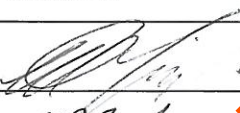
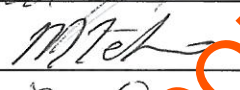
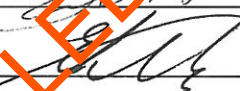


Document No.	LE-WIN-0136	 necsa We're in your world
Revision No.	2.0	
Title	PREPARATION AND PACKING OF SOLIDIFICATION DRUMS	

	NAME	SIGNED	DATE
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Distribution List:

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PREPARATION AND PACKING OF SOLIDIFICATION DRUMS

REVISIONS

This document has been revised according to the following schedule:

Revision	Date Approved	Nature of Revision	Prepared by
00	2005/02/02	Supersedes NW-TOI-0001 Rev. 00 due to organisational changes. Revise to include the recommendations made in document NLM-AUD-04/001.	RGF Robberts
2.0	See Title Page	Supersedes NW-TOI-0001, changed the document format and Logo. Changed the revision number in accordance with the Necsa Numbering System. <i> - Revision # according to new numbering system – no 01 or 1.0 applicable.</i>	W Blofield

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Exhibit 1 LE-FRM-0159: Solidification Drum Number Issuing Form	
Exhibit 2 LE-RTC-0001: Route Card for Solidification Drum	

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PREPARATION AND PACKING OF SOLIDIFICATION DRUMS

1 PURPOSE

The purpose of this document is to prescribe the procedure to be followed for the preparation and vacuum testing of the solidification drums to be used in the solidification process at LEMS.

2 SCOPE

This document is applicable to all the solidification drums that will be used in the solidification process at LEMS.

3 REFERENCES

- [1] LE-PUR-0001: Purchase Specification for the Medium Grade Vermiculite and Vermiculite Cement Mixture
- [2] LE-PUR-0002: Purchase Specification for the 100L Solidification Drum
- [3] LE-PUR-0003: Purchase Specification for the Solidification Drum Centre Distribution Pipe
- [4] SHEQ-INS-5300: Written Safe Work Procedures, Instructions, Orientation and Task Training
- [5] 274J019-00-00: Solidification and Drum Preparation

4 ABBREVIATIONS

The abbreviations are used:

DC:	Document Custodian
LEMS:	Liquid Effluent Management Services
NCR:	Non Conformance Report
PDO:	Pre-Disposal Operations (Section of NLM)
PPE:	Personal Protective Equipment
QMS:	Quality Management System
RPO:	Radiation Protection Officer
SHEQD:	Safety, Health, Environment and Quality Department

5 RESPONSIBILITIES

- 5.1 It is the responsibility of the LEMS Section Head to ensure that the preparing of the solidification drums conforms to the requirements specified in this document.
- 5.2 It is the responsibility of LEMS Section Head to maintain this document.
- 5.3 The LEMS Section Head shall ensure that all personnel involved in the preparation and vacuum testing of the solidification drums are adequately trained and authorised in accordance with ^[4].

6 PERSONAL PROTECTIVE CLOTHING

The following PPE shall be use by LEMS personnel for the preparation of the solidification drums:

- One piece or two piece overall
- Tyvek suit with hood
- Safety shoes
- Latex gloves
- Half face mask with T-48 cartridge or air hood
- Safety goggles
- Hair net (Optional)

PREPARATION AND PACKING OF SOLIDIFICATION DRUMS

7 EQUIPMENT AND MATERIAL

The following equipment and material is required in the preparation of the solidification drum:

- 100 litre drum with lid (including closing ring and bolt)
- Centre Distribution Pipe
- Polyethylene oxide film
- Masking tape
- Medium Grade Vermiculite
- Vermiculite Cement Mixture
- Poly-prop inner ring
- Compression sleeve
- Tools (rubber hammer, shifting spanners etc.)
- Drum vibrator
- Silicon rubber
- Vacuum adapter
- Vacuum pump

8 SOLIDIFICATION DRUM NUMBERING

Each solidification drum shall be uniquely numbered. The solidification drum register LE-FRM-0159: Solidification Drum Number Issuing Form (Exhibit 1) shall be used for registering a new solidification drum. Each issued drum number shall be recorded on LE-FRM-0159 by the LEMS operator. This register is kept in the office of the Chief Operator: Operational Support. The drum/s shall be marked with a permanent black marking pen on the side of the drum and on the lid of the drum.

