US ERA ARCHIVE DOCUMENT

SOLOMON	Procedure Title: Untested and Quality Control Procedure			
Procedure Owner:	Document #	Revision Date	Effective	Approved By:
Bob Baird	B-1-ENV-002	02/16/2016	Date: 02/16/2016	RJB

Policy: Solomon Corporation has several quality control procedures in place to ensure

compliance above and beyond what is required from TSCA regulations. This document will define the difference between untested and QC units and define how to handle each

type of sample.

Purpose: This document will define the difference between untested and QC units and define how

to handle each type of sample.

Scope: This procedure applies to all Solomon Corporation facilities.

Procedure:

Untested Units

• If any unit is received and meets one of the following criteria, it is considered untested:

- It does not have a non-PCB statement stamped on the original nameplate. Non-PCB statements are the following (or their equivalent)
 - o Filled with non-PCB oil at the time of manufacture
 - o Filled with <2 ppm PCB oil at the time of manufacture
 - Filled with <1 ppm PCB oil at the time of manufacture
- It does not have a date of 1980 or later stamped on the original nameplate
- It has a nameplate from a remanufacturer, not the original manufacturer (or both) –
 These units are retrofill units. See the section on retrofilled units below.
- It is a polemount or padmount unit and has a serial number that does not correspond to one of the serial numbers on the Manufacturer Non-PCB Certification list (Attachment 1).
- It does not have a customer supplied lab result
- Untested units will need to be tested by one of Solomon Corporation's PCB testing laboratories prior to processing.
- Receiving personnel will mark these units as "Hold" on the LTM Receiving Document.
- ECC techs will pull a sample and deliver it to the lab for testing.

QC Units

- QC units are defined as units which have been tested by the customer, but Solomon Corporation has made a policy to double check their results prior to processing them.
- QC units fall into several categories, each of which is described in detail below.

Large Units

- Large units are defined as units which are:
 - Full of oil with 300 gallons or more
 - Drained units with 700 gallons or more capacity
- Units that are received with customer supplied test results may need to be verified based on the criteria in the following sections.

Large Units – Repair and Yard

- This **does not** apply those customers that have their units GC tested by Solomon Corporation Laboratory prior to shipping.
- Receiving personnel will identify units that fall under the definition of large units and have already been tested by the customer.
- Receiving personnel will mark the unit as "QC" on the LTM Receiving Document. Place a yellow tag on this unit to indicate it cannot be processed until a result is returned.
- ECC techs will pull a sample and deliver it to the lab for testing.

Large Units – Salvage

- This does not apply those customers that have their units GC tested by Solomon Corporation Laboratory prior to shipping.
- Receiving personnel will mark the unit as "CNO" on the LTM Receiving Document.
- Obtain a sample for testing using a Dexsil Clor-N-Oil[®] 50 PCB screen. Follow the Clor-n-Oil
 Procedure located on the Solomon Corporation intranet. Testing may be performed by laboratory
 or receiving personnel as long as the Clor-n-Oil procedure is followed.
- If the result is negative, proceed with processing as <50 ppm.
- If the screen result is positive, label the bottle with the IC number and write 'CNO' on the bottle.
 Deliver the sample to the laboratory along with the used screen kit. Do not proceed with processing the unit until the lab results are known.
- Once PPM is confirmed, continue processing based on PCB content.
- Complete the Clor-N-Oil log located on the clipboard.
- Submit the completed log to the Environmental Office.

Regulators:

 Units that are received with customer supplied test results will need to be verified if they are received full of oil.

Regulators – Repair and Yard

- Any regulator that has not been GC tested by Solomon Corporation Laboratory prior to shipping or is nameplated must be tested prior to being repaired or placed into inventory.
- Receiving personnel will identify regulators that have already been have already been tested by the customer.
- Receiving personnel will mark the unit as "QC" on the LTM Receiving Document. Place a yellow
 tag on this unit to indicate it cannot be processed until a result is returned.
- ECC techs will pull a sample and deliver it to the lab for testing. Write "Reg" on the oil sample bottle.

