:
 - Guarding/Barriers (fixed, removable etc.)
 - Protective devices (interlocks, light curtains etc.)
 - Safety components (two handed controls, safety mats, emergency stops)
- Health related risks around noise, hazardous substances, ergonomics, clean air etc.;
- Understanding safe systems of work including:
 - Safe Operating Procedures
 - Job Safety Analysis and Safe Work Method Statements
 - Permit to Work
 - Lock Out and Tag Out systems
- How to facilitate good engagement and participation with workers;
- Understanding contractor management risks and the need to consult, co-ordinate and co-operate with other organisations with operational machinery risks;
- How unintentional human interaction with machinery risks can lead to harm.



C. Standards and competency

The course will align with AS/NZS 4024 standards and WorkSafe NZ Best Practice Guidelines for the Safe Use of Machinery. The course will focus on the effective controls for eliminating or minimising risk and engineering controls based on WorkSafe hierarchy as a strong preference over modifying behaviour (which is low in the control hierarchy) and not failsafe for workers.

The course material will be written in a way to reach a wide audience of participants with a need to understand and effectively manage the risks when purchasing, installing, operating, maintaining, cleaning and repairing machinery and meet the requirements of NZQA Unit Standard 18410 Manage Hazard ID and Control plant and machinery.

Course participants can choose to have their competency in machinery safety assessed against NZQA Unit Standard 18410 Manage Hazard ID and Control plant and machinery.

The assessment of Unit Standard 18410 means that people can describe:

- hazards and risks associated with plant and machinery in the workplace;
- legislative requirements for machinery and plant hazard and risk control;
- methods of controlling machine hazards with specific reference to types of machine guards and their application;
- identify hazards on a selected item of site plant or machinery; and to develop plant or machinery risk management plans.

NZQA 18410 is a level 4 unit standard (with 4 credits) which means the learner can achieve broad operational and theoretical knowledge in a field of work or study and build skills to:

- Select and apply solutions to familiar and sometimes unfamiliar problems
- Select and apply a range of standard and non-standard processes relevant to the field of work or study

The course duration is 2 Days.

D. Consultation

The course will be developed in consultation and input from;

- NZ representative of the Standards Reference Committee SF-041 for the AS 4024 series of Safety of Machinery standards, Tony Catterson, CMSE (Certified Mechanical Safety Expert) at PILZ
- EMA Northern Inc (Employers and Manufacturers Association, see letter attached).

E. Timeline, delivery and availability

The development of the course will take 16 days work on the part of the consultant, but we propose a 18 month timeframe for completion given the input, consultation and feedback.

Once completed the course will be publicly available through the PTE (Private Training Enterprise) EMA and the wider Business New Zealand group of training organisations.

The EMA will offer the 2 day course for \$1,250+GST and NZQA assessment fees apply.

ACTIVITIES	COST (\$ INCL GST)	TIMEFRAME
Co-funding development of machinery safety risk management course (as outlined above). The course development is supported by key WasteMINZ industry members including; Envirowaste and Smart Environmental.	\$12,937.50	Within 18 months of acceptance of EU
Earthcare will fund the course cost of 15 workers from the waste industry (possibly from a spectrum of the industry) to attend the course over 2 days at no cost.	\$21,562.50	Within 6 months of course availability
Earthcare will commission an article for publication in the WasteMINZ "Revolve" magazine which is published quarterly in New Zealand identifying that this Enforceable Undertaking has been given and in promotion of the Machinery Safety Risk Management course and in support of the wider waste industry and private sector need for good safety guidance with machinery risks.	\$0	Within 6 months of acceptance of EU
Earthcare will commission an article to be published in the EMA Business Plus magazine. The article will summarise the Enforceable Undertaking and emphasise the importance of managing machinery safeguarding and the need to have trained and competent people to undertake machinery risk assessments.	\$0	Within 6 months of acceptance of EU
The EMA will promote the Machinery Safety Risk Management Course and the benefits to industry outcomes through their various communications channels including Business New Zealand to foster further self-funded participation.	\$0	Within 6 months of course availability
Total estimated cost of benefits for industry	\$34,500.00	

Activities to be undertaken to promote the objects of the safety legislation that will deliver benefits for community

The injured party has indicated that he would like to see us do something to support hand therapy in the Wairarapa preferably via support for "AT Hand Therapy" from Greytown who supported him and he was referred to by Hutt Hospital.

