To: Chancellors, Vice Chancellors, Vice Presidents, Deans, Executive Directors, Directors, Department Heads, Chairs and Delegated Procurement Authorities

From: Sally A. McKechnie, Assistant Vice President Procurement & Property Management, CPO

Purpose: Procurement of Personal Protection Equipment (PPE)

Applicability: Louisiana State University and A&M College – Baton Rouge Campus

As you may be aware, there are currently significant challenges in the supply chain for certain Personal Protection Equipment (PPE) items necessary to facilitate the phased reopening of campus. To assist with the restocking of PPE inventory in your department, departments should evaluate inventory and calculate a 3-month projection of the supplies needed to continue operations when the department returns to campus. A non-catalog requisition listing the items needed, projected quantities/costs as well as anticipated delivery timelines must be routed to Amy Bourgeois as the Sourcing Buyer.

Procurement will work with our master contract suppliers or other PPE suppliers to arrange fulfillment of the order as supplies become available. Procurement will also work with Property Management to arrange delivery if your department is not available to accept the items.

A Frequently Asked Questions document has been created and is incorporated as part of this amended memo.

This important memorandum should be immediately distributed internally to appropriate staff. For your convenience, this memo is accessible on our website at www.procurement.lsu.edu (A-Z / Memos). If you have additional questions, please contact this office via email at purchase@lsu.edu.
Personal Protection Equipment (PPE) FAQ

Q: If I can purchase PPE items from a local vendor, am I allowed to purchase using my LaCarte card (tax exempt) or must I do a requisition and go thru Workday?

A: PPE purchases are NOT allowed using LaCarte. Accounts Payable will flag transactions for compliance review. All PPE purchases must be submitted as a non-catalog requisition assigned to Amy Bourgeois for review.

Q: When logging into Workday and clicking on the Purchases icon, do I use the "Connect to supplier website" as I normally would and set up a normal purchase or do I use the "Request Non-Catalog Items"?

A: Supplier websites should not be used for PPE items at this time. Departments should submit a requisition using the “Request Non-Catalog Items” option and enter one of the below Master Contract suppliers in the supplier fields. Do not select the supplier contract.


Q: Once I know what each lab needs, then I would create a non-catalog requisition in Workday for those items. Can the items be from various vendors and can they be specific about the items needed? Can departments charge PPE purchases to various accounts or does it have to be under one account? What is the deadline to submit the requisition?

A: A non-catalog requisition must be submitted thru Workday and Procurement will consolidate orders. Procurement will try to source procured items utilizing one of our Master Contracts prior to going to outside vendors.

With the demand for PPE, it is not guaranteed that specific items will be available; therefore, specifications may need to be adjusted based on product availability.

Departments can charge PPE purchases to various accounts in Workday. Please contact your business office for further assistance with line splits. It is recommended to submit requisitions as soon as possible.

Q: Should we be purchasing masks, gloves and hand sanitizer for our faculty and staff or will individual employees be responsible for having those when we return to campus?

A: Hand sanitizer, gloves and masks can now be purchased through the non-catalog requisition process as referenced above. Departments should list the specific types needed, projected quantities/costs as well as anticipated delivery timelines in the requisition.
Q: Will we need to order hand sanitizer for the offices? We are unsure if each department will order their own and/or if Facility Services will be providing this at the building entrances.

A: Hand sanitizer must now be purchased through the non-catalog requisition process as referenced above. Departments should list the specific types needed, projected quantities/costs as well as anticipated delivery timelines in the requisition.

Q: We are having delivery issues since the delivery men are not able to get inside while no one is there. In regard to the sentence in your memo related to delivery assistance, would anyone be able to assist us in receiving our deliveries?

A: PPE orders can be shipped to Property Management if the department has not returned to campus. Property Management will reach out to department contact to pick up shipments from their location at River Road.

Q: To confirm, we fill this list out in Workday under the non-catalogue items and add Amy Bourgeois as the buyer?

