



# Pontrilas Sawmills Ltd

## Safe Working Procedures

SWP CON-10v2

Issue No: 2

Review Date: Nov 2021

Location area: Treatment Plant

Risk Assessment No: CON-10

Completed By: Sara Withers

Date: 19-11-2020

Checked By: Karl Bythell

Date: 19-11-2020

**Task/ activity:** Treatment Plant Operations

**PPE to be used:** V12 safety boots, hi viz, chemical resistant gloves. **Face shield, chemical resistant wellington boots, coveralls, chemical resistant gloves / sleeves for changing IBC's and collecting chemical samples**

**Site Rules For** NO FOOD OR DRINK IS PERMITTED TO BE CONSUMED IN THE TREATMENT PLANT

**Pre-operational safety checks:**

Before loading, check carriage for cracks or damage which makes the bogie car unsafe to use.

Grease trolley wheels every 3 days.

Check that there are no objects restricting movement of the bogie car to and from the treatment pot on the tracks.

Check ratchet straps for securing the loads are free from defects and can be locked.

**Task or work operation:**

- Loading Treatment Pot 1.**
1. Before loading packs onto bogie car ensure all packs are secure with banding and free from dust if pack has come from pack cutter .
  2. Total length for bogie 1 is 12 metres, 1.2metres wide and 1.2metres high.
  3. Metal bearers are situated on the trolley to help stabilise the load and to assist in withdrawal of the lift truck forks from the pack.
- Maximum height for all packs on the bogie car is 1.2mtrs.**
4. All packs must be secured to trolley with ratchet straps.



5. Select static control on control panel
6. Select and hold load command on control panel. This moves the packs onto the transfer trolley .
7. Select transfer control on control panel.
8. Select and hold load command on control panel. This moves and positions all packs onto the transfer trolley .
9. Move the transfer trolley left or right to align with the bogie vessel tracks. An alarm will sound while this process takes place .

Task or work operation:  
Continued.

### Loading Treatment Pot 1 continued..

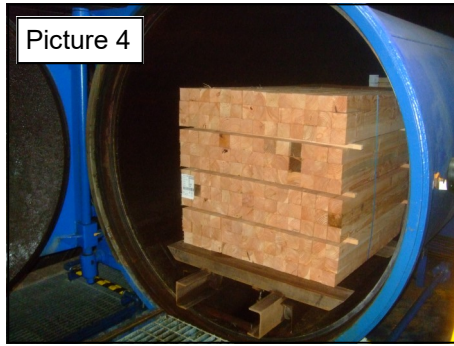
Picture 3



The hydraulic drive unit shifts the transfer trolley from left to right.

6. Open the vessel door using switch on the control panel.
7. Select vessel control on control panel.
8. Select and hold load command on control panel. This moves the packs into the vessel .

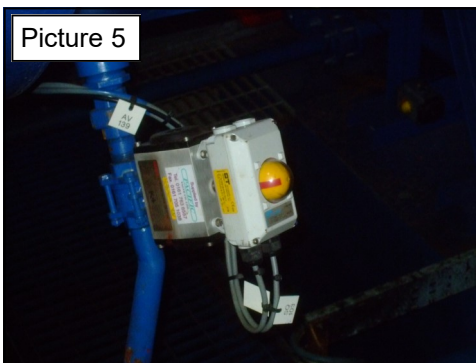
Picture 4



Packs inside vessel ready for treating.

9. Select switch no 7 and hold in the raise command to raise the vessel. An alarm will sound while this process takes place.
10. Select switch no 6 and hold in the door close command to close the vessel door.
11. Select switch no 5 and turn to the lock position.
12. Select switch no 4 to close the test cock on the side of the vessel.

Picture 5



Test cock switch on the underside of the vessel.

13. Return to the computer in the office and select the saved tally number.
14. Press automatic to start the programme.

**Task or work operation:  
Continued.**

**Entering information onto Computer for treating:-**

1. Enter which pot for treating - pot 1.
2. Click on tally no Charge no .
3. Click tally - the tally number for the charge will appear on the screen.
4. Click available tally - create next - ok.
5. Click green or brown for tanalith or tanatone .
6. Enter pack details.
7. Choose which class to be treated.
8. Click add to list.
9. Click save.
10. A message lights up on the computer when the end of the current charge is completed.

