

# POTTERS HANDBOOK

Health and Safety Policies and Procedures

Noosa Shire Arts and Crafts Ceramics Studio
Wallace House
1 Wallace Drive
Noosaville 4566

A community studio for beginners through to advanced ceramicists

"The means of self-expression and creativity are essential Human needs and essential to the health of society"

Commonwealth Government Cultural Policy Creative Nation 1994

Humans have been using clay for thousands of years to make vessels, ritual objects and decorative sculptural work. Our diverse group of members have one definite thing in common, we all love creating with clay!

We welcome you and hope you enjoy your studio experience with us.

As a member of Noosa Ceramics Centre we are part of a community who share a space and some expensive equipment. As with all workplace environments there are potential health and safety risks. All new members are required to attend an Induction and complete a Health and Safety checklist.

## PLEASE READ THIS HANDBOOK AND REFER TO IT AS NEEDED - IF IN DOUBT ASK.

Our studio is part of a flourishing arts community and it will only thrive if individuals contribute to the organisation and running of the studio in a range of ways. Our studio relies on everyone being autonomous and responsible for:

- Health and Safety routines being followed
- Respectful sharing and careful use of all equipment and studio space
- Cleaning (damp cloth, wet mop or damp broom only) and organising any area used before leaving the studio.
- Honesty and prompt payment of \$5 daily fees and individual firing fees.
- Our attendance fees are vital to the continued maintenance of the studio. Loading kilns, cleaning and admin jobs are not an excuse to avoid paying if we are also (on the same day) using the studio for our own work practice.
- Making the majority of work in our studio. We are not just a firing service and the continuing maintenance of the studio depends on our regular attendance fees.
- When we join NSACA we will receive a lanyard with a coloured tag that identifies each member as a currently paid up. The card records name, emergency contact details and any relevant medical details e.g. allergies, pacemaker etc. Please wear it (where practical) in the studio.

#### **ON ARRIVAL**

Enter the ceramics studio via the door to the left of the main entrance or via rear gates if they are open. (The key is kept in a coded key safe next to the door).

If you are the first person at the studio, unlock both gates and kiln shed, BEFORE returning the key to the key safe. (Never put it in your pocket!)

# NSACA follows COVID-19 safety practices.

- Please use the QR Code for entry and exit or sign the sheet if you don't have a mobile phone.
- Please use the hand sanitizer provided before and after signing in.
- Please practice social distancing.
- Pay your \$5 attendance fee and sign the attendance book. (Signing in and out is your insurance if an accident occurs).
- Please bring your own cup, hand towel.

# WORKING SAFELY WITH CERAMICS.

Clay, slip and glazes contain silica. When DRY this produces Silica Dust. Inhaling Silica Dust can lead to Silicosis which is a serious and irreversible lung disease.

# ROUTINES TO MINIMISE THE RISK OF INHALING CLAY DUST.

Wash down the work areas at the end of each day's work and clear up any spills immediately.

#### WET/ DAMP CLEANING ONLY

- Wipe down the wheels after using.
- To prevent creating and inhaling dust NEVER use compressed air or dry brooms to clean the studio. Wet or damp brooms only.
- It is recommended you wear a protective outer garment e.g. apron or smock to stop clay particles from clinging to your clothes. A waterproof apron can be wiped clean and is recommended over a cotton or denim. Avoid wearing wool or fabrics that trap dust.
- Wash clay off your skin before it dries.
- For your safety wear a mask when fretting /sanding unfired work. This must be done outside, out of the wind and away from other people. Where possible use a sponge for finishing off work rather than sanding or scraping or use a spray bottle to damp down the unfired work first to avoid raising a dust.
- Grinding of fired work or fired glaze off kiln shelves requires an industrial ventilator mask and extractor. Our studio does not have this equipment.
- If your work causes damage to shelves it will be your responsibility to pay for the shelf to be professionally cleaned. Any fretting / grinding of fired work must be done away from Wallace House.

