### **RISK ASSESSMENT**

# RISK ASSESSMENT OF PAINT REMOVAL PROJECTS USING THE PEEL AWAY PAINT REMOVAL SYSTEM

#### 1.0 PROJECT DETAILS

RISK ASSESSMENT PEEL AWAY AUSTRALIA -ASIA PACIFIC Pty Ltd STATEMENT PREPARED BY: DAYALAN GOVENDER Ph 02 9746 6733

**SUBCONTRACTOR:** 

**DATE:** 

PRODUCT TO BE USED

PEEL AWAY NUMBER 1

PEEL AWAY NEUTRALISER

PEEL AWAY Australia-Asia Pacific Sept 2010

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#### **SECTIONS 2**

#### 2.0 SCOPE OF WORKS

The scope of works calls for the carefully removal of the lead paint from exterior brick façade surfaces as Heritage. Any nominated system must be Safe, Environmentally Acceptable Stripping Method, Maintaining Original Substrate, Containment of Chemical and Liquid Waste.

The items include:

Exterior/Interior Brick facade

#### 2.1 COMMENCEMENT

The project start date was:

The terms and conditions of the contract is:

#### 2.2 DURATION

This will be subject to:

#### **SECTION 3**

#### 3.0 LEAD PROCESSES & LEAD RISK WORK

Attention of Contractors & Site Supervisors is drawn to Occupational Health & Safety Regulations 2001 Part 7.6 Lead Processes and Lead Risk Work. In part of which follows:

## Part 7.6 Lead processes and lead risk work 199 Definitions

**Blood lead level** means the concentration in whole blood expressed in micromoles per litre or micrograms per decilitre

**Lead** means lead metal, inorganic lead compounds and lead salts of organic acids.

*Lead process* means one of the following processes (more processes are listed in the OH&S Regulations of 2001)

- (a) Any work that exposes a person to lead dust in air or lead fumes arising from the manufacture or handling of a dry lead compound,
- (b) Dry machine grinding, discing, buffing or cutting by power tools of lead or alloy containing more than 5% by weight of lead.
- (c) Machine sanding or buffing of surfaces coated with paint containing more that one percent by dry weight of lead
- (d) Any process by which electric arc, oxy-acetylene, oxy gas, plasma arc or a flame is applied, for the purpose of welding, cutting or cleaning, to the surface of any metal that is coated with lead or paint containing more than one percent by dry weight of lead
- (e) Fire assay if lead is used

**Lead risk work** means a lead process or a work activity or sequence of activities at a specific area within a place of work in which the blood lead level of an employee might reasonably be expected to rise or does arise above 1.45 micromoles per litre or 30 micrograms per decilitre.

#### 200 Application

The provisions of Part 6.4 apply to the use of all hazardous substances (including Lead) at work, and, among other things, require employers to provide health surveillance for employees if there is a risk to health resulting from exposure to a hazardous substance.

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Those provisions apply whether or not the use constitutes a lead process or lead risk work for the purposes of this Part. Also note that clause 345 requires persons to give Work Cover notice of any proposed lead risk work.

#### 201 Employer to control risks from lead

- (1) An employer at a place of work at which a lead process is carried out must ensure that contamination by lead is confined to the area in which the lead process is carried out (a **lead process area**) and that lead contamination of the surrounding environment does not occur. Maximum penalty: Level 4
- (2) An employer must ensure that:
- (a) A lead process area is kept as clean as is practicable and
- (b) compressed air, compressed gas or dry sweeping cleaning methods are not used in a lead process area and
- (c) no employee eats, drinks, chews gum, smokes or carries smoking materials in a lead process area and
- (d) any eating or drinking facilities provided by the workplace cannot be contaminated with lead, and
- (e) employees working in a lead process area wear appropriate personal protective equipment, and
- (f) changing rooms and washing, showering and toilet facilities appropriate for the lead process carried out are provided and maintained in a good working order, and
- (f) employees remove clothing and equipment contaminated with lead, and wash their hands and faces, before entering an area provided at the workplace for eating and drinking.

Maximum penalty: Level 3

(3) An employer must arrange for the laundering of protective work clothing that may have been contaminated by lead.

