

COM
Plastics Pioneers

THE NEWSLETTER

Edition 120
Summer 2012

EDITION: # 120

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■ BASF

The Chemical Company

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DID YOU KNOW?

From The President

Dear Plastics Pioneer

Firstly; may I wish you a very **Happy New Year** and health and good fortune for you and your family in 2012. We have an interesting and challenging year ahead for **Plastics Pioneers**.

Our first **Luncheon Meeting** is **Wednesday March 14** at a great new venue, Kooyong Lawn Tennis Club in Kooyong Road, Kooyong with great access by road and public transport. **Doctor Robb Stanley**, Executive Officer of the **Victoria Society** will talk on the subject; **"The Victoria Society; 150 Years of History, Mystery, Science and Anecdotes."** It is an interesting topic not to be missed. We have a great venue for the **Winery Visit** on **April 1, a change from the earlier advice of March 25**. I am sure you will thoroughly enjoy **Bluestone Lane Vineyard in Balnarring**.

The **Executive Committee** are addressing the most pressing issue for Plastics Pioneers and that is to grow **membership** and change the demographic to a younger age group. You will hear more as the year proceeds and if you know someone who is a 'Pioneer' ask them to join.

Bruce Chisholm - President

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HISTORY



The Chemical Company

Friedrich Engelhorn

BASF was founded on 6 April 1865 in Mannheim, in the state of Baden-Württemberg, Germany, by **Friedrich Engelhorn**. He had been responsible for setting up a gasworks and street lighting for the town council in 1861. The gasworks produced tar as a byproduct, and Engelhorn used this for the production of dyes. BASF was set up in 1865 to produce other chemicals necessary for dye production, notably soda and acids. The plant, however, was erected on the other side of the Rhine River at Ludwigshafen because the town council of Mannheim was afraid that the air pollution of the chemical plant could bother the inhabitants of the town. In 1866 the dye production processes were also moved to the BASF site.

BASF SE is the largest chemical company in the world and is headquartered in Germany. **BASF** originally stood for **Badische Anilin- und Soda-Fabrik** (English: *Baden Aniline and Soda Factory*). Today, the four letters are a registered trademark and the company is listed on the Frankfurt Stock Exchange, London Stock Exchange, and Zurich Stock Exchange. The company delisted its ADR from the New York Stock Exchange in September 2007.

The BASF Group comprises subsidiaries and joint ventures in more than 80 countries and operates six integrated production sites and 390 other production sites in Europe, Asia, Australia, Americas and Africa. Its headquarters is located in Ludwigshafen am Rheine (Rhineland-Palatinate, Germany). BASF has customers in over 200 countries and supplies products to a wide variety of industries. Despite its size and global presence BASF receives little public attention as it abandoned consumer product lines in the 90s.

At the end of 2010, the company employed more than 109,000 people, with over 50,800 in Germany alone. In 2010, BASF posted sales of €63.87 billion and income from operations before special items of about €8.1 billion. The company is currently expanding its international activities with a particular focus on Asia. Between 1990 and 2005, the company invested €5.6 billion in Asia, for example in sites near Nanjing and Shanghai, China and Mangalore in India.

Sources: BASF, Wikipedia



The Chemical Company

PIONEERS NEWS

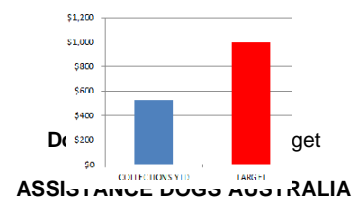
- ✓ The **Special Events Team** have been road testing **Wineries for the March 25 Winery Visit**. Tough work as the six member group will attest.
- ✓ **John Brien** will qualify for **Life Membership** on March 13, 2012. Congratulations John.
- ✓ The first **Executive Committee Meeting** is on February 13, 2012 at Royal Oak Hotel, 5442 Nicholson St, Fitzroy North at 10.30. Members are welcome.