- Store your clay and tools in an airtight lidded container. in the Personal Storage spaces (see Appendix 4).
- Dry clay can be put into designated buckets for recycling.
- Be responsible for bringing and taking home a hand towel and sponge for drying your hands and cleaning your area.
- Washing hands and tools to be done in the clay sinks. Pour clay water into sinks.
- Never wash clay hands in the toilet hand basin or kitchenette sink as it will block the plumbing.

#### **GLAZING: ROUTINES FOR MINIMISING RISKS**

Dry glaze components are potentially toxic if inhaled or ingested. When mixed with water and clay, some can be absorbed through the skin.

- Metal oxides nad other expensive materials are stored in the locked box.
- All glazes and dry glaze components are stored in air tight containers and stored in a lockable area.
- Only experienced glaze makers have access to glaze components.
- Each container is labelled. Read the label and the corresponding information sheets in the Material Data information folder.
- To be on the safe side treat all glaze as though toxic.
- Wear a face mask, latex gloves and apron (preferably waterproof) and protective eye wear when making glaze.
- Clean up spills immediately.
- Glaze makers should work with a partner to avoid mistakes. (Second person double checks).
- The scales used for weighing dry glaze components are expensive and delicate and must remain in the studio. Please avoid moving them unnecessarily.
- Wash hands carefully before consuming food or drink after handling glaze.
- Use outside hose away from the building for cleaning glaze utensils.
- Refer to glaze making instructions displayed in the glaze area.

Even commercial glazes have risk so please research. http://walkerceramics.com.au/health-safety ROUTINES AROUND HEAVY LIFTING TO MINIMISE RISK OF INJURY Clay is heavy. Once fired, if dropped, it will shatter into sharp edged pieces. Some of the equipment used in the studio (e.g. kiln shelves) is heavy.

IT IS PREFERABLE TO WEAR CLOSED IN SHOES.

#### PRACTICE SAFE LIFTING FOR HEAVY OBJECTS

- Feet hip width apart
- Bend your knees
- Keep your back as straight as possible
- Breathe. Don't hold your breath
- Hold the object as close to your body as possible.

# GENERAL SAFE STUDIO PRACTICE

- Always have 3 exits open. They are your exits in case of fire.
- There should be at least two people working in the studio at all times.
- Ensure your hands are dry before touching any power connections or switches.
- It is recommended you wear closed in shoes and an apron (preferably waterproof). If you are loading or unloading kilns you must wear closed in shoes for protection.
- Follow any operational or H&S procedure charts displayed in each work area or on specific equipment. They are there for your information and protection.
- Be prepared to answer questions from less experienced members.
- Do not be afraid to ask questions of other members if you are in doubt about something. The only stupid question is the one you didn't ask!!

#### KILNS AND FIRINGS.

Before kilns can be loaded, the date should be advertised ont he board in the kiln shed at least 3 days before the work of loading can begin. This will give people time to organise themselves so that they can get ware and be there to help.

- Kilns are to be loaded and fired by experienced (volunteer) members only BUT please offer to help so that you can learn, gain experience yourself and share the work load.
- Kilns are only fired when there is enough work on the shelves in the kiln shed to fill the kiln
- The electric kiln programs are set and should not be changed.
- All care but no responsibility is taken, if for some reason, your work is damaged during loading or unloading.
- Work to be bisque fired must be completely dry and free of air pockets.
- Glazed work needs to be free of glaze on the bottom.
- Firing and pricing procedures:
- Work to be fired must be clearly marked with a potters mark and left on the relevant shelf in the kiln room with a note of name, date and brief description of work.

- Work that has been on the shelf the longest should, where possible, be given preference to go in the firing.
- Pricing of the firing should be done after unloading. Pricing varies. (See Appendix 8).
   Our studio does not price by weight.
- To avoid any disputes over firing charges, it is recommended that the person pricing the work, take a photograph of the sorted fired work laid out for pricing.
- Loading, unloading, firing and pricing is voluntary and does not carry special concessions, so please thank the volunteers when you see them.
- After your work has been fired and priced, the fee owing will be entered on your firing sheet in the (orange) Firing Fees Folder on the sign in desk. Please keep up to date with your payments. Finished work must be paid for before taking it home.