The completed page/s of the solidification drum register (LE-FRM-0159) shall be sent to the LEMS Section Head. After verification by the LEMS Section Head the completed page/s shall be sent to LEMS Records.

9 PREPARING OF A SOLIDIFICATION DRUM

9.1 Drum Identification

Allocate the new unique drum number for each drum in accordance with par. 8.

9.2 Completion of the Drum Route Card

After the drum number was allocated for the solidification drum the following information shall be recorded in Section 1: General Information of the applicable form LE-RTC-0001: Route Card for Solidification Drum by the LEMS operator:

- 9.2.1 Record the drum number.
- 9.2.2 Record the date of the allocation of the drum number.
- 9.2.3 Record the drum order number.
- 9.2.4 Record the central distribution pipe order number.
- 9.2.5 Record the medium vermiculite and vermiculite cement mixture order number/s.

9.3 Preliminary Vacuum Testing

To minimize the generation of waste due to no-conforming (Leaking) drums a preliminary vacuum test is conducted on each empty solidification drum before commencing with the filling of the drum with Medium Grade Vermiculite and Vermiculite Cement Mixture.

(See ^[5] for the valve and equipment numbers)

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- 9.3.1 The LEMS operator ensures form LE-FRM-0121: 100 Litre Solidification Drum Inspection Report was completed for the applicable consignment of drums. This is to ensure the drum complies with the requirements in accordance with ^[2].
- 9.3.2 The operator positions the centre distribution pipe inside the solidification drum.
- 9.3.3 The LEMS operator installs the drum lid (including closing ring and bolt) on the drum and fastens the closing ring bolt.
- 9.3.4 Connect the vacuum pump (P104) to the solidification drum by means of a flexible vacuum hose and vacuum adapter.
- 9.3.5 Ensure all the valves (826, 827, 828, 829, 830 and 831) on the vacuum system are in the close position.
- 9.3.6 Open the inlet valve (831) to pump P104.
- 9.3.7 Switch P104 on and monitor the vacuum on the vacuum gauge (PI 104B) installed on the inlet of the vacuum pump. Before commencing with the preliminary vacuum test, the vacuum on the pump should stabilise on ± 200 mbar. If the vacuum does not stabilise on ± 200 mbar the operator have to check for a leak on the vacuum system or the malfunctioning of P104.
- 9.3.8 Ensure the vacuum system is without a leak before opening the inlet valve to the drum.
- 9.3.9 Open the vacuum inlet valve (826, 827, 828, 829 or 830) to the drum very slowly.
- 9.3.10 Evacuate the drum until the required vacuum is obtained (500 mbar on the vacuum gauge at the drum).
- 9.3.11 Close the vacuum inlet valve to the drum.
- 9.3.12 Close valve 831 on P104.
- 9.3.13 Switch off P104.
- 9.3.14 After ten minutes, check the vacuum reading on the vacuum gauge (PI 104C, PI 104D, PI 104E, PI 104F or PI 104G) at the drum. If the vacuum decrease is less than 10 mbar, the drum is considered to be acceptable for use. If the vacuum decreases, the drum and the connection points must be checked for leaks.
- 9.3.15 Repeat the steps 9.3.6 to 9.3.14.
- 9.3.16 If the vacuum again decreases, the LEMS operator informs the Chief Operator: Operational Support or the LEMS Section Head.
- 9.3.17 The Chief Operator: Operational Support or the LEMS Section Head shall investigate the decrease of vacuum and will decide on corrective actions.
- 9.3.18 If a leak on the drum is detected the Chief Operator: Support Services or the LEMS Section Head generates a NCR in accordance with the LEMS QMS to initiate an appropriate corrective and/or preventive action.
- 9.3.19 Disconnect the non-conforming drum from the flexible vacuum hose. The Chief Operator: Support Services or the LEMS Section Head marks the drum with a permanent or paint marker "Scrapped". This is an indication to the operators this drum is not fit for use. Remove the radioactive trefoil and the UN Certificate number from the outside of the drum.
- 9.3.20 If the vacuum decrease is less than 10 mbar, the operator marks the drum with a permanent or paint marker "Passed" and the date on the outside of the drum and disconnects the drum from the flexible vacuum hose.
- 9.3.21 The operator installs the blanking flange onto the flexible vacuum hose.
- 9.3.22 The operator places the conforming drum at the drum preparation area.
- 9.3.23 The drum is now ready to be filled with medium grade vermiculite and vermiculite cement mixture.