Technology-New Stuff



SOY BASED URETHANE IN FORD ESCAPE

DEARBORN, Mich., July 10, 2011— Scientists at Ford’s Research and Innovation Center are hailing a major breakthrough with soy-based polyurethane foam — the primary substance that makes up a vehicle’s seat cushions, seat backs, armrests and head restraints. While many in the automotive industry are experimenting with a 5 percent soy-based polyol — one of the many ingredients used to create the foam used in vehicles — Ford researchers have formulated the chemistry to replace a staggering 40 percent of the standard petroleum-based polyol with a soy-derived material. And they are doing it without compromising the durability, stiffness or performance of the foam. “Five percent is relatively easy, a nice walk-before-you-run application, but there really isn’t a solid business case to do it,” says Matthew Zaluzec, manager of Ford’s Materials Research & Advanced Engineering Department. “At 40 percent, which was formulated in our lab by our researchers, we have the ability to make a significant impact on the environment while reducing our dependency on imported petroleum. “Initial projections estimate that using soy-based foam at high volumes could represent an annual material cost savings of as much as \$26 million. As for the potential environmental benefit, according to the National Institute of Standards and Technology, soy polyols have only one-quarter the level of total environmental impact of petroleum-based ingredients. Source: Ford Motor. Others



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PLASTICS IN HISTORY

The Humble **Plastic** Bread Clip



The bread clip was invented by **Floyd G. Paxton** and manufactured by the **Kwik Lok Corporation** based in Yakima, Washington with manufacturing plants in Yakima and New Haven, Indiana. As far as Kwik Lok® is concerned, both their corporation and the bread clips they make share the same name.

Floyd Paxton was known for repeatedly telling the story about how he came up with the idea of the bread clip. As he told it, he was on an airliner and opened a bag of peanuts and then realized he had no way to close up the bag. He rummaged through his wallet and found an expired credit card and hand-carved his first bag clip with his small pen knife. Of course, this was many decades ago when one could carry a pen knife onto an airplane. When a fruit packer, Pacific Fruit, wanted to replace rubber bands with a better bag closure for its new plastic bags, Paxton remembered his bag of peanuts. He whittled another clip from a small sheet of Plexiglas. With an order in hand for a million clips, Paxton designed a die-cut machine to produce the clips at high speed. Despite repeated attempts, Paxton never won a U.S. Patent for his clips. He did win numerous patents for the high-speed "bag closing apparatus" that made the clips, inserted bread into bags and applied the clips for the finished product. The bread clip was developed in the early 1950s because there was a growing need to close plastic bags on the packaging line very efficiently. Manufacturers, using more and more automation in the manufacture and packaging of food, needed methods to allow them to raise production volumes and reduce costs. At the same time a hurried (or lazy) population of consumers wanted a fast and easy way to open and effectively seal food bags (originally bread hence the name). The simple bread clip allowed for that. In addition, re-closability became a selling point as smaller families and higher costs slowed consumption, leading to a potential for *higher rates of spoilage*. *Kwik Lok has a manufacturing plant in Cheltenham.*

Source: Kwik Lok, Wikipedia, Others



ARCHIVED FILES

You may be interested to know that we still hold most of the early files for **Plastics Pioneers**. And many of our records are now stored electronically on **Microsoft SKYDRIVE**. This is a secure site and linked to, but different to our web site. It is only accessible by the **President and Treasurer** and the **Administrator** who happens to be the Editor of the Newsletter. Our Membership records are also stored on the site and can be changed as changes occur and accessed by the key office holders. Any member has an interest and wants past details, a note to the Editor, may provide the answers you want.

FROM THE PAST

"MONSANTO MAKES POLYSTYRENE"

"Sydney Morning Herald", December 2, 1953

"Monsanto Chemicals (Aust.) Ltd., Melbourne, has begun production of polystyrene, a modern plastic molding material, in a new plant at the West Footscray factory. Designed capacity of 3,000 tons a year, worth about £1 million, will fully meet Australian requirements, director's state." Monsanto in 1948 – see below.