THE PUG MILL: Read operation / information sheet carefully before operating.

THE SLAB ROLLERS; require 2 canvas sheets and 2 cotton inserts. The canvas sheets are marked for use for white clay or dark clay. If the canvas sheets become soiled they need to be washed and hung out to dry. The cotton inserts are also marked as being for white or dark clay. Wash sheets at the end of use unless the next person is using the same colour clay. Unwashed sheets left around will create clay dust

N.B. Raw clay must never touch the rollers.

Like learning to drive, these safely routines will become automatic after a while, leaving you to concentrate on your creative journey into the wonderful world of working with CLAY, gathering lifelong friends along the way!



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# APPENDIX 1.

# MAKING GLAZES.

- Glazes that are made in the pottery are for everyone to use.
- Glazes can only be made by experienced members in the group and two people should always be involved in the process.
- If you are making glazes using raw materials, gloves and masks must be used for the whole time.
- If you are mixing dry materials ensure that the breeze is blowing the dust away from the main section of the pottery. If there is no breeze blowing, turn on one of the fans and direct the airflow so that it goes to the nearest exit.
- Before new glazes can be made in a large quantity, it must first be passed by the Management Committee. Before it is given the okay, test tiles with the glaze must be produced and then the names of a few members who will want to use this glaze.
- Glaze batches must not exceed a total of 5kg dry weight.
- Glazes are stored in plastic buckets. On the side of the bucket the recipe with the maturation temperature must be recorded so that it can be remade when it is finished and the date and who made it should also be on this sheet.
- Glazes need to be sieved before they can be used. The sieve must be thoroughly
  washed after it has been used so that residue doesn't contaminate other glazes.
- A test tile should also be tied to the handle of the bucket and another tile should be placed on in an appropriate place on the test tile board.
- Using Glazes.
- Glazes are stored in sealed plastic buckets so that they don't dry out.

- Before using a glaze, mix it up thoroughly with a drill. Using a spatula, wipe down the inside of the glaze bucket so that the sides are clean.
- Glaze your pieces by either pouring, dipping or brushing.
- When you have finished using a glaze, take the spatula again and ensure that the inside walls of the bucket are really clean.
- Wash up all equipment that you have used in a bucket, then dry it and place it bucket where you got it from, hopefully its correct position.
- If any glaze has spilt on the floor, get a wet mop and mop it clean.
- If you have used the hot wax, ensure that all wax that it on the bench is returned to the frying pan.
- It is best that when you are glazing work, you spread out newspaper so that when you finish it can be carefully collected and placed in the bin.



# WELCOME TO POTTERY/ CERAMICS GROUP.

As you know, the pottery is a community organisation within Noosa Arts and Crafts Association.

It is run by a Management Committee members who are responsible for the day-to-day running of the group. Members on this group give up lots of their own time to work on specific aspects for the group. These members are always willing to give assistance to new members and more established ones as well and all they ask is that their work here is appreciated by all members.

These are some of the ways you can help:-

- 1. When you join the Pottery group, make sure that one of these members is given your contact details, that is phone number and email address. They can then forward this information onto the member who is responsible for keeping these records. Information about the pottery is circulated this way.
- 2. Ensure that you have a Potters' mark. This mark has to be clearly visible on the bottom of your pieces both before and after a firing. This is the only way your pieces can be identified.
- 3. Make sure you have added your Potters' Mark to the Potters' Mark Folder. If you change your mark, ensure that the alteration is added to this folder.
- 4. Always wear your Identification lanyard at all time while in the pottery.
- 5. Keep your gear in a plastic lidded container with your name and member number clearly shown on the box. If you rent a storage place, keep your gear there otherwise take it home after every session. (See Appendix 4)
- 6. Volunteer as much as you can so that you get a better understanding of what happens in the day-to-day running of the pottery.
- 7. Keep your copy of your Potters' Handbook on file so that you can refer to it whenever the need arises. This is your responsibility.