A: A non-catalog requisition listing the items needed, projected quantities/costs as well as anticipated delivery timelines must be routed to Amy Bourgeois as the Sourcing Buyer.

Q: Copier Management sent out an email last week with details for how to clean the copiers and it referenced using alcohol which is why we were purchasing the pads as we have several essential worker staff who are at the office, as well as, for when we return. Is this acceptable or is this also classified as PPE? (Referring to COVID-19 PPE, not day-to-day operations PPE)

A: Departments will need to contact Copier Management at copiermgmt@lsu.edu to get clarification on whether or not the requested pads are acceptable for cleaning copy machines. Currently each department is responsible for procuring the proper agent and cleaning their own machines.

Q: Are we using our PG#s or do we use the COVID-19 grant #?

A: If it is a normal supply, you will need to utilize your PG#. Please contact your business office for further assistance and clarification regarding the appropriate funding source.

Q: If we choose to order from Amazon do we complete it as a normal business purchase?

A: We are not encouraging Amazon orders at this time. Please utilize the requisition process to procure items.
Personal Protection Equipment (PPE) Guidance

Masks:

Attached is the 3M branded spec sheet for their N95 & KN95 respirators

Gloves:
- https://www.who.int/gpsc/5may/Glove_Use_Information_Leaflet.pdf?ua=1

Sprays:

LSU NCBRT/ACE COVID-19 Resources

View available eLearning resources at https://www.ncbrt.lsu.edu/courses/covid19.php.
Comparison of FFP2, KN95, and N95 and Other Filtering Facepiece Respirator Classes

Description

Filtering facepiece respirators (FFR), which are sometimes called disposable respirators, are subject to various regulatory standards around the world. These standards specify certain required physical properties and performance characteristics in order for respirators to claim compliance with the particular standard. During pandemic or emergency situations, health authorities often reference these standards when making respirator recommendations, stating, for example, that certain populations should use an “N95, FFP2, or similar” respirator.

This document is only intended to help clarify some key similarities between such references, specifically to the following FFR performance standards:

- N95 (United States NIOSH-42CFR84)
- FFP2 (Europe EN 149-2001)
- KN95 (China GB2626-2006)
- P2 (Australia/New Zealand AS/NZA 1716:2012)
- Korea 1st class (Korea KMOEL - 2017-64)
- DS2 (Japan JMHLW-Notification 214, 2018)

As shown in the following summary table, respirators certified as meeting these standards can be expected to function very similarly to one another, based on the performance requirements stated in the standards and confirmed during conformity testing.

One notable comparison point is the flow rates specified by these standards for the inhalation and exhalation resistance tests. Inhalation resistance testing flow rates range from 40 to 160L/min. Exhalation resistance testing flow rates range from 30 to 95 L/min. Some countries require testing to be performed at multiple flow rates, others at only the high or low end of those ranges. Although this appears to suggest that the standards’ requirements for breathing resistance (also called “pressure drop”) differ from each other, it’s important to understand that pressure drop across any filter will naturally be higher at higher flow rates and lower at lower flow rates. Given typical pressure curves for respirator filters, the standards’ various pressure drop requirements are actually quite similar. This chart shows a representative filter pressure drop curve. If one filter is tested at a high flow rate, the pressure drop performance will be relatively high. If that same filter is tested at a low flow rate, the pressure drop performance will be relatively low.
Based on this comparison, it is reasonable to consider China KN95, AS/NZ P2, Korea 1st Class, and Japan DS2 FFRs as "similar" to US NIOSH N95 and European FFP2 respirators, for filtering non-oil-based particles such as those resulting from wildfires, PM 2.5 air pollution, volcanic eruptions, or bioaerosols (e.g. viruses). However, prior to selecting a respirator, users should consult their local respiratory protection regulations and requirements or check with their local public health authorities for selection guidance.

