LEED CERTIFICATION PROJECT REVIEW REPORT

How to Interpret this Report

Purpose

Leadership in Energy and Environmental Design (LEED) was designed by the US Green Building Council to encourage and facilitate the development of more sustainable buildings.

This report contains LEED certification review results for the specified project. The review was performed by the Certification Body through the Green Building Certification Institute.

Project Details

Project Title	Newport Tower
Project ID	1000008377
Rating System & Version	LEED-EB:OM v2009
Project Registration Date	08/04/2010
Certification Body	LEED Review Tea
Current Project Status	O and M Application Decision

Review Overview Details

Review Stage Name	Date Submitted	Date Returned	Credits Submitted	Points Anticipated/ Awarded	Points Pending	Points Denied
O and M Preliminary Review	05/26/11	07/12/11	48	43	17	
O and M Final Review	08/11/11	08/31/11	26	17		2
Current Totals	**n/a**	**n/a**	**74**	**60**	**17**	**2**

Certification Levels: Certified: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80+

Review Stage Details

O and M Preliminary Review: **Submitted: 05/26/11** **Returned: 07/12/11**

Credit	Credit Status	Points Attempted	Points Awarded	Points Pending	Points Denied
PIf1: Minimum Program Requirements	Approved				
PIf2: Project Summary Details	Approved				
PIf3: Occupant and Usage Data	Not Approved				
PIf4: Schedule and Overview Documents	Approved				
PIf5: Previously LEED Certified Details	Approved				
SSc2: Building Exterior and Hardscape Management Plan	Pending	1		1	
SSc3: Integrated Pest Management, Erosion Control, and Landscape ManagementPlan	Pending	1		1	
SSc4: Alternative Commuting Transportation	Awarded	7	7		

SSc7.1: Heat Island Reduction-Non-Roof	Awarded	1	1		
WEp1: Minimum Indoor Plumbing Fixture and Fitting Efficiency	Pending				
WEc1: Water Performance Measurement	Awarded	2	2		
WEc2: Additional Indoor Plumbing Fixture and Fitting Efficiency	Pending	2			2
WEc4.1: Cooling Tower Water Management-Chemical Management	Awarded	1	1		
EAp1: Energy Efficiency Best Management Practices-Planning, Documentation, and Opportunity Assessment	Pending				
EAp2: Minimum Energy Efficiency Performance	Awarded				
EAp3: Fundamental Refrigerant Management	Awarded				
EAc1: Optimize Energy Efficiency Performance	Awarded	16	16		
EAc2.1: Existing Building Commissioning-Investigation and Analysis	Awarded	2	2		
EAc2.2: Existing Building Commissioning-Implementation	Awarded	2	2		
EAc2.3: Existing Building Commissioning-Ongoing Commissioning	Awarded	2	2		
EAc6: Emissions Reduction Reporting	Pending	1			1
MRp1: Sustainable Purchasing Policy	Awarded				
MRp2: Solid Waste Management Policy	Awarded				
MRc3: Sustainable Purchasing-Facility Alterations and Additions	Pending	1			1
MRc4: Sustainable Purchasing-Reduced Mercury in Lamps	Pending	1			1
MRc6: Solid Waste Management-Waste Stream Audit	Awarded	1	1		
MRc8: Solid Waste Management-Durable Goods	Pending	1			1
IEQp1: Minimum Indoor Air Quality Performance	Pending				
IEQp2: Environmental Tobacco Smoke (ETS) Control	Awarded				
IEQp3: Green Cleaning Policy	Pending				
IEQc1.1: Indoor Air Quality Best Management Practices-Indoor Air QualityManagement Program	Pending	1			1
IEQc1.3: Indoor Air Quality Best Management Practices-Increased Ventilation	Pending	1			1
IEQc1.4: Indoor Air Quality Best Management Practices-Reduce Particulates in AirDistribution	Awarded	1	1		
IEQc2.1: Occupant Comfort-Occupant Survey	Awarded	1	1		
IEQc2.2: Controllability of Systems-Lighting	Pending	1			1
IEQc2.4: Daylight and Views	Awarded	1	1		
IEQc3.1: Green Cleaning-High Performance Cleaning Program	Pending	1			1

IEQc3.2: Green Cleaning-Custodial Effectiveness Assessment	Awarded	1	1		
IEQc3.3: Green Cleaning-Sustainable Cleaning Products and Materials Purchases	Awarded	1	1		
IEQc3.4: Green Cleaning-Sustainable Cleaning Equipment	Pending	1		1	
IEQc3.5: Green Cleaning-Indoor Chemical and Pollutant Source Control	Awarded	1	1		
IEQc3.6: Green Cleaning-Indoor Integrated Pest Management	Awarded	1	1		
IOc1.1: Exemplary Performance - MRc4	Pending	1		1	
IOc1.2: Residential E-Waste Recycling Program	Pending	1		1	
IOc1.3: Exterior Infrared Scanning Program	Pending	1		1	
IOc1.4: Innovation in Operations - EQc3.3	Awarded	1	1		
IOc2: LEED® Accredited Professional	Awarded	1	1		
IOc3: Documenting Sustainable Building Cost Impacts	Pending	1		1	
Totals for O and M Preliminary Review	**n/a**	**60**	**43**	**17**	**0**