# CLEANING SCHEDULE FOR CLAY RECYCLING SINKS

Both sinks need to be drained of the water and the deposited clay slip removed and placed in the drying moulds. From here it can be put through the pug mill and sold back to members. At the moment the price is \$1 / kg. All proceeds go towards the Kiln Account.

This job should be done about once a month so that the clay does not build up too high in the sinks. The S-bends should be removed and washed every six months.

DARK CLAY SINK WHITE CLAY SINK S-BENDS

Date/Signature



# APPENDIX 4.

PROCEDURES FOR THE OPTIONAL ALLOCATED PERSONAL STORAGE SPACES.

The only place where personal belongings can be stored in the Pottery Studio is in the designated Storage Spaces. There are only 44 of them available.

These spaces are divided into sections that are grid referenced for easy identification:- e.g. Section A is divided into four sub-parts A1, A2, A3 and A4.

Belongings are to be stored neatly in one or two plastic boxes that fit into each sub-part

There is a \$10 annual rental fee for each sub-part. This fee is due for payment in the first two weeks of December each year. Payments are made in the office upstairs. It is important that you tell Jean that you are paying for a storage area so that your name will appear on the Pottery Account details.

Proceeds from these fees goes directly to the KILN ACCOUNT.

If you choose not to use this service, the only option is to take all your personal belongings home after every session.

THIS WAS A STIPULATION PLACED ON US BY THE COUNCIL DURING THE REFURBISHMENT OF THE POTTERY.



# APPENDIX 5.

# KILN OPERATION MANUAL - (Reference Woodrow Kilns Manual)

#### POSITION AND SAFETY OF THE KILN.

- 1. Always provide adequate ventilation
- 2. Ensure that there are no combustibles under or near the kiln.
- 3. Nothing should be stored on top of the kiln.
- 4. No unauthorized person to go near the kiln while it is firing.

#### LOADING THE KILN.

The following safety gear should be available:-

Mask Class P1, gloves, long sleeve non-combustible clothing, safety-glasses with infrared filters for looking at cones.

# PREPARE YOUR KILN.

- Before loading the kiln, check the elements and rods for breakage or other damage. Every 3 or 4 firings the elements should be gently brushed or vacuumed to remove debris or dust. Elements should be a slightly grey colour and their surface should not be rough. There is a small dustpan and brush for the purpose beside the entry door.
- 2. Inspect your pottery to ensure it is completely dry and clearly marked with a potters' mark.
- 3. Make sure the kiln load is even. Choose pieces based on height. Load tall pieces on one level and short pieces on another. Always try and evenly load a kiln from side to side, top to bottom. This will promote even firing.
- 4. Ensure that the thermocouple is not too close to any piece, prop or shelf. (try to picture the end of the thermocouple probe at the centre of a sphere the size of a tennis ball)

- 5. For glaze firing, ensure shelves have a good coating of kiln wash over all surfaces. Alumina hydrate (white powder) can be sprinkled under ware to help prevent it from sticking to shelves.
- 6. Let pottery breathe. In order for the heat to fire your ware, make sure your pieces are 1 2 cm apart and leave a few centimetres at the top of each level for the heat to pass evenly throughout the kiln.
- 7. Allow the kiln to cool naturally. Bungs can be removed but do not open the door to cool it rapidly. Do not open the door until the kiln has cooled to below 50°C.

#### KILN SHELVES.

- 1. Most shelves will ultimately bend however the life of a shelf can be increased by regularly turning and ensuring that the kiln does not spend too much time at the top end of its cycle.
- 2. Cracking.

If a shelf has a crack in it, do not use.

# Reasons for cracking

- (i) Thermal shock too rapid heating or cooling 20 > 250 C
- (ii) Never fire damp shelves. (All shelves should be stored off the floor)
- (iii) Uneven heating or cooling due to poor circulation.
- (iv) Bad propping.
  - (a) Three props are more stable than four.
  - (b) If four props are used ensure that all props are in contact with shelf.
  - (c) Props should be placed in line vertically. Ensure face ends of props are flat and parallel.
  - (d) Keep the vertical line down from the thermocouple free of props.