9.4 Prepare Central Distribution Pipe

The LEMS operator ensures form LE-FRM-0165: Centre Distribution Pipe Inspection Report was completed for the applicable consignment of centre distribution pipes. This is to ensure the centre

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- distribution pipe complies with the requirements in accordance with ^[3].
- 9.4.1 Wipe the central distribution pipe clean (remove grease and oil if any).
- 9.4.2 Cover the holes (three sets) in the central distribution pipe with polyethylene oxide film, which must be fixed in position by means of masking tape (NB. make sure not to cover the holes with the masking tape).
- 9.4.3 Five small pinholes (± 3 mm in diameter) must be made through the plastic film covering each hole.
- 9.4.4 The operator has to ensure that his/her hands and immediate surroundings are COMPLETELY dry during this operation as the polyethylene oxide film is extremely soluble in water.
- 9.4.5 Screw the end cup onto the open end of the distribution pipe (to prevent medium grade vermiculite/vermiculite cement mixture etc. entering the distribution pipe).
- 9.4.6 Position the centre distribution pipe inside the solidification drum.
- 9.4.7 The operator completes and signs Section 2: Preparation of Centre Distribution Pipe on the applicable form LE-RTC-0001: Route Card for Solidification Drum.
- 9.5 Visual Inspection of the Solidification Drum**
- 9.5.1 The LEMS operator ensures form LE-FRM-0121: 100 Litre Solidification Drum Inspection was completed for the applicable consignment of solidification drums to ensure the solidification drums comply with the requirements in accordance with ^[2].
- 9.5.2 The operator opens the drum and inspects the inside and outside for defects (Dents, deformation, paint damaged etc.).
- 9.5.3 The operator ensures the o-ring on the lid is in place.
- 9.5.4 If a defect/s is detected the operator informs the Chief Operator: Support Services or the LEMS Section Head.
- 9.5.5 The Chief Operator: Support Services or the LEMS Section Head shall investigate the defect/s and will decide on corrective actions.
- 9.5.6 If a non-conformance is detected on the drum the Chief Operator: Support Services or the LEMS Section Head generates a NCR in accordance with the LEMS QMS to initiate an appropriate corrective and/or preventive action.
- 9.5.7 If the drum does not conform in accordance with ^[2] the Chief Operator: Support Services or the LEMS Section Head marks the drum with a permanent or paint marker "Rejected". This is an indication to the operators this drum is not fit for use.
- 9.5.8 If the drum conforms to the requirements in accordance with ^[2] the operator completes and signs Section 3: Visual Inspections of Drum on form LE-RTC-0001.
- 9.5.9 The drum is ready to be filled with Medium Grade Vermiculite/Vermiculite Cement Mixture. Continue with 9.6.
- 9.6 Fill the Solidification Drum with Medium Grade Vermiculite/Vermiculite Cement Mixture**
- 9.6.1 The LEMS operator ensures form LE-FRM-0163: Verification of Medium Grade Vermiculite Particle Size and LE-FRM-0162: Verification of Vermiculite Cement Mixture Particle Size was completed for the applicable consignment of medium grade vermiculite and vermiculite cement mixture to ensure it complies with the requirements in accordance with ^[1].
- 9.6.2 The operators open the correct quantity of medium grade vermiculite and vermiculite cement mixture bags and place the opened bags near the solidification drum preparation.
- 9.6.3 The operators place the drum on the vibration table.
- 9.6.4 Switch on the extraction fan (FM102) and do a functional test on the extraction system. Stop work immediately if the extraction system does not function correctly and report the defect to maintenance services for repair.
- 9.6.5 If the extraction system operates in accordance with the specification requirements the relevant operators put on their prescribed PPE (see par. 6 above).