O and M Final Review:	**Submitted: 08/11/11**		**Returned: 08/31/11**		
Credit	**Credit Status**	**Points Attempted**	**Points Awarded**	**Points Pending**	**Points Denied**
PIf1: Minimum Program Requirements	Approved				
PIf2: Project Summary Details	Approved				
PIf3: Occupant and Usage Data	Approved				
PIf4: Schedule and Overview Documents	Approved				
PIf5: Previously LEED Certified Details	Approved				
SSc2: Building Exterior and Hardscape Management Plan	Awarded	1	1		
SSc3: Integrated Pest Management, Erosion Control, and Landscape ManagementPlan	Awarded	1	1		
WEp1: Minimum Indoor Plumbing Fixture and Fitting Efficiency	Awarded				
WEc2: Additional Indoor Plumbing Fixture and Fitting Efficiency	Awarded	2	2		
EAp1: Energy Efficiency Best Management Practices-Planning, Documentation, and Opportunity Assessment	Awarded				
EAc4: On-site and Off-site Renewable Energy	Awarded	2	2		
EAc6: Emissions Reduction Reporting	Awarded	1	1		
MRc3: Sustainable Purchasing-Facility Alterations and Additions	Awarded	1	1		
MRc4: Sustainable Purchasing-Reduced Mercury in Lamps	Awarded	1	1		
MRc8: Solid Waste Management-Durable Goods	Awarded	1	1		

IEQp1: Minimum Indoor Air Quality Performance	Awarded				
IEQp3: Green Cleaning Policy	Awarded				
IEQc1.1: Indoor Air Quality Best Management Practices-Indoor Air QualityManagement Program	Denied	1			1
IEQc1.3: Indoor Air Quality Best Management Practices-Increased Ventilation	Denied	1			1
IEQc2.2: Controllability of Systems-Lighting	Awarded	1	1		
IEQc3.1: Green Cleaning-High Performance Cleaning Program	Awarded	1	1		
IEQc3.4: Green Cleaning-Sustainable Cleaning Equipment	Awarded	1	1		
IOc1.1: Exemplary Performance - MRc4	Awarded	1	1		
IOc1.2: Residential E-Waste Recycling Program	Awarded	1	1		
IOc1.3: Exterior Infrared Scanning Program	Awarded	1	1		
IOc3: Documenting Sustainable Building Cost Impacts	Awarded	1	1		
Totals for O and M Final Review	**n/a**	**19**	**17**	**0**	**2**

Credit Details

PIf1: Minimum Program Requirements

Credit Status	Approved		
Credit Type			

O and M Final Review and O and M Preliminary Review Comments:

This form was previously approved during the Preliminary Review. No changes have been made. The LEED Project Information Form has been provided stating that the project complies with all Minimum Program Requirements. The project owner has signed the form, as required. The project is located in Jersey City, New Jersey.

PIf2: Project Summary Details

Credit Status	Approved		
Credit Type			

O and M Final Review and O and M Preliminary Review Comments:

This form was previously approved during the Preliminary Review. No changes have been made. The LEED Project Information Form has been provided including the following project summary details. The building has a total gross floor area of 1,050,199 squarefeet in an urban context and was constructed in 1992. The building consists of 100% existing unrenovated space. The total land area within the LEED project boundary is 105,966 square feet. The building footprint is 66,053 square feet. The area outside the building footprint, within the LEED boundary, that is comprised of hardscape is 34,913 square feet. The project has no parking spaces for building users. There are 36 floors above grade and one floor below grade (excluding parking). The building uses energy from natural gas and electricity.

PIf3: Occupant and Usage Data

Credit Status	Approved		
Credit Type			

O and M Final Review and O and M Preliminary Review Comments:

The LEED Project Information Form has been revised to address the issues outlined in the Preliminary Review comments and includes the average level of occupancy for the building over time. The form indicates that the building was 89% occupied from April 1, 2010 to April 15, 2011. A clarification narrative has been provided indicating that the total gross floor area listed on the form and on the Statement of Energy Performance provided for EAp2