Maximum penalty (subclause (3)): Level 2

#### 202 Biological monitoring & health surveillance

(1) In the case of lead risk work, any biological monitoring required to be performed under Part 6.4 must consist of the measurement of lead in whole blood or packed

- (2) red cells, sampled as capillary or venous blood (as appropriate) and related measurements as required.
- (3) In the case of lead risk work, help surveillance (additional to that required to be performed under Part 6.4) must be performed:
- (a) In relation to an employee who is carrying out lead risk work at the commencement of this clause as soon as practicable after that commencement, or,
- (b) in relation to an employee who commences lead risk work after the commencement of this clause:
  - (i) before the employee commences the work (except biological monitoring),
  - (ii) within one month of the commencement of the work and
  - (iii) as soon as practicable after 2 months of the commencement of the work
  - (iv) as soon as practicable after 6 months of the commencement of the work.
- (4) In the case of lead risk work, the biological monitoring required to be performed under part 6.4 and subclause (1) must be performed at the following intervals:
- (a) for females of reproductive capacity:
- (i) Within 3 months of the last biological monitoring if the result of that last monitoring shows a blood level level of less than 0.48 micromoles per litre (10 micrograms per decilitre)
- (ii) Within 6 weeks of the last biological monitoring if the result of the last monitoring shows a blood lead level result of 0.47 micromoles per litre (10 micrograms per decilitre) or more
- (b) for females not of reproductive capacity and males:
- (i) within 6 months of the last biological monitoring if the result of the last monitoring shows a blood lead level result of less than 1.45 micromoles per litre (30 micrograms per decilitre), or
- (ii) within 3 months of the last biological monitoring if the result of the last monitoring shows a blood lead level of 1.45 micromoles per litre (30 micrograms per decilitre) or more but less than 1.93 micromoles per litre (40 micrograms per decilitre), or

(iii) within 6 weeks of the last biological monitoring if the result of the last monitoring shows a blood level of 1.93 micromoles per litre (40 micrograms per decilitre) or more.

Maximum penalty: Level 4

#### 203 Employer to remove certain employees from lead risk work

- (1) An employer must ensure that an employee ceases to carry out lead risk work if the employer or employee considers that the employee has received an excessive exposure to lead in the workplace and the results of the biological monitoring on the employee show the confirmed blood lead level of the employee as:
- (a) 0.72 micromoles per litre (15 micrograms/decilitre) or more for females who are pregnant or breast feeding, or
- (b) 0.97 micromoles per litre (20 micrograms / decilitre) or more for other females or reproductive capacity, or
- (c) 2.41 micromoles/Litre (20 micrograms/decilitre) or more for females not of reproductive capacity and males.
- (2) An employer must ensure that an employee referred to in subclause (1) receives a medical examination by an authorised medical practitioner within 7 days of the employer determining that the employee should cease carrying out lead risk work.
- (3) An employer must ensure that an employee referred to in subclause (1) does not carry out lead risk work until:
- (a) The employees confirmed blood lead level is less than:
- (i) 0.48 micromoles per litre (10 micrograms/decilitre) for females of reproductive capacity, or
- (ii) 1.93 micromoles/Litre (40 micrograms/decilitre) for females not of reproductive capacity and males, and
- (b) the employee is certified as fit to return to lead risk work by an authorised medical practitioner.
- (4) An employer must keep a record that includes the following particulars:
- (a) the date on which an employee ceased to carry out lead risk work in accordance with this clause and the date on which the employee recommenced such work,
- (b) The name, sex and date of birth of the employee.

Note: The record must be retained for at least 5 years. See clause 171.

(5) In this clause:

*Confirmed blood lead level* means the concentration of lead in venous whole blood.

Maximum Penalty: Level 4

#### 3.1 PEEL AWAY PAINT REMOVAL SYSTEM

PEEL AWAY is a safe chemical paint removal process. The product is specially formulated to remove multiple layers of Lead paint from many substrates. The paste is applied to the substrate about three to four mm thick and then covered with the laminated plastic paper. The product is left on the surface for at least 3 to 4 days and the product softens layer upon layer of paint. The removal is done with carefully lifting the many layers with the laminated paper and placed in heavy duty bags and stored for removal.

#### PLEASE REFER TO ALL TECHNICAL DATA SHEETS SUPPLIED

The product is made up of two components;

The product is made into a paste form and supplied in metal drums (225 kg)

The second component is the printed laminated plastic paper

#### 3.2 SITE PREPARATION

- 1) All care needs to be taken on site
- 2) Each area where work is to be done thick plastic needs to be used on floor and other surrounding surfaces for protection. Secure using duct tape and weight to keep in place: eg sand bags.
- 3) Secure any loose items attached to the building and around work site area.