# BUNGS IN DOORS AND ROOFS.

- 1. For bisque firing, both door and roof bungs should be left out until the kiln has reached 600 ° C.
- 2. For glaze firing, bungs can be left in as long as there is no oil or burn out material to be driven off. (oils in gold lustre)
- 3. Never have the bungs out for the entire firing.

## PYROMETRIC CONES

Pyrometric cones should be placed in every firing and should be able to be seen through the bung hole in the door.

#### GENERAL IMPORTANT NOTES.

- 1. Moist ware is more likely to explode in a firing.
- 2. Do not place anything that will burn in a kiln e.g. paper, cloth, wood.
- 3. No metallic material should be placed in a kiln.
- 4. Where a kiln has not been in use for a few months and humidity has been high, fire the kiln to reach 150°C to dry out the refractories.
- 5. If a kiln is not in use, keep the door shut.
- 6. The programs on the kilns have all been set. Alterations can be made if you seek and gain approval from three members of the management group.
- 7. When loading kilns, take photos of your progress so the location of pieces is known, This can also be very useful when pricing a kiln load as the photos clearly show the space taken up by particular pieces.

#### **EXHAUST FAN**

The exhaust fan needs to be on for the whole firing. When the firing cycle has concluded, the fan should then be turned off, preferably at least 30 minutes after the cycle.

There is a timer switch that activates the fan. It is set to start at 2 or 3am so that the second half of the firing is in progress when the solar panels on the roof of the House can power them.

Most firings in the electric kilns will finish somewhere between 1pm and 4pm depending on which firing cycle is being used. It is important to turn the timer switch off so that it does not activate the fan again at 2am.

The timer switch has saved a lot of electricity usage since it has been installed and it also means that the fan is only on when it is needed.

#### FIRING PROCEDURES.

It is House policy that at least two people are required to load and unload kilns.

Kilns should not be unloaded if the ware is too hot to handle. When the temperature guage reads less than 50C then it is generally safe to unload.

Bungs on the top and the front of kilns can be taken out to speed up the cooling cycle but this should only happen after at least 12 hours of cooling. The door can also be left adjar after the kiln has cooled down to below 100C.

PRICING OF FIRED WARE. (See Appendix 8).



# APPENDIX 6.

#### THE GAS KILN.

Noosa Arts and Craft Association allows only qualified members to fire this gas kiln. Two members must be in attendance at all times.

Liquid Petroleum Gas is the fuel used and as it is highly flammable, it is extremely important that strict safety instructions are followed at all times. Qualified members who are able to fire this kiln are all very aware of these safety regulations.

The names of the members who are qualified to fire this kiln are held in a register in the office. Only those people are able to get the keys that open up the gas bottle lid and the kiln itself.

A firing to cone 10 usually takes around 8 to 9 hours. It is best to start around 6 or 7 am so that the firing is finished in the early part of the afternoon.

The kiln must be attended at all times and regular readings at no more than 1 hour intervals need to be taken so that the correct monitoring of the kiln can take place.

It is best if these reading are recorded on a graph as well so that there can be a quick response to temperature changes.

A cone pad consisting of three cones must be placed in the kiln so that they are clearly visible during the firing. This is the only really accurate method of knowing the temperature inside the kiln. Pressure adjustments to the burners can be made after observations are taken as a result of how the cones are dropping.

If you wish to become a qualified member, you need to:- (1) Come along to a number of firings and make observations of what actually happens. (2) You would then need to take charge of a firing under the supervision of the Committee member in charge of this kiln. (3) If you demonstrate proficiency, then you will be awarded a certificate and your name will then be added to the Register held in the office.