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<tbody>
<tr>
<td>Filter performance – (must be ≥ X% efficient)</td>
<td>≥ 95%</td>
<td>≥ 94%</td>
<td>≥ 95%</td>
<td>≥ 94%</td>
<td>≥ 94%</td>
<td>≥ 95%</td>
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<tr>
<td>Test agent</td>
<td>NaCl</td>
<td>NaCl and paraffin oil</td>
<td>NaCl</td>
<td>NaCl</td>
<td>NaCl and paraffin oil</td>
<td>NaCl</td>
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<tr>
<td>Flow rate</td>
<td>85 L/min</td>
<td>95 L/min</td>
<td>85 L/min</td>
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<td>95 L/min</td>
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<tr>
<td>Total inward leakage (TIL)* – tested on human subjects each performing exercises</td>
<td>N/A</td>
<td>≤ 8% leakage (arithmetic mean)</td>
<td>≤ 8% leakage (arithmetic mean)</td>
<td>≤ 8% leakage (individual and arithmetic mean)</td>
<td>≤ 8% leakage (arithmetic mean)</td>
<td>Inward Leakage measured and included in User Instructions</td>
</tr>
<tr>
<td>Inhalation resistance – max pressure drop</td>
<td>≤ 343 Pa</td>
<td>≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min) ≤ 500 Pa (clogging)</td>
<td>≤ 350 Pa</td>
<td>≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min)</td>
<td>≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min)</td>
<td>≤ 70 Pa (w/valve) ≤ 50 Pa (no valve)</td>
</tr>
<tr>
<td>Flow rate</td>
<td>85 L/min</td>
<td>Varied – see above</td>
<td>85 L/min</td>
<td>Varied – see above</td>
<td>Varied – see above</td>
<td>40 L/min</td>
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<tr>
<td>Exhalation resistance - max pressure drop</td>
<td>≤ 245 Pa</td>
<td>≤ 300 Pa</td>
<td>≤ 250 Pa</td>
<td>≤ 120 Pa</td>
<td>≤ 300 Pa</td>
<td>≤ 70 Pa (w/valve) ≤ 50 Pa (no valve)</td>
</tr>
<tr>
<td>Flow rate</td>
<td>85 L/min</td>
<td>160 L/min</td>
<td>85 L/min</td>
<td>85 L/min</td>
<td>160 L/min</td>
<td>40 L/min</td>
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<td>Exhalation valve leakage requirement</td>
<td>Leak rate ≤ 30 mL/min</td>
<td>N/A</td>
<td>Depressurization to 0 Pa ≥ 20 sec</td>
<td>Leak rate ≤ 30 mL/min</td>
<td>visual inspection after 300 L/min for 30 sec</td>
<td>Depressurization to 0 Pa ≥ 15 sec</td>
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<tr>
<td>Force applied</td>
<td>-245 Pa</td>
<td>N/A</td>
<td>-1180 Pa</td>
<td>-250 Pa</td>
<td>N/A</td>
<td>-1,470 Pa</td>
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<td>CO₂ clearance requirement</td>
<td>N/A</td>
<td>≤ 1%</td>
<td>≤ 1%</td>
<td>≤ 1%</td>
<td>≤ 1%</td>
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</tr>
</tbody>
</table>

*Japan JMHLW-Notification 214 requires an Inward Leakage test rather than a TIL test.
Definitions

**Filter performance** – the filter is evaluated to measure the reduction in concentrations of specific aerosols in air that passes through the filter.

**Test agent** - the aerosol that is generated during the filter performance test.

**Total inward leakage (TIL)** – the amount of a specific aerosol that enters the tested respirator facepiece via both filter penetration and faceseal leakage, while a wearer performs a series of exercises in a test chamber.

**Inward leakage (IL)** – the amount of a specific aerosol that enters the tested respirator facepiece, while a wearer performs a normal breathing for 3 minutes in a test chamber. The test aerosol size (count median diameter) is about 0.5 micro meter.

**Pressure drop** – the resistance air is subjected to as it moves through a medium, such as a respirator filter.

*IMPORTANT: Always read and follow respirator user instructions.*