ACTIVITIES	COST (\$ INCL GST)	TIMEFRAME
Earthcare will make a donation of \$10,000 to AT Hand Therapy in Greytown towards improving hand therapy outcomes. This is something that the injured person suggests as a really positive step. This money might possibly be utilised to fund patient reviews or to improve the facilities at their practice.	\$10,000	Within 28 days of EU acceptancer
Total estimated cost of benefits for community	\$10,000	

AT Hand Therapy has identified to us the following types equipment that could be obtained and the benefits to clients:

A. Wax bath

Used to provide heat and relieves pain for a variety of different client groups. Heat also relaxes muscles, ligaments and improves blood flow (if compromised) and it is a useful treatment to help restore movement of stiff joints. Currently they have no heat treatments available other than wheat packs which do not provide adequate heat and therefore have limited effect on pain and movement. Clients who would benefit from this are post-surgical patients following surgeries such as traumatic amputations and tendon surgeries, fracture fixations, arthritis, the list is endless. Helping to improve pain management and decreased movement helps people increase the amount of use they have in their hand and return to activities they cannot currently do faster.

B. Splint bath

Splinting is a very common treatment in the rehab process. It allows them to protect structures if damaged and also to facilitate safe movement when the injury is healing.

A splint bath allows them to make more complex and bigger splints than they currently make in the frying pan. A bath heats more consistently and therefore the material moulds better. It would also allow them to make stronger splints as different splinting materials heat and mould at different temperatures and the splint bath allows them to control that process better. With better fitting and stronger splints, it allows the hand rehab to progress faster and therefore clients are able to return to work and or things that they haven't been able to do quicker.

C. Higher quality heat gun

Makes the task of splinting easier, currently their heat gun heats too quickly which means the Velcro tabs and joins in the splint sometimes do not unite properly. This means peoples splints often break and a broken splint slows down the rehab process. The heat gun they are currently looking at getting heats to higher temperatures with a slower fan to control the heating process and therefore making the splints stronger, this means less breakages and better rehab for the patient.



D. Monofilaments

This is equipment used to test nerve recovery improvements. Gives clients objective feedback about the sensation of the nerves, with the added benefit of seeing improvement it gives positive reinforcement for the client to continue on with their rehab programme.

E. Other improvements

There are a number of other items and improvements that AT Hand Therapy consider would improve their outcomes as they are newly established.

Agreement to pay WorkSafe's recoverable costs

Earthcare agrees to pay WorkSafe's costs associated with this undertaking, as itemised below, and it is acknowledged that payment is due 30 days after receipt of the WorkSafe invoice:

Acknowledgement regarding any promotion of the person in relation to this undertaking

Earthcare acknowledges WorkSafe's requirement that it will not undertake any activities that may promote or benefit the person without explicitly linking that activity / benefit to this Undertaking (by making express reference to this Undertaking and the decision of the Regulator to approve it, on the basis of the various benefits submitted in the Undertaking application).

Where WorkSafe considers appropriate in the circumstances, developing a commitment to (establish and maintain OR maintain) an HSMS

Details of Earthcare' HSMS compliance are set out above. If WorkSafe has any queries in relation to those systems and processes, please advise, but Earthcare considers the processes meet the required standards.

Minimum spend

Earthcare agrees to spend any residual amount arising from an original term not being completed or being less costly than estimated in this undertaking.

Agreement on how to spend any residual amount will be sought from the regulator.

TOTAL COST	MINIMUM SPEND (\$)
Amends to victim (incl GST if any)	\$42,800
Benefits to workers (incl GST if any)	\$2,875
Benefits to industry (incl GST if any)	\$34,500
Benefits to community (incl GST if any)	\$10,000
WorkSafe recoverable costs (incl GST if any)	\$11,845
Estimated total cost of the undertaking (incl GST if any)	\$102,020

SECTION 4: EXECUTION

This undertaking is given by the person on the date it is accepted by the Regulator as set forth in section 5 below.

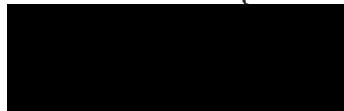
(This may include to work health and safety representatives and in the annual report, if applicable)

COMPANY

Earthcare Environmental Limited

on the 2nd day of March 2018 before me:

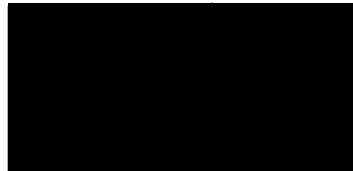
Signature of person:



Witness name: Christie Clemons.

Witness address:

Witness signature:



SECTION 5: ACCEPTANCE

The undertaking is accepted by the regulator

on the _____ day of _____ 2018 before me:

Signature of person:



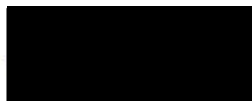
Name: Simon Humphries

General Manager, WorkSafe (or delegated Person)

Witness name: Cordell Weil

Witness Address:

Witness Signature:



86 Customhouse Quay Wellington