**Unloading Treatment Pot 1:-**

1. Open the test cock, unlock and open the vessel door.
2. Select switch no 7 to lower the vessel An alarm will sound while this process takes place .
3. Select and hold unload command on control panel. This moves the packs onto the transfer trolley .
4. Transfer the car left or right to align with the static unloading area. An alarm will sound while this process takes place .
5. The waiting loaded trolley can then be moved into the pot.

**Unloading treated packs from trolley:-**

10. Release and remove the ratchet straps that are securing the packs of timber to the trolley and place them behind the trolley - This avoids damage to the wheels of the fork lift truck or the floor of the treatment plant . **CHEMICAL RESISTANT GLOVES MUST BE WORN WHILST CARRYING OUT THIS TASK.**
11. Unload the trolley and place treated packs of timber at the top end and office side of the plant, this is called the drip area.
12. Packs of timber must remain in the plant until they cease dripping and the surface is dry minimum of 48 hours .
13. When the treated timber is dry, packs should be removed from the treatment plant as soon as possible.
14. When the trolley has been unloaded and there is a new load of timber to be treated, start the process again.

**Task or work operation:**

**Loading Treatment Pots 2 and 3.**

1. Before loading packs onto trolley make sure that the packs are secure with banding and free from dust if pack has come from pack cutter . Total length for both trolleys is 15 metres, 1.2metres wide and 1.2metres high. Use bearers to help stabilised the load, all packs must be secured to trolley with the chains. When stacking part packs on top of each other on the trolley make sure that packs have the correct amount of bearers to make the load stable.
2. On the processing record fill in the details as required.
3. Push trolley in, make sure that the trolley enters the treatment pot fully use the ram if necessary to push the trolley completely in.



4. Remove the tracks with the tools provided and place on the roadway.
5. Turn door motor on, located on the control panel.
6. Close door on treatment pot and lock.
7. Turn door motor off, located on the control panel.
8. Check water flow is coming through pot in control room, when water is flowing close tap in control room.
9. On control panel in control room, there is a black switch which is turned to auto and press start, the machine will automatically start.

**Task or work operation:**

**Unloading treatment pots 2 and 3**

1. When treatment pot has finished and vacuum has removed excess chemicals from the timber the door can then be opened using the hydraulic locking system.
2. The rails are to be re-inserted using the tools provided. Picture 8 .

Picture 8



3. The trolleys are pulled out of the pot using a FLT and cable attached to the front trolley, a pack is lifted with the FLT to provide grip whilst pulling the trolleys out of the pot. Picture 9 .

Picture 9



3. All securing chains and straps are to be removed and placed on one side of the trolley so not to be run over by the FLT. Picture 10 .
4. The trolleys are then to be unloaded one pack at a time and stacked in the treatment plant for 48 hours to allow appropriate time to dry.
5. Trolleys can then be re-loaded ready to begin the next treatment process.

Picture 10



Task or work operation  
Continued:

### **CHANGING AND REPLACING STOCK SOLUTION IBC CONTAINERS:-**

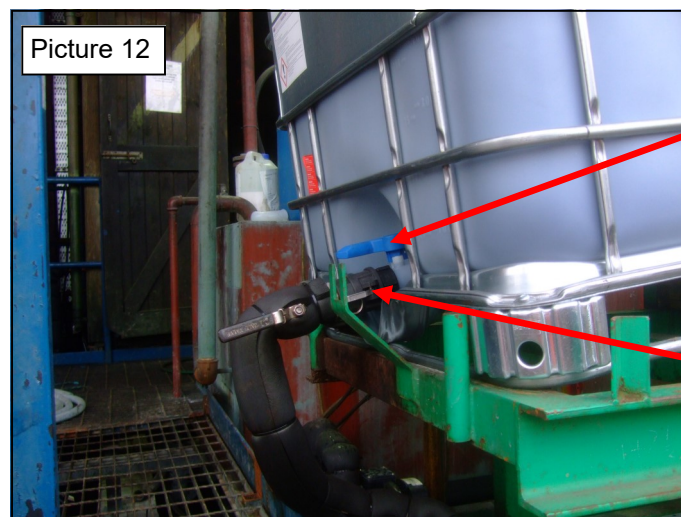
Tanatone and Tanalith is stored in separate IBC stock solution containers.