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- 9.6.6 Pour the vermiculite cement mixture into the drum until the level of the mixture has almost reached the bottom hole ($\pm 5\text{mm}$ below) on the centre distribution pipe.
- 9.6.7 Switch on the drum vibrator (Y105) for a period of 10 seconds only. After 10 seconds switch off the Y105.
- 9.6.8 Check the level of the vermiculite cement mixture inside the drum. Add or remove some of the vermiculite cement mixture to ensure that the level of the mixture is $\pm 5\text{mm}$ below the bottom hole on the distribution pipe.
- 9.6.9 Repeat 9.6.6 to 9.6.8 until the desired level is obtained.
- 9.6.10 Position the Polyprop inner ring concentric on top of the vermiculite cement mixture.
- 9.6.11 Fill the space between the drum wall and the Polyprop inner ring with the vermiculite cement mixture to capacity (bottom side of the mild steel ring on the centre pipe).
- 9.6.12 Switch on Y105 for a period of 10 seconds only. After 10 seconds switch off Y105.
- 9.6.13 Check the level of the vermiculite cement mixture between the drum wall and Polyprop inner ring. Add or remove some of the vermiculite cement mixture to ensure that the level of the mixture is level with the bottom side of the mild steel ring on centre pipe.
- 9.6.14 Repeat 9.6.11 to 9.6.13 until the desired level is obtained.
- 9.6.15 Add ± 6 litres of medium grade vermiculite into the inside of the Polyprop inner ring.
- 9.6.16 Insert the marked-off compression sleeve and compress the medium grade vermiculite slightly (Make sure not to over compress).
- 9.6.17 Check if the number one mark on the compression sleeve is level with the top of the drum.
- 9.6.18 Remove the compression sleeve.
- 9.6.19 Add or remove some of the medium grade vermiculite if the number one mark on the sleeve was not level with the top of the drum.
- 9.6.20 Insert the marked-off compression sleeve and compress the medium grade vermiculite slightly again (Make sure not to over compress).
- 9.6.21 Repeat 9.6.16 – 9.6.19 until the desire level is obtained.
- 9.6.22 Add ± 8 litres of the vermiculite cement mixture on top of the medium grade vermiculite in the Polyprop inner ring.
- 9.6.23 Insert the marked-off compression sleeve and compress vermiculite cement mixture slightly (Make sure not to over compress).
- 9.6.24 Check if the number two mark on the compression sleeve is level with the top of the drum.
- 9.6.25 Remove compression sleeve.
- 9.6.26 Add or remove some of the vermiculite cement mixture if the number two mark on the sleeve was not level with the top of the drum.
- 9.6.27 Insert the marked-off compression sleeve and compress vermiculite cement mixture slightly again (Make sure not to over compress).
- 9.6.28 Repeat 9.6.23 – 9.6.26 until the desire level is obtained.
- 9.6.29 Add ± 6 litres of the medium grade vermiculite on top of the vermiculite cement mixture in the Polyprop inner ring.
- 9.6.30 Insert the marked-off compression sleeve and compress the medium grade vermiculite slightly (Make sure not to over compress).
- 9.6.31 Check if the number three mark on the compression sleeve is level with the top of the drum.
- 9.6.32 Remove compression sleeve.
- 9.6.33 Add or remove some of the medium grade vermiculite if the number three mark on the sleeve was not level with the top of the drum.
- 9.6.34 Insert the marked-off compression sleeve and compress the medium grade vermiculite slightly again (Make sure not to over compress).
- 9.6.35 Repeat 9.6.29 – 9.6.33 until the desire level is obtained.
- 9.6.36 Add ± 8 litres of the vermiculite-cement mixture on top of the medium grade vermiculite in the