Minimum Energy Efficiency Performance (1,050,199 square feet)is accurate. The narrative states that all retail customers have been included in Tables PIf3-3 and PIf3-4 (as FTE occupants). The documentation demonstrates form compliance. The LEED Project Information Form has been provided including the following occupant and usage data. The occupant type is mixed and the project consists primarily of financial office spaces. The average FTE value is 3,450. The project has an average of 200 transient occupants. A rent roll listing the building tenants and their occupancy periods has been provided. The following areas are listed as exempt from IEQc3.1 Green Cleaning - High-Performance Cleaning Program, IEQc3.2 Green Cleaning - Custodial Effectiveness Assessment, IEQc3.3 Green Cleaning - Purchase of Sustainable Cleaning Products and Materials, and IEQc3.4 Green Cleaning - Sustainable Cleaning Equipment: Market Cafe and two Other Retail areas. The Data Center is listed as exempt from IEQc3.6 Green Cleaning - Indoor Integrated Pest Management. However, three issues are pending: 1. Although a rent roll listing the building tenants and their periods of occupancy has been provided, the average level of occupancy for the building over time has not been provided. Additionally, for the reasons outlined in Item 2 below, it is unclear whether the rent roll accurately reflects the floor area included in the LEED project. 2. The total gross floor area listed in the rent roll (1,099,767 square feet) does not match the gross floor area listed on the form, the PIf2 Project Summary Details form, or the Statement of Energy Performance provided for EAp2 Minimum Energy Efficiency Performance (1,050,199 square feet). 3. Although retail spaces are included in Table PIf3-1 Space Usage Type, retail customers have not been included in Table PIf3-4 Total Daily Occupancy. Please note the following: 1. Table PIf3-1 Space Usage Type indicates that all of the 1,050,199 square feet of gross floor area within the project building is considered regularly occupied, which is atypical for a multi-tenantoffice building. As stated in the Glossary of the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010), regularly occupied spaces are areas where workers are seated or standing as they work inside a building; therefore, it is atypical that 100% of the gross floor area within a building would be regularly occupied. As IEQp1 Minimum Indoor Air Quality and IEQc2.4 Daylight and Views both indicate that 974,159 square feet of the building is regularly occupied,form compliance is not affected. For future submittals, ensure that the area of regularly occupied space in the project building is reported consistently across all credits and prerequisites. 2. Because the project was registered after October 8, 2009 and the average occupancy is below 90%, the project is required to adhere to the Reduced Occupancy Guidance for LEED for Existing Buildings Operations and Maintenance, 2009, which is available on the LEED-EBOM web page (www.USGBC.org/LEED/EB). This has been noted under each relevant credit and prerequisite. TECHNICAL ADVICE: 1. Please provide a revised form showing the average level of occupancy for the building over time. Note that if occupancy conditions have not fluctuated over time, only a single row of calculations is needed. If occupancy conditions have varied over time and the number of entries exceeds the number of available rows in Table PIf3-2, provide calculations summarizing the average percentage occupied across all partially occupied spaces.Ensure consistent reporting of total gross floor area throughout the application. 2. Provide a revised form listing a total gross floor area for the project building that is consistent with all other forms, prerequisites, and credits. 3. Provide a revised form that includes retail customers. Ensure consistent reporting of retail customers throughout the application. Alternatively, provide a narrative confirming that the retail establishments at the project building serve only building occupants, and do not serve customers who do not work in the building.

PIf4: Schedule and Overview Documents

Credit Status	Approved		
Credit Type			

O and M Final Review and O and M Preliminary Review Comments:

This form was previously approved during the Preliminary Review. No changes have been made. The LEED Project Information Form has been provided stating that the performance period is from January 15, 2011 to April 15, 2011. The following documents have been provided: photographs of the building interior and exterior, representative floor plans, a site plan, an aerial photograph of the project site, elevations, and HVAC system schedules. In addition, a narrative describing the building HVAC, lighting, andelectrical systems has been provided, along with a narrative describing the LEED project in general. Please note that the earliest performance period start date in the application must be at least one year before the latest end date. As the performance period start date for EAp2 Minimum Energy Efficiency Performance is at least one year before the latest performance period end date in the application, form compliance is not affected. For future submittals, ensure that the earliest performance period start date is accurately listed on PIf4.

PIf5: Previously LEED Certified Details

Credit Status	Approved		
Credit Type			

O and M Final Review and O and M Preliminary Review Comments:

This form was previously approved during the Preliminary Review. No changes have been made. The LEED Project Information Form has been provided stating that no portion of the project has ever been LEED certified.