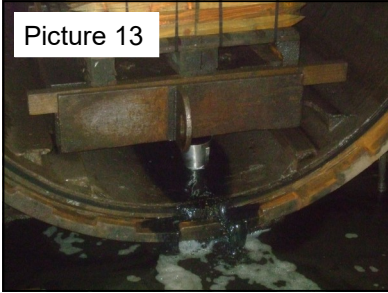
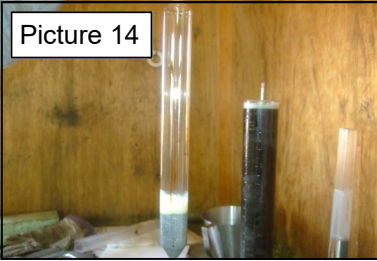
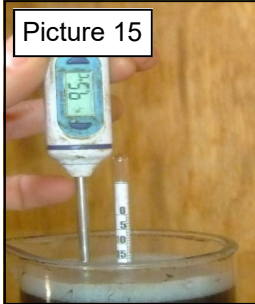
When an existing IBC container requires replacing the following Personal Protective Equipment PPE MUST BE WORN:-

- Face shield
- Chemical resistant wellington boots
- Chemical resistant coveralls
- Chemical resistant Nitrile Gloves / sleeves
- An full body apron is situated in the shed next to the IBC's

1. Close the blue valve at the bottom of the IBC container.
2. Disconnect the pipe.

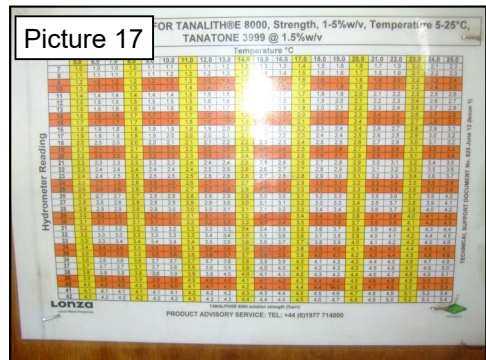
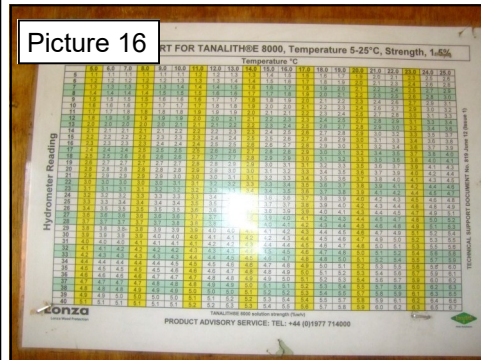


3. Remove the empty IBC and replace with a full one.
4. Reconnect the pipe.
5. Open the blue valve to allow the solution to pass through.

<b>Task/ activity:</b>	Measure and calculate the strength of preservative solution.
<b>Equipment required</b>	Hydrometer. Digital Thermometer. Stainless container able to hold 1 litre of solution. Clear measuring beaker able to measure a litre of solution .
<b>PPE that MUST be worn:-</b>	<ul style="list-style-type: none"> <li>- Face shield</li> <li>- Chemical resistant wellington boots</li> <li>- Chemical resistant coveralls</li> <li>- Chemical resistant Nitrile Gloves / sleeves</li> </ul>
<b>Task or work operation:</b>	<p><u>THIS PROCESS MUST BE CARRIED OUT EVERY 10-12 CHARGES.</u></p> <p><u>The hydrometer box will flash on the computer screen when testing is required.</u></p> <p><b><u>Measure and Calculate:</u></b></p> <ol style="list-style-type: none"> <li>1. Place stainless steel container inside the pot before closing and locking door to collect the sample for checking.</li> <li>2. When treatment cycle has finished, open the door and take sample from steel container and transfer to beaker exactly 1 litre.</li> </ol> <div data-bbox="453 887 842 1178" style="text-align: center;">  <p>Picture 13</p> </div> <ol style="list-style-type: none"> <li>3. Take sample to control room.</li> <li>4. Lower the hydrometer into the jar until settled.</li> </ol> <div data-bbox="453 1276 831 1536" style="text-align: center;">  <p>Picture 14</p> </div> <ol style="list-style-type: none"> <li>5. Read the hydrometer scale looking horizontally through the liquid.</li> <li>6. Having noted the hydrometer reading, use a digital thermometer to take the temperature of the solution, °C .</li> </ol> <div data-bbox="456 1655 711 1957" style="text-align: center;">  <p>Picture 15</p> </div> <p>This reading along with the hydrometer reading will be required to determine the actual solution strength.</p>