Regulators - Salvage

- Any regulator that has not been GC tested by Solomon Corporation Laboratory prior to shipping or is nameplated must be CNO tested prior to being salvaged.
- Receiving personnel will mark the unit as "CNO" on the LTM Receiving Document.
- Obtain a sample for testing using a Dexsil Clor-N-Oil® 50 PCB screen. Follow the Clor-n-Oil Procedure located on the Solomon Corporation intranet. Testing may be performed by laboratory or receiving personnel as long as the Clor-n-Oil procedure is followed.
- If the result is negative, proceed with processing as <50 ppm.
- If the screen result is positive, label the bottle with the IC number and write 'CNO' on the bottle.
 Deliver the sample to the laboratory along with the used screen kit. Do not proceed with processing the unit until the lab results are known.
- Once PPM is confirmed, continue processing based on PCB content.
- Complete the Clor-N-Oil log located on the clipboard.
- Submit the completed log to the Environmental Office.

Retrofill Units - Reclassified as Non-PCB:

- Read the manufacturer's original nameplate (if present) to determine if the unit was originally
 manufactured as PCB (i.e., Pyranol, Interteen, Askeral). If so, do not process further and notify the
 Environmental Department.
- Also read the nameplate to look for fluid other than mineral oil (i.e. Wecosol, Perchloroethylene, Tetrachloroethylene). If so, do not process further and notify the Environmental Department.
- All other units must be screened as follows.

Retrofill Units - Repair and Yard

- This does not apply those customers that have their units GC tested by Solomon Corporation Laboratory prior to shipping.
- Receiving personnel will identify units that fall under the definition of retrofill units.
- Receiving personnel will mark the unit as "QC" on the LTM Receiving Document. Place a yellow
 tag on this unit to indicate it cannot be processed until a result is returned.
- ECC techs will pull a sample and deliver it to the lab for testing.

Retrofill Units - Salvage

- This does not apply those customers that have their units GC tested by Solomon Corporation Laboratory prior to shipping.
- Receiving personnel will mark the unit as "CNO" on the LTM Receiving Document.
- Obtain a sample for testing using a Dexsil Clor-N-Oil[®] 50 PCB screen. Follow the Clor-n-Oil
 Procedure located on the Solomon Corporation intranet. Testing may be performed by laboratory
 or receiving personnel as long as the Clor-n-Oil procedure is followed.
- If the result is negative, proceed with processing as <50 ppm.
- If the screen result is positive, label the bottle with the IC number and write 'CNO' on the bottle. Deliver the sample to the laboratory along with the used screen kit. Do not proceed with processing the unit until the lab results are known.
- Once PPM is confirmed, continue processing based on PCB content.

• Complete the Clor-N-Oil log located on the clipboard.

Submit the completed log to the Environmental Office.

Separate Compartments

Occasionally we find units that have multiple compartments. These compartments may be LTCs, conservator tanks, switch compartments, OCB tanks, etc. It is important that we have a test result for each compartment if the oil is segregated.

- If the unit has a customer result treat the main tank according to the section above
 - Label the main tank sample as #######Main. Only pull a QC sample if it is necessary according to the section above.
 - Label each additional tank as #######LTC1, LTC2, LTC3, etc. Treat each additional sample and tank like a QC unit.
 - If the unit is an OCB label the three tanks as OCB1, OCB2, OCB3.
- If the unit is untested treat the main tank according to the section above
 - Label the main tank sample as #######Main. Treat it like an untested sample and unit.
 - Label each additional tank as #######Tank1, Tank2, Tank3, etc. Treat each additional sample and tank like an untested unit.
 - If the unit is an OCB label the three tanks as OCB1, OCB2, OCB3.

Conflicting PCB Data

Solomon Corporation conducts QC testing on any unit that has conflicting PCB data. Conflicting PCB data is defined as:

- Lab report does not correspond to what is written on the unit
- Lab report does not correspond to PCB labeling on the unit
- Lab report does not correspond to nameplate information
- There are two different types of PCB labels on the unit
- Customer says it is Nameplated Non-PCB, but doesn't qualify under Solomon Corporation policy
- Oil has an "off" smell indicating oil is not mineral oil
- GE units ending with a P (these are almost always contaminated)

If any of the above conditions apply:

- Pull a confirming sample and turn into the Lab
- Do not process until the results are known

Bushings

- All oil filled bushings need to have a PCB result so they can be handled properly.
- Bushings that are stamped 1980 or newer or are stamped "non-PCB" or "Manufactured with <1 ppm oil" are considered nameplated and do not need to be tested.
- Tar filled bushings are considered greater than 500 ppm and do not need to be tested, but they
 do need to be tagged and processed as greater than 500 ppm.

- Use a non-destructive method to get an oil sample from the bushing if it is for a repair unit or is going to be sent for inventory.
- Place a yellow tag on the bushing indicating it has been sampled.