SSc2: Building Exterior and Hardscape Management Plan

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The performance measurement narrative has been revised to address the issues outlined in the Preliminary Review comments and indicates that no calcium chloride was used during the performance period. A clarification narrative has been provided indicatingthat frequency of use is the revised performance measurement method for maintenance equipment. A revised Building Exterior and Hardscape Management Plan has been provided. The documentation demonstrates credit compliance. Please note that neither the revised performance measurement narrative nor the revised hardscape management plan provided indicate the revised performance measurement method for maintenance equipment. As the clarification narrative lists the revised performance measurement method for maintenance equipment, credit compliance is not affected. For future submittals, ensure that the plan includes a performance measurement method for maintenance equipment that describes how actual outcomes and sustainability performance for maintenance equipment practices will be measured and tracked over time. The LEED Credit Form has been provided stating that the project has implemented a Building Exterior and Hardscape Management Plan. A copy of the plan has been provided. The plan includes maintenance equipment, snow and ice removal, cleaning of building exterior, paint and sealants used on building exterior, and cleaning of sidewalks, pavement, and other hardscape. A performance measurement narrative, a site plan, and an aerial site photograph of the project building have been provided. However, two issues are pending: 1. Although the plan states that magnesium chloride is used to melt ice, the performance measurement narrative indicates that calcium chloride was used on walkways during the performanceperiod, which is not compliant, as indicated in the Implementation section of SSc2 in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). Note that although the abbreviation for magnesium chloride isused, calcium chloride is also#included in the performance measurement narrative, and it is unclear which product is being used. 2. It is unclear whether the performance measurement method for maintenance equipment reflects the true sustainability performance for maintenance equipment. The performance metric stated in the plan is the percentage of applicable pieces of equipment, but it is unclear how often non-environmentally preferable equipment is used versus environmentally preferable equipment. Please note that the quantitative goal for new maintenance equipment is not listed consistently between the plan provided (50%) and the performance measurement narrative (100%). As both percentages listed meet the requirements of this credit, credit complianceis not affected. For future submittals, ensure consistent reporting of quantitative goals in the supporting documentation. TECHNICAL ADVICE: 1. Please provide clarification demonstrating that snow and ice removal is achieved through less environmentally disruptive methods as specified in the Reference Guide. Indicate whether calcium chloride was used during the performance period, and if so, demonstrate quantitatively that it was used less than 80% of the time. 2. Revise the plan to include a performancemeasurement method for maintenance equipment that describes how actual outcomes and sustainability performance for maintenance equipment practices will be measured and tracked over time. The performance measurement method must be able to quantify how themaintenance equipment is used rather than examine the pieces of equipment in the overall inventory. An example of a performance metric is the number of hours that each piece of environmentally preferable maintenance equipment is used during the performance period.

SSc3: Integrated Pest Management, Erosion Control, and Landscape ManagementPlan

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The Integrated Pest Management, Erosion Control, and Landscape Management Plan has been revised to address the issues outlined in the Preliminary Review comments and addresses ongoing erosion and sedimentation control for the project building. A clarification narrative has been provided, along with a copy of the performance measurement narrative. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has implemented an Integrated Pest Management,Erosion Control, and Landscape Management Plan. A copy of the plan, a performance measurement narrative, a site plan, and an aerial site photograph of the project building have been provided. However, the plan states that the project does not have an ongoing erosion and sedimentation control plan in place. All buildings, even in urban settings, require measures for preventing erosion and sedimentation. This includes cleaning out storm drains, maintaining sidewalks, removing detritus, etc. TECHNICAL ADVICE: Provide a revised plan that addresses ongoing erosion and sedimentation control for the project building.

SSc4: Alternative Commuting Transportation

Credit Status	Awarded	**Points Attempted**	7
Credit Type	Standard	**Points Awarded**	7
Threshold Attempted			

25% Reduction 7 points

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project building has achieved a 25.08% reduction in conventional commuting trips. The form indicates that the project participated in an informal commute reduction tracking program in accordance with SCAQMD procedures. Supporting documentation includes a summary of employee commuting survey data, a narrative describing the data collection methodology and protocols used, and

a copy of the SSc4 Alternative Transportation Survey Results Calculator.

SSc7.1: Heat Island Reduction-Non-Roof

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project is pursuing an Alternative Compliance Path and that no parking on- or off-site is maintained by the building. The form narrative confirms that the building owner and building tenants do not maintain off-site parking facilities. An aerial site photograph has been provided indicating that a former on-site parking lot is now a rail station. A second aerial site photograph and a site plan have been provided.

WEp1: Minimum Indoor Plumbing Fixture and Fitting Efficiency

Credit Status	Awarded		
Credit Type	Standard		

O and M Final Review and O and M Preliminary Review Comments:

The LEED Prerequisite Form has been revised to address the issues outlined in the Preliminary Review comments and meets the requirements outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009. A clarification narrative has been provided confirming that the retail customers have been included in the value listed for the FTE occupants. The revised form indicates that the potable water usage of the project has been reduced to 15.73% below the LEED-EBOM baseline. Manufacturer documentation verifying the flush rate of the 1.5 GPF Urinal has been provided. The documentation demonstrates prerequisite compliance. The LEED Prerequisite Form has been provided stating that the potable water usage of the project has been reduced to 16.1% below the LEED-EBOM baseline. Water use calculations and copies of fixture cut sheets have been provided. In addition, a policy mandating economic assessment of conversion to high-performance plumbing fixtures has been provided. However, four issues are pending: 1. As noted under PIf3 Occupant and Usage Data, this project is required to follow the guidance outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009, available on the LEED-EBOM web page (www.USGBC.org/LEED/EB). In order to meet the requirements of this prerequisite, for floors or separate tenant spaces that are completely vacant or unused throughout the entire performance period, use the default values for occupancy listed in ASHRAE Standard 62.1-2007 for the given space type (this maintains consistency with IEQp1 Minimum IAQ Performance). Distribute the default occupants reasonably to the various fixture types present in the building. Create usage groups in the WEp1 Minimum Indoor Plumbing Fixture and Fitting Efficiency calculator to account for the vacant areas. 2. Manufacturer or supplier data verifying the flow rates have not been provided for the Urinal in Fixture Group C. Note that manufacturer or supplier data verifying the flow rates for each fixture type that differs from UPC/IPC efficiency requirements must be provided. 3. No occupants have been listed for Fixture Group D and a narrative has not been provided to explain this omission. As a result, daily use values for this fixture group are not included in the calculations in the Flush and Flow Fixture Tables. 4. Although retail spaces are included in Table PIf3-1 Space Usage Type, retail customers have not been included in the WEp1 form calculations. TECHNICAL ADVICE: 1. Revise the calculations to meet the requirements outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009. 2. Provide manufacturer or supplier data verifying the flow rates for each fixture type that differs from UPC/IPC efficiency requirements. If manufacturer or supplier data are unavailable, specify measured water consumption rates for at least a 20% sample (by number of fixtures) of each fixture type in the project building that differs from UPC/IPC requirements. 3. Provide a revised form that includes the number of FTE occupants, transients, and retail customers for Fixture Group D. Ensure that the total number of average occupants remains consistent across all credits. Alternatively, provide a narrative indicating why this fixture group is not used. 4. Provide a revised form with calculations that include retail customers. Ensure consistent reporting of retail customers throughout the application. Alternatively, provide a narrative confirming#that the retail establishments at the project building serve only building occupants, and do not serve customers who do not work in the building.

WEc1: Water Performance Measurement

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2
Threshold Attempted			

Whole Building Metering 1 points-Submetering 1 points

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has permanently installed water meters that measure the total potable water use for the entire building and associated grounds. Submetering information for cooling towers and fire sprinkler water has been provided, along with monthly

and annual water use summaries. Calibration reports for the meters owned by the project building have been provided and indicate that the meters were calibrated during the performance period. The form indicates that meter readings are read on a weekly basis. Please note the following issues: 1. The form narrative does not identify the meter data recording process for the cooling tower make-up meter. As the cooling tower water management plan provided under WEc4.1 Cooling Tower Water Management indicates that the cooling tower meter is read weekly, credit compliance is not affected. For future submittals, ensure that the form narrative identifies the meter data recording process for all meters, including intervals and schedule. 2. The Credit Form indicates that fire protection systems are considered process water used for industrial processes and building systems. The intent of the credit is to measure building and subsystem water performance over time to understand consumption patterns and identify opportunities for additional water savings. Metering fire suppression systems does not assist in understanding consumption patterns or identifying opportunities for water savings. The project has identified fire suppression systems as process water. Process water implies controllable water use that is on a regular basis. A fire suppression system typically uses little to no water and when water is used (for testing or fire suppression), it is not on a regular basis. Therefore, fire suppression systems cannot be considered process water. For future submittals, note that achievement of WEc1.2 Water Performance Measurement - Submetering will not be awarded for metering fire suppression systems.

WEc2: Additional Indoor Plumbing Fixture and Fitting Efficiency

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2
Threshold Attempted			

15% Reduction 2 points

O and M Final Review and O and M Preliminary Review Comments:

A revised LEED Credit Form has been provided and indicates that the project has achieved a 15.73% reduction in potable water use for indoor plumbing fixtures and fittings from the LEED-EBOM Baseline. The documentation for WEp1 Minimum Indoor Plumbing Fixture and Fitting Efficiency has been revised and addresses reduced occupancy in the project building, the presence of retail customers, and the provision of required manufacturer documentation. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has achieved a 16.1% reduction in indoor plumbing fixture and fitting for potable water use from the LEED-EBOM Baseline. Manufacturer documentation and calculations against the LEED-EBOM baseline have been provided in WEp1 Minimum Indoor Plumbing Fixture and Fitting Efficiency. However, WEp1 is currently denied pending clarifications. WEp1 must be achieved before WEc2 may be awarded. TECHNICAL ADVICE: Please address the comments provided for WEp1 and resubmit this credit.

