

Note: This proposal is the work of an independent advisory committee to GSA, and as such, may or may not be consistent with current GSA or other Federal Policy. Mention of any product, service, or program herein does not constitute an endorsement.

GSA Green Building Advisory Committee Advice Letter on Sustainable Response to COVID-19 Task Group

February 9, 2021

Kevin Kampschroer
Chief Sustainability Officer and Director,
Office of Federal High-Performance Buildings
U.S. General Services Administration (GSA)

RE: Sustainable Response to COVID-19 Task Group Recommendations

Dear Mr. Kampschroer:

This letter summarizes the Green Building Advisory Committee recommendations, based on the work of its Sustainable Response to COVID-19 Task Group. Please see the list of Task Group members and observers below.

This task group analyzed potential impacts on federal facility sustainability, including occupant health and wellness, related to the possible implementation of COVID-19 mitigation measures and operational practices. While the top priority in responding to the COVID-19 pandemic is to assure occupant health and safety, current engineering controls guidance (e.g., increased ventilation and filtration) may be challenging to implement and increase energy use in some buildings. Similarly, increased building cleaning and disinfection frequency can lead to high levels of indoor air pollutants, negatively impacting occupant health and wellness.

The task group completed the following steps in evaluating the sustainability impacts of COVID-19:

- Reviewed current COVID-19 reopening guidance regarding HVAC engineering controls, surface cleaning, and disinfection
- Evaluated the implications of the guidance on maintaining facility sustainability (e.g., energy use) and occupant health and wellness (e.g., indoor air quality)
- Identified key considerations for use in facility decision making
- Provided guidance documents and implementation resources
- Developed a proposed decision guide for indoor air quality, surface cleaning and disinfection planning and programming

The proposed decision guide builds on existing guidance with the intent of ensuring that such guidance is used in such a way as to enhance sustainability, efficiency and health while simultaneously confronting the acute threat of COVID-19. This guide is proposed to be provided as public information on GSA's SF Tool website and to be piloted at facilities where best practices and lessons learned can be collected and used to improve such guidance.

Task Group Approach

The task group developed a proposed decision guide (attached), which documents guidance, sustainability impacts, health and safety impacts, and other considerations for managing a sustainable response to COVID-19. The proposed decision guide also provides links to federal agency references and additional guidance and resources to evaluate and implement various interventions and improvements. The proposed decision guide is organized into two sections: Engineering Controls for Clean Air and Cleaning and Disinfection for Clean Surfaces.

The Clean Air section includes guidance, impacts, and considerations for the following areas:

- HVAC System Assessment
- Ventilation, Filtration, Air Cleaning
- Air Distribution
- System Operations
- Building Automation Systems
- System Environmental Monitoring
- Isolation Rooms
- Special Needs and High-Risk Populations.

The Clean Surfaces section focuses on fomites and the indirect transmission of pathogens by touching a contaminated surface and then touching the face, nose, mouth, or eyes. The following surfaces are considered:

- Door Knobs, Pull Handles/Push Plates, Cabinetry Handles, Grab Bars, Handrails, Light Switches, Room Controls (thermostats, sensors)
- Seating (armrests, cushions, arm caps), Shared Countertops and Work Surfaces
- Flooring
- Personal Electronic Devices (smartphones, touchpads, computers and workstation peripherals, mouse, keyboard)

Proposed Decision Guide

The proposed decision guide is intended to be flexible to help with agency decisions during COVID and in the event of a future pandemic. The considerations are purposefully not in priority order. Each organization needs to evaluate its operational processes, develop appropriate policies and procedures, and make decisions based upon their facilities, the type of work being performing in them, identification of occupants of the space, and the interactions between users. Stakeholder collaboration using an integrated, multidisciplinary team approach is necessary for innovative, successful solutions. An evaluation of all operational functions include responding to “who, what, where, when, why, and how” and responses are used to develop policies and procedures that are supportive to the health and wellbeing of building occupants. The proposed decision guide considerations can be prioritized and organized based upon the desired outcomes.