"£250,000 FACTORY"

"Sydney Morning Herald", February 11, 1954

C.S.R. Chemicals Pty, Ltd. plan to build a new £250,000 factory at Rhodes, near Sydney. A spokesman for the Company said yesterday that the factory would manufacture a new plastic molding powder. This is part of a £.4 million plan to make new chemicals goods in Australia. A project engineer of C.S.R. Chemicals, Mr. H. Hawse, returned to Sydney last night after three months in England and the United States completing plans for the factory. Construction is expected to start early this year

"I.C.I.A.N.Z. Press Conference"

"The Argus", June 7, 1951


With the holding of its first formal Press conference yesterday, **Imperial Chemical Industries of Australia and New Zealand Ltd.** has Inaugurated a procedure which might well be followed by others in this country. Yesterday the company Invited the Press to hear what it is doing and what it proposes to do. After spokesmen had announced plans to produce more plastic molding powders, which are critically short in Australia today, questions were answered "on the record" about a variety of production and financial matters. Large public «companies are often most difficult to contact on matters of policy, and this latest move will ensure that I.C.I.A.N.Z., by regular Press Conferences, will keep in touch both with shareholders and the public generally

Source: Trove; Australian National Library, Canberra.


THOUGHT FOR THE DAY

"Don't be humble; you are not that great"


Up-coming Events



PLASTICS PIONEERS LUNCHEON MEETING
 WEDNESDAY MARCH 14, 2012
 KOOYONG LAWN TENNIS CLUB




The Royal Society of Victoria
 Promoting science since 1854 and polar science since 1874



Dr. Robb Stanley Executive Officer,
 The Royal Society of Victoria

**"The Royal Society of Victoria:
 150 Years of History, Mystery,
 Science and Anecdotes"**

Exciting New Venue
 Kooyong Lawn Tennis Club



WEDNESDAY, MARCH 14, 2012

[REGISTER](#)

Or see Page 8



WINERY VISIT
BLUESTONE LANE
 VINEYARDS

Sunday April 1, 2012
 Bluestone Lane Vineyard &
 Veraison Restaurant
 269 Myers Road, Balnarring
 Melways 163, A 7

Extensive Wine Tasting
 Main Course and Desert, Coffee and a glass of wine
 Additional Wine to own account. \$49.00 per head

Hamper Raffle generously donated by




Winery visit
Sunday April 1, 2012
 12.00 for 12.30 PM
Note New Date.

Bluestone Lane Vineyard & Veraison Restaurant
 269 Myers Road, Balnarring

[REGISTER](#)

Or go to Page 8



The Royal Society of Victoria
 Promoting science since 1854 and polar science since 1874

The speaker at the **March 14 Plastics Pioneers luncheon** is **Dr. Robb Stanley, Executive Officer, The Royal Society of Victoria**. His subject is:- **"The Royal Society of Victoria; 150 Years of History, Mystery, Science and Anecdotes."**

The **Royal Society of Victoria** is Victoria's oldest continuous scientific society. First established in 1854 (initially, as the Philosophical Society of Victoria) its aim has been the promotion and advancement of science, and the dissemination of scientific information to the general public.



The Royal Society of Victoria, 9 Victoria Street, Melbourne



Dr Robb Stanley
 Executive Officer, the Royal Society of Victoria

[REGISTER](#)

KEY DATES FOR 2012

Luncheon Meeting	Wednesday March 14, 2011
Winery Visit	Sunday April 1, 2012
Luncheon Meeting	Wednesday June 13, 2012
Special Event Luncheon	Wednesday July 11, 2012
AGM & Luncheon	Wednesday September 12, 2011
Partners' Luncheon	Wednesday December 5, 2012

Luncheon Wednesday June 13, 2012

[REGISTER](#)

REMINISCENCES OF A TRAGIC NIGHT - 48 YEARS ON
THE WORST PEACE TIME DISASTER IN AUSTRALIAN NAVAL HISTORY

PLASTICS PIONEERS
LUNCHEON
Wednesday
June 13, 2012

Speaker: Russel Dale
Wednesday June 13, 2012
Kooyong Lawn Tennis Club
12.00 for 12.30 PM

On February 10, 1964 HMAS Voyager was performing trials in Jervis Bay under the command of Captain Duncan Stevens. The aircraft carrier HMAS Melbourne, under the command of Captain John Robertson was also undergoing trials. The ships collided at 8.58 PM and Voyager was struck aft of her bridge structure cutting her in half. Of the 314 personnel aboard Voyager, 14 officers and 67 sailors were killed. Russel Dale was a 17 year old seaman on board HMAS Melbourne on the night of the Melbourne-Voyager collision. He has published and unpublished photographs of the ships and many anecdotes from those who survived.