WEc4.1: Cooling Tower Water Management-Chemical Management

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has developed and implemented a cooling tower water management plan and has installed and maintained a conductivity meter and automatic controls. The following supporting documents have beenprovided: 1) a cooling tower water management plan; 2) a narrative description of the conductivity meter, automatic controls, and setpoints for each cooling tower; and 3) a photograph and engineering drawings documenting the installed conductivity meter and controls.

EAp1: Energy Efficiency Best Management Practices-Planning, Documentation, and Opportunity Assessment

Credit Status	Awarded		
Credit Type	Standard		

O and M Final Review and O and M Preliminary Review Comments:

The building operating plan has been revised to address the issues outlined in the Preliminary Review comments and includes vacant spaces. A clarification narrative has been provided indicating that the scope of the preventive maintenance plan and the sequence of operations include vacant space within their scope. A revised ASHRAE Level I Walk-Through Analysis has been provided including the energy demand savings and total energy cost savings (consumption + demand) resulting from each potential low-cost/no-cost energy efficiency and conservation upgrade and programmatic change. The documentation demonstrates prerequisite compliance. The LEED Prerequisite Form has been provided stating that the project has implemented a building operating plan, sequence of operations, and preventive maintenance program at the project building. The form states that an ASHRAE Level I Walk-Through Analysis has been conducted during the performance period. The submitted documentation includes a building operating plan, a systems narrative describing the mechanical and electrical systems, excerpts from the current sequence of operations for the building, documentation describing the preventative maintenance program in place at the project building, the results of the ASHRAE Level I Walk-Through

Analysis, an energy use breakdown by end use, and an Energy Utilization Index (EUI) analysis. However, two issues are pending: 1. As noted under PIf3 Occupant and Usage Data, this project is required to follow the guidance outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009, available on the LEED-EBOM web page (www.USGBC.org/LEED/EB). In order to meet the requirements of this prerequisite, the building operating plan, sequence of operations, and preventive maintenance plan must include all completely vacant space within their scope. Additionally, these documents must specify any practices that differ for vacant space versus occupied space. It is not clear that all vacant space in the building has been accounted for in the building operating plan, sequence of operation, and preventive maintenance program. 2. The energy demand savings and total energy cost savings (consumption + demand) resulting from the potential low-cost/no-cost improvements identified have not been provided. TECHNICAL ADVICE: 1. Please revise the building operating plan, sequence of operations, and preventive maintenance plan to meet the requirements outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009 document. 2. Provide the energy demand savings and total energy cost savings (consumption + demand) resulting from each potential low-cost/no-cost energy efficiency and conservation upgrade and programmaticchange.

EAp2: Minimum Energy Efficiency Performance

Credit Status	Awarded		
Credit Type	Standard		

O and M Preliminary Review Comments:

The LEED Prerequisite Form has been provided stating that the building has an ENERGY STAR score of 92. The form indicates that building energy meters are owned by third parties. A Statement of Energy Performance stamped by a professional engineer and a congratulatory letter from ENERGY STAR have been provided. The ENERGY STAR program correspondence confirms that the project building earned the label, the date of the label, and the performance score achieved in Portfolio Manager. Please note that althoughthe form indicates that the project has shared the building with the GBCI Portfolio Manager account, the project could not be located in the GBCI master account. For future submittals, if the project wishes to share the project with the GBCI Portfolio Manager account, use the following procedure. From the main building view, click on Add user to share this Facility on the right side of the screen, under Sharing Data. On the next screen, use the drop-down list to select GBCI - LEED_EBOM and#click continue.

EAp3: Fundamental Refrigerant Management

Credit Status	Awarded		
Credit Type	Standard		

O and M Preliminary Review Comments:

The LEED Prerequisite Form has been provided stating that the project building contains no CFC-based refrigerants in base building systems. A copy of the building refrigerant management program and a spreadsheet showing the refrigerant use for each base building system have been provided.

EAc1: Optimize Energy Efficiency Performance

Credit Status	Awarded	**Points Attempted**	16
Credit Type	Standard	**Points Awarded**	16
Threshold Attempted			

91 rating/41% 16 points

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the building has an ENERGY STAR score of 92 and is seeking 16 points under EAc1. Supporting documentation has been provided within EAp2 Minimum Energy Efficiency Performance.

EAc2.1: Existing Building Commissioning-Investigation and Analysis

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has implemented a retrocommissioning plan for the major building energy-using systems and has conducted the investigation and analysis phase. Supporting documentation includes a copy of the retrocommissioning plan, a report of findings, a list of participating parties, a summary of the energy use breakdown associated with each major system and/or end-use, a table listing any operating problems affecting occupant comfort or building energy use and potential operational changes that will solve them, and a table listing capital

improvements expected to provide ongoing operational cost savings and illustrating the financial attractiveness of each improvement. Please note that a summary of the energy use breakdown for the project has not been provided with the documentation for this credit. As this summary has been provided under EAp1 Energy Efficiency Best Management Practices: Planning, Documentation, and Opportunity Assessment, credit compliance is not affected. For future submittals, ensure that all required documentation is included under each applicable credit and prerequisite.