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- Polyprop inner ring.
- 9.6.37 Insert the marked-off compression sleeve and compress vermiculite cement mixture slightly (Make sure not to over compress).
 - 9.6.38 Check if the number four mark on the compression sleeve is level with the top of the drum.
 - 9.6.39 Remove compression sleeve.
 - 9.6.40 Add or remove some of the vermiculite cement mixture if the number four mark on the sleeve was not level with the top of the drum.
 - 9.6.41 Insert the marked-off compression sleeve and compress vermiculite cement mixture slightly again (Make sure not to over compress).
 - 9.6.42 Repeat 9.6.37 – 9.6.40 until the desire level is obtained.
 - 9.6.43 Add ± 6 litres of the medium grade vermiculite on top of the vermiculite cement mixture in the Polyprop inner ring.
 - 9.6.44 Insert marked-off compression sleeve and compress the medium grade vermiculite slightly (Make sure not to over compress).
 - 9.6.45 Check if the number five mark on the compression sleeve is level with the top of the drum.
 - 9.6.46 Remove compression sleeve.
 - 9.6.47 Add or remove some of the medium grade vermiculite if the number five mark on the sleeve was not level with the top of the drum.
 - 9.6.48 Insert marked-off compression sleeve and compress the medium grade vermiculite slightly again (Make sure not to over compress).
 - 9.6.49 Repeat 9.6.44 – 9.6.47 until the desire level is obtained.
 - 9.6.50 Add ± 8 litres of the vermiculite cement mixture on top of the medium vermiculite in the Polly-prop inner ring.
 - 9.6.51 Insert marked-off compression sleeve and compress the vermiculite cement mixture slightly (Make sure not to over compress).
 - 9.6.52 Check if the number six mark on the compression sleeve is level with the top of the drum.
 - 9.6.53 Remove compression sleeve.
 - 9.6.54 Add or remove some of the vermiculite cement mixture if the number six mark on the sleeve was not level with the top of the drum.
 - 9.6.55 Insert marked-off compression sleeve and compress vermiculite cement mixture slightly again (Make sure not to over compress).
 - 9.6.56 Repeat 9.6.51 – 9.6.54 until the desire level is obtained.
 - 9.6.57 The compression sleeve is marked from number one to number six. On the last step, to reach number 6, approximate eleven litres of the vermiculite cement mixture is needed (the vermiculite cement mixture should then be just below the mild steel ring on the centre pipe).
 - 9.6.58 Remove Polyprop inner ring.
 - 9.6.59 Remove the end cub from the open end of the distribution pipe.
 - 9.6.60 Clean the rubber seal on the drum lid with a clean cloth and apply a little silicon rubber on the rubber seal and on top of the mild steel ring welded to the centre pipe.
 - 9.6.61 Wipe drum edge clean and locate drum lid carefully on distribution pipe.
 - 9.6.62 Screw down lid tightly onto mild steel ring with the galvanized nut.
 - 9.6.63 Fix the closing ring onto the lid.
 - 9.6.64 Insert the Teflon ring into the threaded side of the vacuum adapter.
 - 9.6.65 Screw on the vacuum adapter.
 - 9.6.66 Clamp the blank flange onto the vacuum adapter with the clamping ring.
 - 9.6.67 The operator completes Section 4: Preparation of Drum on LE-RTC-0001 and signs the route card to confirm that the packing of the drum was done according to this procedure.
 - 9.6.68 The drum is only ready to be vacuum tested after a drying period of at least 12 hours. This is to allow the silicon rubber to dry completely before the drum can be vacuum tested.

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9.6.69 After a batch of 20 solidification drums have been filled, stop FM102 and clean the filter bags (F101) of the vacuum system.

9.7 Vacuum test

9.7.1 Connect the solidification drum to the vacuum system by means of a flexible vacuum hose and vacuum adapter.

9.7.2 Ensure all the valves on the vacuum system are in the close position.

9.7.3 Open the inlet valve (831) to the vacuum pump (P104).

9.7.4 Switch the vacuum pump on and monitor the vacuum on the vacuum gauge PI 104B (Installed on the inlet of the vacuum pump). Before commencing with the vacuum test, the vacuum on the pump should stabilise on ± 200 mbar. If the vacuum does not stabilise on ± 200 mbar the operator have to check for a leak on the vacuum system or the malfunctioning of the vacuum pump.

9.7.5 Ensure the vacuum system is without a leak before opening the inlet valve to the drum.

9.7.6 Open the vacuum inlet valve (Valve 826, 827, 828, 829, or 830) to the drum very slowly.

9.7.7 Evacuate the drum until the required vacuum is obtained (200 mbar on PI 104C, PI 104D, PI 104E, PI 104F or PI 104G).

9.7.8 Close the vacuum inlet valve (PI 104C, PI 104D, PI 104E, PI 104F or PI 104G) to the drum.

9.7.9 Stop P104.

9.7.10 Close the inlet valve (831) to the pump.

9.7.11 After twenty minutes, check the vacuum reading again. If the vacuum decrease is less than 40 mbar, the drum is considered to be satisfactory. If the vacuum decrease is more than 40 mbar, the drum and connection points must be checked for leaks.

9.7.12 Repeat steps 9.7.2 - 9.7.11.

9.7.13 If the vacuum again decreases more than 40 mbar, the LEMS operator informs the Chief Operator: Operational Support or the LEMS Section Head.

9.7.14 The Chief Operator: Operational Support or the LEMS Section Head shall investigate the decrease of vacuum and will decide on corrective actions.

9.7.15 If a leak on the drum is detected the Chief Operator: Operational Support or the LEMS Section Head generates a NCR in accordance with the LEMS QMS to initiate an appropriate corrective and/or preventive action.

