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<p>Brookhaven National Laboratory National Synchrotron Light Source II Work Instruction</p>	<p>Doc No.: NSLSII-7ID-WIN-007 Effective Date: 12APR2019 Review Frequency: 5 yrs Version No.: 1</p>
<p>Title: Vent and Pump-down of the MICROCAL Experimental Station at 7-ID-1</p>	

Prepared By:

4/12/2019

X Chernojaye

Chernojaye
SST-1 Lead Beamline Scientist
Signed by: Jaye, Chernojaye

Reviewed By:

4/16/2019

4/12/2019

X Conan Weiland

Conan Weiland
SST-2 Lead Beamline Scientist
Signed by: Weiland, Conan

X Daniel Fischer

Daniel Fischer
NIST Synchrotron Science Group Leader
Signed by: Fischer, Daniel

Approved By:

4/17/2019

X Robert Todd

Robert Todd
Beamline Vacuum Engineer
Signed by: Todd, Robert J

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1 WORK SCOPE

This work instruction provides instructions for the venting and pump-down of the MICROCAL experimental station at the 7-ID-1 Beamline.

This work instruction will enable Authorized Beamline Staff to safely perform configuration changes requiring venting and pump-down of the MICROCAL endstation.

2 PREREQUISITES

- 2.1 Only Authorized Personnel shall perform this work.
- 2.2 Authorized Personnel shall have a copy of NSLSII-VAC-PRC-007, *Beamline Vacuum System Venting* to use with this work instruction.

3 PRECAUTIONS/WARNINGS

- 3.1 Do not leave gas venting operations unattended.

4 INSTRUCTIONS

4.1 MICROCAL Experimental Station Venting

- 4.1.1 Close or check closed the experimental station upstream valves GV29B and GV29 as well as downstream valves GV30 and GV31 AND ensure that they are sealed.
- 4.1.2 Ensure detector power supplies are off.
- 4.1.3 Isolate OR power off the MICROCAL experimental station pumps and ion gauges.
- 4.1.4 Vent the MICROCAL endstation in accordance with NSLSII-VAC-PRC-007, *Beamline Vacuum System Venting*.

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4.2 MICROCAL Endstation Pump-down

- 4.2.1 Pump-down using an NSLS-II Pump Station OR a chamber pumping system.
- 4.2.2 Ensure the MICROCAL experimental station vacuum achieves less than 5×10^{-7} torr pressure.
- 4.2.3 When the above vacuum pressure is established, then open upstream valves GV29B and GV29 AND monitor the pressure in the MICROCAL chamber.
- 4.2.4 When the above vacuum pressure is established, then open downstream valve GV30.
- 4.2.5 When the above vacuum pressure is established, then open downstream GV31.

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VERSION HISTORY

VERSION	SECTION(S)	PAGE #	DATE	LIST OF REVIEWERS	DESCRIPTION
1	All	All	12APR2019	See cover page	First Issue.

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<p>Brookhaven National Laboratory National Synchrotron Light Source II Work Instruction</p>	<p>Doc No.: NSLSII-7ID-WIN-008 Effective Date: 12APR2019 Review Frequency: 5 yrs Version No.: 1</p>
<p>Title: Vent and Pump-down of the LARIAT1 Endstation at 7-ID-1</p>	

Prepared By:

4/12/2019

X Chernojaye

Chernojaye
SST-1 Lead Beamline Scientist
Signed by: Jaye, Chernojaye

Reviewed By:

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SST-2 Lead Beamline Scientist
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Approved By:

4/17/2019

X Robert Todd

Robert Todd
Beamline Vacuum Engineer
Signed by: Todd, Robert J

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Title: Vent and Pump-down of the LARIAT1 Endstation at 7-ID-1	

1 WORK SCOPE

This work instruction provides instructions for the venting and pump-down of the LARIAT1 Endstation at the 7-ID-1 Beamline.

This work instruction will enable Authorized Beamline Staff to safely perform configuration changes requiring venting and pump-down of the LARIAT1 Endstation.

2 PREREQUISITES

- 2.1 Only Authorized Personnel shall perform this work.
- 2.2 Authorized Personnel shall have a copy of NSLSII-VAC-PRC-007, *Beamline Vacuum System Venting* to use with this work instruction.

3 PRECAUTIONS/WARNINGS

- 3.1 Do not leave gas venting operations unattended.

4 INSTRUCTIONS

4.1 LARIAT1 Endstation Venting

- 4.1.1 Close or check closed the endstation upstream valves GV29B and GV29 as well as downstream valves GV30 and GV31 AND ensure that they are sealed.
- 4.1.2 Ensure detector power supplies are off.
- 4.1.3 Isolate OR power off the LARIAT1 Endstation pumps and ion gauges.
- 4.1.4 Vent the LARIAT1 endstation in accordance with NSLSII-VAC-PRC-007, *Beamline Vacuum System Venting*.

4.2 LARIAT1 Endstation Pump-down

- 4.2.1 Pump-down using an NSLS-II Pump Station OR a chamber pumping system.

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- 4.2.2 Ensure the LARIAT1 Endstation vacuum achieves less than 5×10^{-7} torr pressure.
- 4.2.3 When the above vacuum pressure is established, then open upstream valves GV29B and GV29 AND monitor the pressure in the LARIAT1 chamber.
- 4.2.4 When the above vacuum pressure is established, then open downstream valve GV30.
- 4.2.5 When the above vacuum pressure is established, then open downstream GV31.

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