EAc2.2: Existing Building Commissioning-Implementation

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that, based on the results of the commissioning investigation and analysis phase, the project has implemented all no-cost and low-cost energy efficiency measures and has identified planned capital energy efficiency projects. The project is pursuing EAc2.1 Existing Building Commissioning: Investigation and Analysis for the project building and associated grounds. Supporting documentation includes a table listing all no- or low-cost measures implemented and a summary of the capital plan for major retrofits or upgrades.

EAc2.3: Existing Building Commissioning-Ongoing Commissioning

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has implemented an ongoing commissioning program that includes elements of planning, system testing, performance verification, corrective action response, ongoing measurement, and documentation to proactively address operating problems. The project is pursuing EAc2.1 Existing Building Commissioning: Investigation and Analysis for the project building and associated grounds. Supporting documentation includes an ongoing commissioning plan, an estimated budget for completion of the overall commissioning cycle, and documentation of the tasks completed in the first commissioning cycle.

EAc4: On-site and Off-site Renewable Energy

Credit Status	Awarded	**Points Attempted**	2
Credit Type	Standard	**Points Awarded**	2
Threshold Attempted			

4.5% On / 37.5% Off 2 points

O and M Final Review Comments:

This credit was submitted for initial review during the Final Review. The LEED Credit Form has been provided stating that 37.5% of the building energy usage has been met with off-site renewable energy systems. A copy of a two-year, Green-e certified contract and a certificate have been provided. The documentation demonstrates credit compliance.

EAc6: Emissions Reduction Reporting

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The summary of actions relating to building energy emissions reductions measures has been revised to address the issues outlined in the Preliminary Review comments and includes estimates of the relative contribution of each action to the greenhouse gas emissions reductions of the building. A clarification narrative has been provided. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has reported emissions through formal participation in a third-party voluntary reporting or certification program. Supporting documentation includes the Statement of Energy Performance generated by ENERGY STAR Portfolio Manager, a summary of the Portfolio Manager greenhouse gas tracking methodology, and a summaryof actions relating to energy efficiency and emissions reductions. However, although the summary of actions relating to energy efficiency, renewable energy, and other building energy emissions reductions measures estimates the contribution of numerous actions to greenhouse gas emissions reductions in aggregate, the summary does not does not estimate the individual contribution of each action to these reductions. TECHNICAL ADVICE: Please estimate the relative contribution of each action to the greenhouse gas emissions reductions of the building.

MRp1: Sustainable Purchasing Policy

Credit Status	Awarded		
Credit Type	Standard		

O and M Preliminary Review Comments:

The LEED Prerequisite Form has been provided stating that a Sustainable Purchasing Policy was in place during the performance period. A copy of the Sustainable Purchasing Policy has been provided. The policy addresses MRc1 Sustainable Purchasing: OngoingConsumables, MRc2 Sustainable Purchasing: Durable Goods, and MRc3 Sustainable Purchasing: Facility Alterations and Additions. The policy states a goal of 100% implementation of all policy components.

MRp2: Solid Waste Management Policy

Credit Status	Awarded		
Credit Type	Standard		

O and M Preliminary Review Comments:

The LEED Prerequisite Form has been provided stating that a Solid Waste Management Policy was in place during the performance period. A copy of the Solid Waste Management Policy has been provided. The policy addresses the requirements of MRc7 Solid WasteManagement: Ongoing Consumables, MRc8 Solid Waste Management: Durable Goods, and MRc9 Solid Waste Management: Facility Alterations and Additions, as well as the recycling of all mercury-containing light bulbs.