The proposed decision guide is designed to be used by the following stakeholders.

- Federal facility directors and managers
- Federal facility engineering and operations staff
- Third-party contract HVAC and controls service providers
- In-house and third-party contracted cleaning staff
- Facility commissioning and test-and-balance contractors
- Indoor air quality and energy consultants and specialists
- Architects and engineers involved in facility design, renovation, and retrofit

Piloting the proposed design guide should be done in facilities with a diverse combination of characteristics, including facility type and location, facility users and interactions, and mechanical system configuration and age. An integrated, multidisciplinary team should be used to prioritize actions, using the proposed decision guide as a template.

The integrated team should document the operational responses to "who, what, where, when, why, and how" for facility and user processes and review current cleaning and disinfection policies and procedures that correlate to all material selections within each space. The team should assess HVAC and control system condition and operating performance and evaluate potential product, material, system, and operational updates. Finally, the team should update policies, procedures, and specifications to address occupant health, wellness, safety, and sustainability.

Key Task Group Findings

- Information and research on the response to COVID-19 continue to evolve, requiring updates to guidance and recommendations.
- Proposed decision guidance is intended to help guide agency plans, decisions, and procedures in a pandemic recognizing that facilities are not uniform across all government buildings.
- COVID-19 recovery guidelines from federal agencies and other organizations are generic and may not apply directly to specific individual facilities.
- Flexibility is needed to respond to indoor pathogens and emergency health conditions while also focusing on long-term best practices.
- Engineering control measures taken to maintain clean air can significantly impact energy use depending on the building type and location, and a variety of alternative solutions should be considered based on individual facility characteristics and climate.
- Cleaning and disinfection practices need to be evaluated based on individual facility circumstances to balance the indirect transmission of a pathogen with overall occupant health and wellness.
- Stakeholder collaboration using an integrated, multidisciplinary team approach is essential to innovative, successful solutions.
- A top recommendation in response to COVID-19 is understanding and implementing strategies that support sustainability, climate change, and human health in buildings.

Key Task Group Recommendations

1. Post the Proposed Decision Guide in an appropriate place on SFTool to be used as a resource.
2. Develop a plan to establish responsibility for the Proposed Decision Guide to periodically update content based on the new guidance, research, and experience.
3. Pilot the Proposed Decision Guide in several federal facilities and update as desired based on lessons learned and best practices for each pilot site.
4. Consider a second phase task group to leverage learnings to make recommendations for operating and designing new and renovated facilities that optimize health, wellness, and sustainability under current and future pandemic and emergency conditions.

GSA is in a unique position to help federal facilities respond to the COVID-19 pandemic while still achieving sustainability objectives and providing a healthy, safe environment for occupants. We hope that this task group's work can help inform key federal stakeholders on the essential considerations in responding to the COVID-19 and future pandemics.

Thank you for your careful consideration of this package and for the opportunity to recommend these essential policies to GSA. On behalf of the Green Building Advisory Committee, I respectfully submit these recommendations for your consideration.

Sincerely,

Projjal Dutta, Chair
Green Building Advisory Committee

Fernando Aras, Co-Chair
Sustainable Response to COVID-19 Task Group

Clay Nesler, Co-Chair
Sustainable Response to COVID-19 Task Group

Task Group Members and Observers

Task Group Members or Designees:

Allison Ackerman, U.S. Department of Energy
Reena Agarwal, Center for Active Design
Fernando Arias, Clark Construction Group, Co-Chair
Whitney Austin Gray, International WELL Building Institute
Sara Karerat, Center for Active Design
Clay Nesler, Johnson Controls, Co-Chair
Andrew Persily, NIST
Kent Peterson, P2S Inc.
Jane Rohde, JSR Associates
Nathan Stodola, International WELL Building Institute

GSA Attendees:

Michael Bloom, GSA

Alex Rogers, Logistics Management Institute