On The Lighter Side

A well-to-do business man was walking down a Melbourne street when he was accosted by a particularly dirty and shabby looking homeless man who asked him for a couple of dollars for dinner. The businessman not accustomed to handing out money, somehow felt the need and took out ten dollars and asked, "If I give you the money, will you but beer or wine instead of a meal?" Indignant the homeless man replied, "No, I stopped drinking years ago." "Will you go fishing instead of buying food," the businessman asked. The homeless man said, "No, I do not waste time fishing as I need every minute of the day trying to stay alive."

"Will you spend this on green fees at a golf course instead of food?" "Are you NUTS?" said the homeless man, "I have not played golf for twenty years." "Will you spend money on a woman in the red light district instead of food?" "No way, I would not know what I would get with only \$10 and a feed is far more important." The business man smiled, "I am not going to give you the money and instead I am going to take you home for a terrific dinner cooked by my wife."

The homeless man was astounded. "Won't your wife be furious with you for inviting me to your home? I am dirty and probably smell pretty disgusting." The businessman replied. "That is OK. It is important for her to see what a man looks like after giving up beer, wine, golf, fishing and sex."

Source: A friend who is neither a homeless person nor businessman, so he says!

Help Us

Send News and Information to:
plasticspioneers@iinet.net.au

Plastics Pioneers Newsletter Edition 120 Email & Mail Version



PLASTIXANZ
Plastics Industry
Awards
2012

PlastixANZ are looking for sponsors for, both Award and Event and two levels of sponsorship are available; Platinum and Gold. More details are available by clicking the links below.

[AWARDS](#)

[SPONSORS](#)

The Awards will be held at **Kooyong Lawn Tennis Club** on **Wednesday September 12, 2012**. The objective of the awards is to recognise achievements within the Australian and New Zealand plastics industry.

Sponsorship for the **Awards** and the **Event** are available and four Award sponsorship categories are still available. **BASF** have signed on as a sponsor for the **DESIGN & INNOVATION AWARD**

Also note:

PLASTIXANZ
YOUR PLASTICS INDUSTRY INNOVATION PORTAL
PLASTICS INDUSTRY YEAR BOOK

The **PlastixANZ Plastics Industry Year Book** will be distributed to a comprehensive data base including plastics and non-plastics industries. The majority of plastics industry products and components are supplied outside the plastics industry. It is essential that general industry and commerce are aware they can source their requirements from local production and suppliers. Too often buyers source their requirements from overseas without providing the local suppliers an opportunity to quote. Every opportunity must be provided for the local manufacturer to quote for the business. **PlastixANZ Plastics Industry Year Book** will provide considerable information about local suppliers.

Supplied by Trevor Walton, *Plastics Pioneer and Managing Director PlastixANZ*

DO YOU KNOW A POTENTIAL NEW MEMBER?

Help strengthen **PLASTICS PIONEERS** and encourage Friends to join Plastics Pioneers. Click the Plastics Pioneers Logo for a [MEMBERSHIP FORM](#)



Summer 2012



FROM THE PAST

The Plastics Pioneers **Executive Committee of 1981-1982**. Eric Grant, Roy Hammond, Roy Bethune (President), Ross Kingston, Alan Black (Secretary) took the photo and Bob Jeavons and Spencer Watson were absent

How to Contact Plastics Pioneers

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Did You Know?

Toner is a powder used in **laser printers** and photocopiers to form the printed text and images on the paper. In its early form it was simply carbon powder. Then, to improve the quality of the printout, the carbon was melt-mixed with a **polymer**. Toner particles are melted by the heat of the fuser, and bind to the paper. In earlier machines, this low-cost carbon toner was poured by the user from a bottle into a reservoir in the machine. Current machines feed directly from a sealed laser toner cartridge. Modern laser toner cartridges intended for use in color copiers and printers come in cyan, magenta, yellow and black

The specific polymer used varies by manufacturer but can be a **styrene acrylate copolymer**, a **polyester resin**, a **styrene butadiene copolymer**, or a few other special polymers. Toner formulations vary from manufacturer to manufacturer and even from machine to machine. Typically formulation, granule size and melting point vary the most.