9.7.16 Disconnect the non-conforming drum from the Flexible vacuum hose. The Chief Operator: Operational Support or the LEMS Section Head marks the drum with a permanent or paint marker "Rejected" and the date on the outside of the drum. This is an indication to the operators this drum is not fit for use. The operator disconnects the drum from the flexible vacuum hose.

9.7.17 If no vacuum decrease is detected, the operator marks the drum with a permanent or paint marker "Accepted" and date onto the drum and disconnects the drum from the flexible vacuum hose.

9.7.18 If the vacuum decrease is less than 40 mbar, disconnect the drum from the flexible vacuum hose.

9.7.19 Install the blanking flange on the vacuum adapter directly after disconnecting the drum from the flexible vacuum hose.

9.7.20 The operator completes and signs Section 5: Vacuum Test of Drum on LE-RTC-0001 to confirm that the vacuum test of the drum was done according to this procedure.

9.7.21 Send the original copy of the completed route card to the LEMS Section Head or his/her delegate.

9.7.22 The LEMS Section Head or his/her delegate completes Section 6: Declaration by Responsible Person on LE-RTC-0001 and signs the route card to confirm that the packing and vacuum testing of the solidification drum was completed in accordance with the prescribed specifications in accordance with LE-WIN-0136.

9.7.23 The LEMS Section Head or his/her delegate hands the completed LE-RTC-0001 to the operator

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responsible for the transferring of MA concentrate into the solidification drums.

- 9.7.24 This is an indication to the responsible operator the prepared drums conforms to the prescribed specifications and are now ready to be used in the solidification process.

10 QUALITY RECORDS

The following are designated quality records:

DESCRIPTION	RETENTION PERIOD	BY WHOM
Completed LE-FRM-0159 forms	30 Years	LEMS: DC
Completed LE-RTC-0001	30 Years	LEMS: DC

11 LIST OF FORMS

FORM NUMBER	TITLE	EXHIBIT NUMBER
LE-FRM-0159	Solidification Drum Number Issuing Form	1
LE-RTC-0001	Route Card for Solidification Drum	2

UNCONTROLLED COPY

[illegible]

LIQUID EFFLUENT MANAGEMENT SERVICES		 necsa We're in your world	
ROUTE CARD FOR SOLIDIFICATION DRUM			
SECTION 1: GENERAL INFORMATION			
Drum Number:		Date:	
Drum order number:		Centre Distribution Pipe order number:	
Vermiculite Cement Mixture order number:		Medium Grade Vermiculite order number:	
SECTION 2: PREPARATION OF CENTRE DISTRIBUTION PIPE			
The undersigned hereby declares that the preparation of the centre distribution pipe is according to the specifications prescribed in I.E-WIN-0136 Rev _____			
NAME		SIGNATURE	
DATE		NCR NR. (If applicable)	
SECTION 3: VISUAL INSPECTION OF DRUM			
VISUAL INSPECTION:	Criteria	Acceptable (tick ✓/X)	
	Damage to drum and lid (dents, deformation etc.)	YES	NO*
	Paint on drum and lid (damage to paint etc.)	YES	NO*
	O-ring on drum lid in place	YES	NO*
* Don't use drum if any defect is noted			
SECTION 4: PREPARATION OF DRUM			
The undersigned hereby declares that the packing of the solidification drum is according to the specifications prescribed in I.E-WIN-0136 Rev _____			
NAME		SIGNATURE	
DATE		NCR NR. (If applicable)	
SECTION 5: VACUUM TEST OF DRUM			
Drum vacuumed to 230 mbar on vacuum gauge	YES	Drum left under 230 mbar for twenty minutes	YES
Vacuum decrease is less than 40 mbar after twenty minutes	YES		
The undersigned hereby declares that the vacuum testing of the solidification drum is according to the specifications prescribed in I.E-WIN-0136 Rev _____			
NAME		SIGNATURE	
DATE		NCR NR. (If applicable)	
SECTION 6: DECLARATION BY RESPONSIBLE PERSON			
The undersigned hereby declares that the packing and vacuum testing of the solidification drum is according to the specifications prescribed in I.E-WIN-0136 Rev _____			
NAME		SIGNATURE	
TITLE		DATE	
I.E-WIN-0136 Rev _____		Copy of route card attached to drum (tick ✓) YES	