**Task or work operation:**

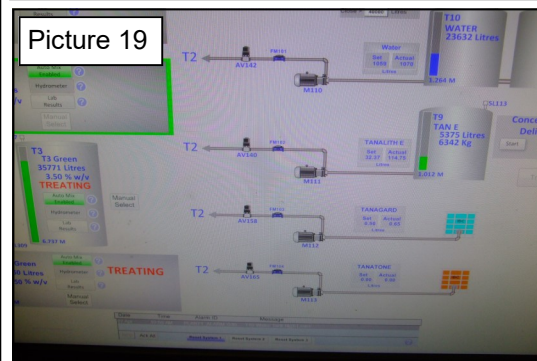
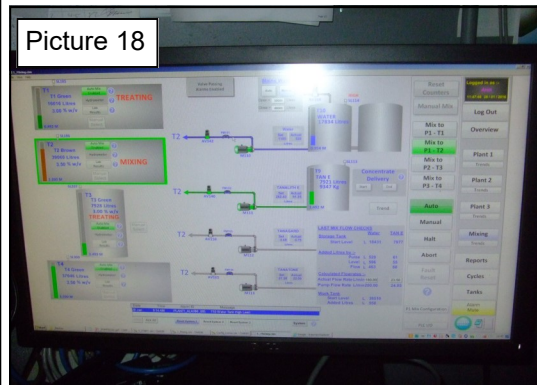
- Using the charts on the wall, read the temperature on the horizontal axis and the hydrometer reading on the vertical axis. An estimate of solution strength is where the two meet. The reading should be within +/- 10%.



- When finished with sample, empty back into the bunded tank. Wipe the hydrometer clean and store away.

**MIXING and TRANSFER.**

Automatic mixing is carried out by computer and can be monitored on the computer screen in the office.



Manual mixing can also be carried out by:-

- Bring up the mixing screen on the computer.
- Press the mixing button.
- Press the manual button.
- Click on the required water and pump valve to open.
- The computer calculates and displays the figure as it is mixing.
- To stop the manual mix, click on the water and pump valve.
- Press the stop button.



<p><b>Task or work operation:</b></p>	<p><b><u>Vessel Entry.</u></b></p> <p>The treatment pots have to be cleaned every three months to save build up of debris.</p> <p>Before entering the treatment pots a “PERMIT TO ENTER” must be obtained.</p> <p>There are two types, one for short duration entry, less than 10 minutes, and a long duration entry.</p> <p>These permits can only be issued by the Engineering Manager. <b>AT NO TIME MUST THE OPERATOR ENTER THE TREATMENT POTS ON HIS OWN OR WITHOUT A PERMIT TO ENTER.</b></p> <p><b><u>Weekly and Monthly Maintenance.</u></b></p> <p>The plant operators have to carry out weekly checks and monthly checks.</p> <p><b>Weekly checks are as follows:</b></p> <ul style="list-style-type: none"> <li>• Plant area kept clean,</li> <li>• Vessel door seals and vessel seal faces are free from tares and damage.</li> <li>• Lubricate the vessel doors and trolley wheels.</li> <li>• Check the compressor oil; level and clean all filters in control 1 and control room 2.</li> <li>• Other daily duties required to keep the treatment clean and tidy.</li> </ul> <p><b>Monthly checks are as follows,</b></p> <ul style="list-style-type: none"> <li>• Check pressure pumps for leaks, remove debris from rear of vessel, remember a permit to enter must be obtained and at least two people present.</li> <li>• Check air compressors / receivers and drain any water build up</li> <li>• Check pneumatic system for air leaks, salt level.</li> <li>• Check the condition of all pipes to the mixing tank and the oil levels for hydraulic circuits and pump for vacuum / pressure.</li> </ul> <p><b><u>Treatment Certificate.</u></b></p> <p>Customers can ask for a treatment certificate for the timber that has been treated on their behalf. The operator fills in the certificate with the details of the charge this can be taken from the tally charge on the computer.</p> <p>Customer has top copy and the treatment plant keep the bottom copy on file.</p>
<p><b>Emergency Procedures:</b></p>	<p><b><u>Fire:</u></b></p> <ol style="list-style-type: none"> <li>1. Isolate the Plant if possible</li> <li>2. Leave the Treatment Plant and go to the designated assembly point.</li> </ol> <p><b><u>Mechanical Failure:</u></b></p> <ol style="list-style-type: none"> <li>1. Isolate the Plant and report fault to supervisor.</li> <li>2. Do not attempt to repair the fault.</li> <li>3. Only restart operations when you have been informed by your supervisor or maintenance engineer that the machine is safe to do so.</li> </ol> <p><b><u>Electrical Failure:</u></b></p> <ol style="list-style-type: none"> <li>1. Isolate the Plant and report fault to supervisor.</li> <li>2. Do not attempt to repair the fault.</li> <li>3. Do not touch any electrical equipment that may have become faulty.</li> <li>4. Only restart operations when you have been informed by your supervisor or maintenance engineer that the machine is safe to do so.</li> </ol>