Bushings - Repair and Inventory

- Create an oil sample log for the bushings.
 - Repair bushings will have the <u>bushing</u> serial number, parent IC number and the Job number attached to them.
 - Inventory bushings will only have the <u>bushing</u> serial number and parent IC number attached to them.
- The lab will assign a six digit lab number to the sample.
- If the PCB content comes back greater than or equal to 50 ppm, transfer these bushing to Commercial Storage for disposal.

Bushings - Salvage

- When bushings are removed from a unit and are NO LONGER of use, place a yellow hold tag
 on each bushing and write the IC# of the unit in which it was removed from.
- Look in the system for the serial of the sub that matches the IC# written on the yellow tags.
- Sample each bushing separately. When a sample is pulled, assign the <u>unit</u> serial number of the unit -1, -2, -3 and so on for the number of bushings that were removed from the unit.
- Write up an oil sample log and take to the lab along with the samples. The lab will assign sixdigit lab numbers to the bushings and enter the serial numbers into LTM.
- Once the results have been returned from the lab, any bushings that have a result of greater than or equal to 50 ppm PCB can be given an internally generated IC # and received into the system.
 - Bushings that are going to be entered into the system must be weighed first.
- Any bushings that have a result of less than 50 ppm PCB can be destroyed. No other actions are required.

by processing the bushings in this manner, the bushings can always be tracked back to the original unit without a lot of searching in the system

Small PCB Capacitors and Green Goo:

- Always be sure to check inside of the LTC, Tap Changers, Switch Chambers, etc for small PCB capacitors and any green goo that may be attached to the wiring harness.
- If found report it to the ECC immediately.

Random Sampling:

Solomon Corporation conducts random sampling on units that are received with customer test results to verify the validity of customer provided test results. Any discrepancies between the customer's test results and the test results obtained by Solomon Corporation's PCB testing lab are investigated to ensure that proper material management procedures are being followed from the point the unit is taken out of service to the point it arrives at a Solomon Corporation facility.

Solomon Corporation strives to meet a standard of 1 out of every 50 tested units received. This only applies to units that do not fall under our untested our QC testing protocols.

- Unloading crew will sample 1 out of 50 tested units received to verify PCB content provided by customer.
- · Set the unit aside in the holding area

- Suspect units that historically test >50 ppm.
 - GE beginning with a B through D or 5 through 9 or ending with P
 - WH with only one alphabet character, i.e. 74C16908, 56K22690
 - Old Allis Chalmers units
 - This is a general listing. The receiving lead person should use his/her own discretion.
- Obtain a sample and perform a Dexsil Clor-N-Oil® 50 PCB screen. Follow the Clor-n-Oil Procedure located on the Solomon Corporation intranet. Testing may be performed by laboratory or receiving personnel as long as the Clor-n-Oil procedure is followed.
- If the result is negative, proceed with processing as <50 ppm.
- If the screen result is positive, label the bottle with the IC number and write 'CNO' on the bottle. Deliver the sample to the laboratory along with the used screen kit. Do not proceed with processing the unit until the lab results are known.
- Once PPM is confirmed, continue processing based on PCB content.
- Complete the Clor-N-Oil log located on the clipboard.
- Submit the completed log to the Environmental Office.

Drain Pans:

- Drain pans used to collect residual oil in any area of the facility are to be sampled for PCB content prior to pumping into the above ground storage tanks.
- Each drain pan should be uniquely identified for sampling purposes.
- Obtain a sample and perform a Dexsil Clor-N-Oil® 50 PCB screen. Follow the Clor-n-Oil Procedure located on the Solomon Corporation intranet. Testing may be performed by laboratory or receiving personnel as long as the Clor-n-Oil procedure is followed.
- If the result is negative, proceed with pumping into the above ground storage tank.
- If the screen result is positive, label the bottle with the drain pan location and ID on the bottle. Deliver the sample to the laboratory along with the used screen kit. Do not pump the drain pan until the lab results are known.
- Complete the Clor-N-Oil log located on the clipboard located on the clipboard.
- Submit the completed log to the Environmental Office.

Note: Dexsil Clor-N-Oil® 50 PCB screens must be performed by employees who have received training from management personnel in the proper procedures.

Revision History:

Revision	Date	Description of changes	Requested By	
2.0	2/11/2016	Moved to new format and expanded all sections	Twila Jeffrey	
2.1	2/16/2016	Incorporated edits from Marcus	Marcus Zumbrunn	