#1 CONTACT INFORMATION:

<table>
<thead>
<tr>
<th>Procedure Title</th>
<th>Handling of High/low pH chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Author</td>
<td>Brian Muller</td>
</tr>
<tr>
<td>Date of Creation/Revision</td>
<td>9/18/2015</td>
</tr>
<tr>
<td>Name of Responsible Person</td>
<td></td>
</tr>
<tr>
<td>Location of Procedure</td>
<td>All laboratories (FH 341, 342, FW 336)</td>
</tr>
<tr>
<td>Approval Signature</td>
<td></td>
</tr>
</tbody>
</table>

#2 THIS STANDARD OPERATING PROCEDURE (SOP) IS FOR A:

- [x] Generic use of specific chemical or class of chemicals with similar hazards
- [ ] Specific laboratory procedure or experiment
- [ ] Generic laboratory procedure that covers several chemicals

#3 PROCESS OR EXPERIMENT DESCRIPTION

Proper utilization of highly acidic and basic solutions

Frequency:

- [x] daily
- [ ] one time
- [ ] weekly
- [ ] monthly
- [ ] other:__________________

Duration per Expt:

____________ minutes; or _____ hours

Variable Exposure times 5 minutes - 2 hours

#4 SAFETY LITERATURE REVIEW & HAZARD SUMMARY

For assistance with this form contact NIU Environmental Health and Safety, 815-753-0404.
### SAFETY LITERATURE REVIEW & HAZARD SUMMARY


### STORAGE REQUIREMENTS

Work in fume hood when possible.

### STEP-BY-STEP OPERATING PROCEDURE

**Steps to include in your procedure:**

1. **Don personal protective equipment.**
   - [x] appropriate street clothing (long pants, close-toed shoes)
   - [x] gloves; indicate type: **latex/sterile examination gloves**
   - [ ] safety goggles  [ ] safety glasses  [ ] face shield
   - [x] lab coats
   - [ ] other: ___________________________

2. **Check the location and accessibility of the safety equipment that serves your lab:**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Fume Hood/Glove Box or other</td>
<td>Location: __________________________</td>
</tr>
<tr>
<td>Ventilation Control</td>
<td></td>
</tr>
<tr>
<td>Eyewash/Safety Shower</td>
<td>Location: __________________________</td>
</tr>
</tbody>
</table>

3. 

4. **See next sheet**

5. **Dispose of hazardous solvents, solutions, mixtures, and reaction residues as hazardous waste.**
   - See EH&S Hazardous Waste Program
   - [http://www.ehs.niu.edu/ehs/chemical/waste.shtml](http://www.ehs.niu.edu/ehs/chemical/waste.shtml)

For assistance with this form contact NIU Environmental Health and Safety, 815-753-0404.
NIU Standard Operating Procedure Template

**Locate spill kit in lab. (Next to laboratory entrance/sink)**

<table>
<thead>
<tr>
<th>ITEM</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Fume</td>
<td>Location: _______________</td>
</tr>
<tr>
<td>Hood/Glove Box or other</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
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</tr>
</tbody>
</table>

3. Gloves, lab coat, and goggles must be worn. Acids & bases are corrosive. Spills must be neutralized/washed immediately.

4. Avoid skin contact and keep face away from chemicals. Be aware of vapor hazards as well.


6. Clean up work area and lab equipment.

7. Remove PPE and wash hands.

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### WASTE DISPOSAL

Acids and bases can be diluted and rinsed away. Strong and organic acids & bases must be transferred to waste containers.

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### TRAINING REQUIREMENTS

**General Training (check all that apply):**

- [ ] General Safety & Emergency Preparedness

For assistance with this form contact NIU Environmental Health and Safety, 815-753-0404.
**NIU Standard Operating Procedure Template**

- [x] Chemical Safety for Laboratories
  - [ ] Radiation Safety
  - [ ] Biosafety training
  - [ ] Other: ____________________________

**Location Where Records Maintained:**

**Laboratory-specific training (check all that apply):**
- [ ] Review of SDS for other chemicals involved in process/experiment
- [ ] Review of this SOP
- [ ] Other: ____________________________

**Location Where Records Maintained:**

**#9 PRIOR APPROVALS**

Prior approvals are required by the following University Committees:

- **Radiation Safety Committee: Radioactive material,**
- **Radiation Safety Committee: X-Ray machines**
- **Laser safety: Laser producing equipment Class 3b or above.**
- **IACUC: Animal use in research**
  - [http://www.orc.niu.edu/orc/animal_research/index.shtml](http://www.orc.niu.edu/orc/animal_research/index.shtml)
- **IBC: Recombinant DNA, potential pathogens, human tissue/body fluids**
  - [http://www.orc.niu.edu/orc/biosafety/niupolicy.shtml](http://www.orc.niu.edu/orc/biosafety/niupolicy.shtml)

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