Originally, the particle size of toner averaged 14–16 micrometers or greater. To improve image resolution, particle size was reduced, eventually reaching about 8–10 micrometers for 600 dots per inch resolution. Further reductions in particle size producing further improvements in resolution are being developed through the application of new technologies such as Emulsion-Aggregation. Toner manufacturers maintain a quality control standard for particle size distribution in order to produce a powder suitable for use in their printers. Toner has traditionally been made by compounding the ingredients and creating a slab which was broken or pelletized, then turned into a fine powder with a controlled particle size range by air jet milling. This process results in toner granules with varying sizes and aspherical shapes. To get a finer print, some companies are using a chemical process to grow toner particles from molecular reagents. This results in more uniform size and shapes of toner particles. The smaller, uniform shapes permit more accurate color reproduction and more efficient toner use.

Source: Wikipedia, Others

A CORRECTION

Edition 119 of the Newsletter had a serious omission. It omitted reference to one **Honorary Life Member of Plastics Pioneers**. The first honorary member of Plastics Pioneers was **Bob Jeavons** who received the honour in 1995 after many years on Committee. Bob was president 1995-1996 (18 months), 2000-2001, and 2001-2002. We wish to extend our sincere apologies to Bob Jeavons on this omission.

Editor

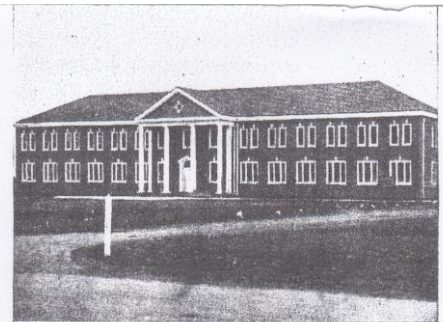
"Experience is a wonderful thing. It enables you to recognise a mistake when you make it again".

Nostalgia

The Editor happened upon an early photograph of the

The **Monsanto** offices at West Footscray in a copy of "Australian Manufacturer", April 1948. The Editor understands that this is all that is left of the West Footscray Site post Huntsman.

The building was based on American Southern architecture. The West Footscray or Braybrook site was a major move from the small South Melbourne site of Monsanto Southern Cross limited a venture funded by Nicholas 'Aspro'. The initial Monsanto Australia limited was a JV with Nicholas and later became a wholly owned subsidiary of Monsanto Chemicals Limited of UK.



Executive Office and Laboratories, Monsanto (Aust.) Pty., Ltd.

[Page 196. April 15, 1948.]

This was included in the same article and includes a panoramic of the site as it was in 1948



General view of works, Monsanto (Aust.) Pty., Ltd.

BACK PAGE

Interesting, Totally Useless Plastic Related Information



Gert Noel
Synthetic Cork Inventor

The Plastic Wine Cork

Gert Noel, a Belgian businessman and wine connoisseur got the idea to create an alternative wine closure to cork at a family party after opening a number of bottles of wine ruined by cork taint. He applied forty years of manufacturing knowledge derived from cellular extrusion of synthetic materials. He embarked on what he called 'Project Broomstick' in 1993 determined to create a wine closure based on foam extrusion technology. He spent six years in research before producing the first 'nomacorc' closure.

Several European wine makers saw the potential and in 1999 in Zebulon, North Carolina, Marck Noel, the son of Gert Noel established Nomacorc. In 2001 they expanded into Europe with operations in Eupen in Belgium and later at Thimister-Clemon, Belgium. They now have facilities in Yanti, Shandong, China.

Nomacorc use a patented two stage extrusion process. In the first stage materials are extruded to form a long foamed cylinder. The second stage extrudes a flexible outer skin that is bonded to the inner core. The shape is then stabilised in a cool and then cut to shape and size.

Nomacorc closures are used in thirty of the top forty wineries around the world and annual output is in the billions.

The debate continues about the relative merits of cork versus plastics versus aluminium closures and some say that a plastic cork indicates a cheap wine. Most readers will have had wine from a plastic bag in a box and the fact that there are billions of plastic corks used annually and the business is growing must mean plastic does the trick when it comes to oxygen permeability as well as preventing cork taint.