#### 3.3 SAFETY EQUIPMENT

- 1) Use all safety equipment in accordance with Australian Standards
- 2) All ladders and scaffold must be secure as there is high risk of wind on site.
- 3) All erected equipment must be secure during work
- 4) Store all equipment overnight in a secure area.
- 5) Ensure storage of equipment is away from any loose cables and electrical wires.

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#### 3.4 WORKER PROTECTION

- 1) All workers using and working around PEEL AWAY product must have protective clothing to ensure the skin is completely covered. Recommend "DuPont- Tyvek Barrier Man" overhauls (99% Particle to 0.5 Micron)
- 2) Always have "Barrier Cream" on site and rub on hands prior to commencement
- 3) Use recommended "Chem-Master" gloves. These have excellent liquid run- off abrasive and chemical resistance. Suitable for lab work, manufacturing and use of solvents handling.
- 4) Hard hat protection at all times
- 5) Orange coloured day Vest to be worn at all times for high visibility
- 6) Use of chemical resistance safety boots at all times
- 7) The use of Protector Twin Filter face respirator mask. AS 1716 Lic No 218
- 8) The use of Chemical & Impact goggles for eye protection at all times. AS 1337 .1 Lic No. 219

#### 3.5 APPLICATION TOOLS

- 1) For the application of the PEEL AWAY 1 product the following can be used: Wide nylon brush or trowel application.
- 2) Plastic trowels can also be used to apply the product.

#### 3.6 APPLICATION OF PRODUCT

- 1) The product is in a thick paste form and must be applied at least 3 to 4mm thick covering all the surfaces. Do not scrape off any loose or flaking paint apply product directly on the peeling paint.
- 2) Completely cover the product with the printed laminated PEEL AWAY paper and seal the surface. Ensure all air pockets are ironed out for ideal performance.
- 3) Using masking tape seal all edges and corners so laminated paper is secure in high wind, even though the principle of the product and the paper is to form a seal onto the surface.

- 4) Allow product to work for 72 to 84 hrs prior to removal so the product has ample time to draw the original coats of paint out of the brick work.
- 5) Carefully lift sections of the paper and most of the lead paint can be rolled into the laminated paper. This will fully contain the removal process and reduce the amount of loose material.
- Remove any loose debris left behind and contain in bags, this can be done easily when wet or immediately after removal.
- 7) All of the product should be stored in strong thick plastic bags for safe disposal.

#### 3.7 CONTAINMENT OF CHEMICALS

- 1) The PEEL AWAY process has just ensured that all the chemicals used, the Lead paint on the surface is now fully contained.
- 2) This has been done with No Atmospheric Pollution, No Dust, Fumes or Mess.
- 3) It will take a potentially risky and harmful situation to a Safe and Stable situation.

#### 3.8.1 REMOVAL

By sliding applicator tool behind laminated sheet and lift old paint coatings. Contain all solid waste in thick black tie up bags and store safely ready for disposal. Thoroughly wash down the surface.

All surface to be left dry and check for complete removal.

When using Peel Away One, all surfaces must be neutralized with PEEL AWAY Neutraliser.

#### 3.9 CONTAINMENT OF LIQUID WASTE

Safe on-site storage is required for both solid and liquid waste products. All consideration must be given to water disposal and run off into storm water drains. A liquid waste disposal tank is required. Sandbags should be used as a filter for run off water during wash down. Temporary water proof stick on sheeting can be used to protect concrete. Cover all surrounding areas, gardens, drains with plastic and sandbag for excess water collection. Protect and inform surrounding property owners of any disruption.

The use of sandbags are very helpful in acting as a filter for excess water and trapping of paint and debris that could flow down the storm water system. Two rows of sandbags must be formed around the wall areas; length can vary from four to seven metres long. Allow the water to stand for a period of at least two days in some cases to filter the liquid. Scoop up the remainder as solid waste.

#### 3.10 STORAGE OF CHEMICAL WASTE

All waste needs to be contained in thick black tie up bags and stored safely ready for disposal. Keep away from extreme heat and open flames and make sure the material does not come into contact with water or acids.

Dispose of in accordance with local, state or national regulations. Recover non usable free liquid and dispose of in an approved incineration or biological treatment facility. Recover any contaminated water and treat appropriately. Remove non usable solid material and/or contaminated soil for disposal in an approved facility. Do not flush to surface water into storm water but can be flushed in sanitary sewer system.