## **PONTRILAS SAWMILLS LTD**

Training Record and Re-Assessment Sheet For: TREATMENT PLANT OPERATIONS CON-10v2

Trainees Name:- \_\_\_\_\_ Training start date:- \_\_\_\_\_

Training completion date:- \_\_\_\_\_

Instructed or Assessed By:- PRINT \_\_\_\_\_ SIGN:- \_\_\_\_\_

Interpreted By:- PRINT \_\_\_\_\_ SIGN:- \_\_\_\_\_

### **THE TRAINEE MUST SIGN ALL RELEVANT SECTIONS BELOW ON COMPLETION OF TRAINING**

PPE TO BE USED \_\_\_\_\_

SITE RULES FOR TREATMENT PLANT \_\_\_\_\_

PRE OPERATIONAL SAFETY CHECKS \_\_\_\_\_

LOADING TREATMENT POT 1 \_\_\_\_\_

COMPUTER INFORMATION REQUIREMENTS \_\_\_\_\_

UNLOADING TREATMENT POT 1 \_\_\_\_\_

UNLOADING TREATED PACKS FROM TROLLIES \_\_\_\_\_

LOADING TREATMENT POTS 2 3 \_\_\_\_\_

UNLOADING TREATMENT POTS 2 3 \_\_\_\_\_

CHANGING REPLACING STOCK SOLUTION IBC's \_\_\_\_\_

MEASURING CALCULATING STRENGTH OF SOLUTION \_\_\_\_\_

MIXING AND TRANSFER \_\_\_\_\_

VESSEL ENTRY \_\_\_\_\_

EMERGENCY PROCEDURES \_\_\_\_\_

The content of this document was verbally interpreted to me by a company representative. I confirm that I fully understand its content. English

Signed.....

Содержание этого документа было устно переведено мне представителем компании. Я подтверждаю, что я полностью понимаю его содержание. Russian

Signed.....

Zawartość tego dokumentu słownie została objaśniona mi przez przedstawiciela firmy. Potwierdzam, że w pełni rozumiem jego zawartość Polish

Signed.....

Sio dokumento turinys zodziu buvo isverstas mano, kompanijos atstovo . As patvirtinu, kad pilnai suprantu jo turini. Lithuanian

Signed.....

Continutul acestui document mi-a fost verbal interpretat de catre reprezentantul acestei companii. Confirm ca am inteles im totalitate continutul acestuia Romanian

Seminaura.....

Re Assessment Date	Assessed By	Issue Number
30-09-2016	Callum Bowman	Issue 1
05-10-2016	Sara Withers / Marcin Bogacz Treatment Plant Operator	Issue 1
10-10-2017	Sara Withers / Marcin Bogacz	Issue 1
29-01-2020	Mark Williams Treatment Plant Operator	Issue 1
19-11-2020	Sara Withers	Issue 2