Sources: Nomacorc®, Wikipedia, others



VULCANIZATION

“Charlie Goodyear Died Broke”

Charles Goodyear, the inventor of vulcanized rubber was unsuccessful and died broke. In 1839 a small rubber business in Woburn Massachusetts hired a fellow by the name of Charles Goodyear; someone who had been peddling the idea of temperature –stable rubber for some years. He had run up a sizeable debt because of his fruitless tinkering and had been in and out of jail because of his bad credit. His task was to eliminate the problem that rubber had of being brittle in the cold and soft and gooey in the hot weather.

He or someone he was working with left a piece of rubberized fabric on a hot stove and the sizzling rubber began to burn. Although charred Goodyear noticed that it did not go runny. He questioned whether the mix of rubber, sulphur, and white lead caused the rubber to be melt-proof. His experiments continued and he slid deeper in debt. He managed to take out a US Patent on his invention but this was his last good business decision. He met with two English businessmen, Hancock and Macintosh who worked out that it was the sulphur that had made the rubber temperature stable and Hancock filed a British patent. A series of nasty law suits followed and finally a decision was made in favour of Goodyear as the inventor of vulcanization.

Goodyear died deep in debt in 1860. Six of his twelve children died of malnutrition. However his surviving heirs became very wealthy from the royalties from his patent. More than one company adopted the name of Goodyear and some survive today. The more famous company founded by Frank A. Seiberling in Akron Ohio and became **The Goodyear Tire & Rubber Company**.



Sources: Wikipedia, About.com, Goodyear®

REGISTRATION

LUNCHEON MEETING

Wednesday ,March 14, 2012
"THE ROYAL SOCIETY OF VICTORIA; 150 YEARS OF HISTORY, MYSTERY, SCIENCE & ANECDOTES."



Please register the following Members/Partners at \$49.00 and Guests and \$54.00 per head 12.00 for 12.30PM

Given Name Surname Member/Guest

Given Name	Surname	Member/Guest

Name Signature..... Date

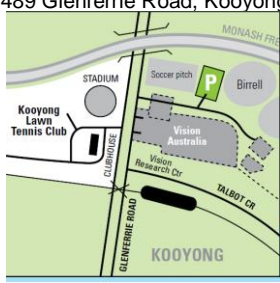
PAYMENT

- Cheque payable to Plastics Pioneers \$.....
- Bank Transfer to Plastics Pioneers Westpac \$.....
 BSB 033-372 A/C 241 631
 Indicate Remitters Name on Transfer

Mail Registration to: Dorothy Morrison, 7 Whiting CT, Wantirna South 3152 or Email domo1942@hotmail.com or Fax: 03 59883661

Download a Form [HERE](#)

Venue: Kooyong Lawn Tennis Club, 489 Glenferrie Road, Kooyong

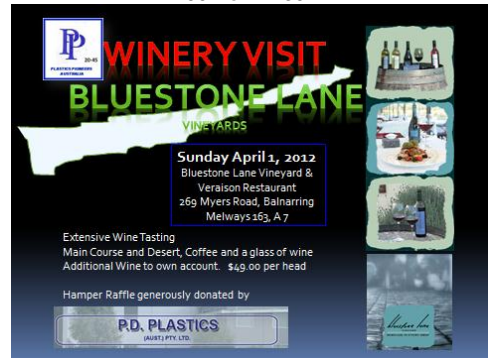


Please do not park in KLTC Car park. There is adequate parking opposite in public park next to Vision Australia

REGISTRATION

**WINERY VISIT
 BLUESTONE LANE VINEYARD**

Sunday April 1, 2012
 12.00 For 12.30 PM



Wine Tasting and selection of main and desert plus a glass of wine. Additional wine to own account PLUS a raffle of a hamper donated by **PD Plastics Pty Ltd.**

Please register the following Members/ Partners at \$49.00 and Guests at \$ 50.00 per head

Given Name Surname Member /Guest

Given Name	Surname	Member /Guest

Name..... Signature..... Date.

PAYMENT

- Cheque payable to Plastics Pioneers \$....
- Bank Transfer to Plastics Pioneers Westpac
 BSB 033-372 A/C 241 631
 Indicate Remitters Name on Transfer

Mail Registration to: Dorothy Morrison, 7 Whiting Court, Wantirna South, 3152 or Email; domo1942@hotmail.com Or Fax to 03 5988 3661

Download a [FORM Here](#)

[Get Directions Here.](#)