#### GENERAL NOTES ABOUT THE POTTERY.

- 1. If you are the first person to open up the pottery you must enter via the front door and not through the access door into Wallace House. You could be locked in accidently if you enter through this door.
- 2. The front door is locked with a padlock and the key is located in the key safe on the right side of the front door. This safe is opened with a code that you will be given after joining the pottery. Upon entering using the key, it is your responsibility to then unlock three other doors, two gates in the pottery and the kiln shed door. The key is then placed back in the key safe. Push it closed, scramble the code and then draw up the black cover. The key is not required to lock up the pottery.
- 3. There is a Sign-in book located on the desk at the front door. It is important that you sign in and out every time you attend the pottery.
- 4. At the moment there is a \$5 activity fee that members need to pay when they come into do their own work. This activity fee is split when it is taken upstairs. \$2 GOES TO THE HOUSE AND \$3 IS BANKED INTO THE POTTERY ACCOUNT. Before this is done 15% of the \$3 is placed into the KILN ACCOUNT and the remainder is placed into the GENERAL ACCOUNT.
- 5. The LANYARD with your name and contact details which is given to you when you join has to be worn at all time while you are in the pottery.
- 6. If you wish to leave any private property in the pottery, it must be stored in a lidded container that has your name and Wallace House number clearly marked on the front of the box. This box must be stored in the storage area and a \$10 annual rent is charged for this space. This fee is due in December each year. All proceeds go towards the kiln account.
- 7. ON WEEKDAYS, WEEKENDS AND PUBLIC HOLIDAYS, there must be at least two people in the pottery at all times for it to remain open for activities.

- 8. All green ware that is unfinished must be stored in the drying room and not left on the work tables..
- 9. Equipment that belongs to the pottery should not be taken home.
- 10. All equipment and work stations should be left in a clean and tidy state after you have finished work.
- 11. Clay from the clay recycling sinks is dried in the plaster moulds and then put through the pugmill. This is then sold to interested members and all the proceeds go towards the KILN ACCOUNT.
- 12. The Management Committee of the pottery meets on the third Monday of the odd months and there is a General members' meeting held on the third Monday of the even months. All members are encouraged to attend the General meeting if they can.
- 13. We encourage members to learn how to fire kilns and workshops will be run on a regular basis so that more members will feel confident with this process.
- 14. The same applies to the Pricing Procedures. If your work has been fired it is your responsibility to help with unloading and pricing the ware that is in that kiln.
- 15. At the moment we have two large electric kilns that fire most of the work made in the pottery. Kiln No 1 is to be mainly used for Low, Mid and High firings. For special circumstances, this kiln can be used to bisque ware. Kiln No 2 is to be used as a bisque kiln and it can be stacked with ware over a couple of weeks. The very thick props can be used in the initial set ups so that Kiln No 1 can be fired.



#### **APPFNDIX 8**

#### PRICING POLICY

#### ALL WARE THAT IS FIRED IS PRICED ACCORDING TO ITS VOLUME.

All the ware in a kiln load is measured to calculate its volume. Everything is treated as though it is a rectangular prism so that we multiply its height by its width by its length.

#### VOLUME = LENGTH X WIDTH X HEIGHT

This process works very well and takes the guess work out of pricing.

This pricing process works best with about three or four people.

All pricings are then recorded in the Pricing Book that can always be found on the entrance deck.

HOW TO PAY FOR FIRED PIECES.

The Firing Book records each firing and all the potters whose work has been fired.

- **Step 1.** Find the firing that had your work in it.
- **Step 2**. When you find your name, you will find that a number has been recorded and the amount that you owe.
- **Step 3**. Go to the firing box that is located beside the front door and take a small record sheet and a small plastic bag from the front of the box.
- **Step 4**. On the record sheet, write the firing number, the amount you have paid, your name and the date and then place this with either your money or your receipt, if you paid upstairs, into the small plastic bag and place this in the box.

On a regular basis, the Treasurer unloads this box and then checks the amounts recorded on the sheets against what appears in the book. If your number or you name is not on the sheet it is very difficult to determine whose money is in the bag.

The money is then taken upstairs and Jean counts and banks it.



# WALLACE HOUSE POLICY DOCUMENTS LIST

Noosa Arts and Crafts Association has a number of policy documents that are stored in the office at Wallace House and can also be found on the website.

# **POLICY DOCUMENTS**

- 1. Code of Conduct
- 2. Accident and Incident Reporting
- 3. Property Damage Reporting
- 4. Security Reporting
- 5. C. P.R.
- 6. Fire and Evacuation Procedures