#### 3.11 CLEANING OF SUBSTRATES

After the main removal of the Peel Away product and paint layers, the surface will still need to be cleaned to remove any remaining materials. Thoroughly wash the surface with plain water, nylon brush and sponge. Alternatively a pressure water cleaner could be used, bearing in mind that all contaminants need to be adequately contained. If Peel Away One has been used, the surface may need to be neutralized before repainting occurs. Refer to detailed instructions for thorough neutralizing of Wood and Plaster surfaces.

#### 3.12 HANDOVER

Final site inspection with owner should be done. Site conditions and hand over must be done with owner.

Copies of all records must be handed to owner for their records.

#### **SECTION 4**

#### 3.0 RISK ASSESSMENT

#### 4.0.0 AWARENESS AND PRECAUTION

It is extremely important to be fully aware of all the current rules and regulations (if not already known) relating to the removal of paint, especially lead. The safety of the owner, public and health of the contractors must be considered. Awareness and responsibility is a priority, to avoid unnecessary fines and legal costs. A full site evaluation is needed so as to establish the procedure and related requirements to complete such a project.

A lead analysis should be carried out, with test patches done on at least three to four different areas of the building. Careful assessment should be made to ensure the products performance.

Reference should be made to Peel Away data sheets, Application Guides and Contractor guide. Material Safety Data sheets are essential, as is the Removal Specification and Method Statement.

#### 4.1 PRODUCT CLASSIFICATION

#### 4.1.0 PEEL AWAY ONE

UN No: 1824

**Dangerous Goods Class: Class 8 (Corrosive)** 

Packaging Group III Poison Schedule S6

#### 4.2.0 PEEL AWAY EIGHT

**Non Dangerous Goods** 

#### 4.2 HAZARDS FOR PRODUCT HANDLING

#### 4.3.0 PEEL AWAY ONE

Has Sodium Hydroxide as a chemical ingredient, which is a substance that has a high level of alkalinity.

Peel Away One is corrosive to human tissues and common metals. Therefore long length gloves and overalls should be worn to minimize the risk of contact with the skin.

A dangerous goods declaration needs to be completed whenever the product is shipped or couriered.

#### 4.3.1 PEEL AWAY EIGHT

Is a non dangerous goods product. It is recommended to wear gloves and overalls. The product can be a mild irritant.

Can be shipped/transported without any dangerous goods declaration.

#### 4.3 SOLUTIONS ASSOCIATED WITH RISKS

- **4.3.0** Personal Protection / Safety Equipment should be used by all staff using/ handling Peel Away.

  This personal protection should consist of:
- **4.3. 1 Respiratory Protection**: A face mask or respirator is advised
- **4.3.2 Protective Gloves**: Rubber or PVC gloves are advised.
- **4.3.3 Eye Protection:** Full face mask, safety glasses are advised.
- **4.3.4 Clothing:** Clean overalls should be worn, preferably with an apron. All skin areas should be covered.
- **4.3.5 Safety Boots:** Wearing safety boots is advised.
- **4.3.6 Hygienic Practices:** Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

#### 4.4 ACCIDENT AVOIDANCE

**4.4.0 Fire Hazard:** Keep the product away from heat, flame, and ignition sources. Keep containers closed. Do not cut, drill, grind or weld near open containers. Avoid spillages onto hot surfaces.

#### 4.4.1 Spills & Disposal

- **4.4.1.0 Initial Containment:** Remove sources of heat, sparks, flames, impact, friction or electricity. Dike spill. Prevent material from entering sewers, waterways or low areas.
- **4.4.1.1. Cleanup:** Recover free liquid for re-use if possible. Use spark free implements for clean up. Soak up with sand, saw dust, vermiculite or other oil free absorbent material.
- **4.4.1.2 Disposal:** Dispose of in accordance with local, state or national regulations. Recover non usable free liquid and dispose of in an approved incineration or biological treatment facility. Recover any contaminated water and treat appropriately. Remove non usable solid material and/or contaminated soil for disposal in an approved facility. Do not flush to surface water or sanitary sewer system.

#### **Information supplied**

All information and technical advice is given in good faith and without warranty. This Risk Assessment is a guideline for the use of our product, its suitability for the intended processes and use. The application, use and processing of the products are beyond our control and, therefore your own responsibility. All care must be taken to understand and abide by the guidelines.

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