MRc3: Sustainable Purchasing-Facility Alterations and Additions

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and states that the total costs reported are comprehensive and do not include any exemptions, that recognition is not being sought for tenant sustainable purchases, and that the total cost of sustainable materials entered in the form table are based on actual costs. A clarification narrative has been provided confirming that the facility alterations that occurred during the performance period meet the criteria defined in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project maintained a sustainable purchasing program over the performance period covering materials for facility alterations and additions and that 68.46% of total purchases were sustainable. Manufacturer data verifying the product compliance with the specified sustainability criteria have been provided for at least 20% of the purchases, by cost. The form indicates that the project building is comprised of multiple tenants. However, two issues are pending: 1. Although the Credit Form indicates that the project building is comprised of multiple tenants, the form does not include all information required for multi-tenant facilities. Specifically, the form does not identify whether any of the building floor area is exempted from this credit, whether recognition is sought for tenant sustainable purchases, or whether the total cost of sustainable materials entered in Table MRc3-1 is based on actual costs or a combination of actual and estimated costs. 2. It is unclear whether the facility alterations and additions that occurred during the performance period meet the minimum requirements for a facility alteration, as stated in the Introduction section of the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). It appears the activities performed involve replacement of ceiling tiles and painting of walls, but these activities would be considered a routine replacement or minor upgrade. At a minimum, facility alterations must involve at least two trade specialties, a substantial change to at least one room, and isolation of work. A trade specialty is considered to be work done by more than one discipline of architectural, electrical, mechanical, plumbing, etc. In order to meet the requirements of this credit, the alteration must be sufficiently substantial so that multiple disciplines are involved (such as relocating walls, installing new electrical work, moving plumbing, etc.). ; TECHNICAL ADVICE: 1. Please revise the Credit Form to include all required information for multi-tenant buildings. Identify whether any of the building floor area is exempted from this credit, whether recognition is sought for tenant sustainable purchases, and whether the total cost of sustainable materials entered in Table MRc3-1 is based on actual costs or a combination of actual and estimated costs. 2. Provide a narrative describing the facility alterations and additions that were experienced during the performance period and demonstrate that they meet the criteria defined in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). Provide a revised form, if necessary. Only include materials from qualifying alterations and additions.

MRc4: Sustainable Purchasing-Reduced Mercury in Lamps

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and states that the form tables use the actual bulb data for the entire project building and associated grounds over the performance period. A clarification narrative has been provided. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has a compliant lighting purchasing plan in place and that the lamps purchased during the performance period have an average mercury content of 64.39 picograms per lumen-hour. Manufacturer documentation verifying the mercury performance level has been provided for at least 20% of the purchased lamps. In addition, cut sheets for lamps that have been excluded because they comply with the voluntary NEMA guidelines have been provided to verify NEMA compliance. The form indicates that the project comprises multiple tenants. However, although the form indicates that the project building is comprised of multiple tenants, the form does not include all information required for multi-tenant facilities. Specifically, the form does not identify whether any of the building floor area is exempted from this credit. TECHNICAL ADVICE: Please revise the form to identify whether any of the building floor area is exempted from this credit.

MRc6: Solid Waste Management-Waste Stream Audit

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has performed an audit of the entire ongoing waste stream of the building and grounds during the performance period. A narrative describing the opportunities identified for improved waste diversion practices has been provided. A summary of the waste stream audit report, including a description of the sample of waste audited, the timing of the audit, and a rationale demonstrating that the audit sample is representative of the typical waste stream of the building, has been provided.

MRc8: Solid Waste Management-Durable Goods

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and states that the form data on quantities of durable goods waste is comprehensive and does not include any exemptions, that recognition is being sought for tenant quantities of durable goods waste, and that the total quantities of durable goods waste entered in the form table are based on actual volumes of waste. The revised form indicates that the amount of mixed electronic waste has been revised to1,174 pounds, resulting in a durable waste diversion rate of 80.55% during the performance period. A clarification narrative has been provided confirming that the e-waste generated from sources other than the project building site and associated grounds has been excluded from the credit calculations. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has diverted 78.13% of the durable waste stream during the performance period. A summary of the diverted materials, along with the method of diversion and the hauler or destination, has been provided. The form indicates that the project building is comprised of multiple tenants. However, two issues are pending: 1. Although the Credit Form indicates that the project building is comprised of multiple tenants, the form does not include all information required for multi-tenant facilities. Specifically, the form does not identify whether any of the building floor area is exempted from this credit, whether recognition is being sought for tenant quantities of durable goods waste, or whether the total quantities of durable goods waste entered in Table MRc8-1 are based on actual volumes or a combination of actual and estimated volumes of waste. 2. The project has attempted an Innovation in Operations credit for Residential E-Waste Recycling and it is unclear whether residential e-waste has been inappropriately included in the form calculations for this credit. Note that although the policy and the e-waste collection receipt provided under IOc1.2 indicate that 1,174 pounds of e-waste was counted under MRc8, the MRc8 form only lists 447 pounds of mixed e-waste. Therefore, it is unclear how much e-waste has been attributed to the residential e-waste programand how much has been attributed to building tenants under MRc8. TECHNICAL ADVICE: 1. Please revise the Credit Form to include all required information for multi-tenant buildings. Identify whether any of the building floor area is exempted from this credit, whether recognition is being sought for tenant quantities of durable goods waste, and whether the total quantities of durable goods waste entered in Table MRc8-1 are based on actual volumes or a combination of actual and estimated volumes of waste. 2.Provide a narrative confirming that e-waste generated from sources other than the project building site and associated grounds has been excluded from the credit calculations. Revise the form as necessary.

IEQp1: Minimum Indoor Air Quality Performance

Credit Status	Awarded		
Credit Type	Standard		

O and M Final Review and O and M Preliminary Review Comments:

The LEED Prerequisite Form has been revised to address the issues outlined in the Preliminary Review comments and uses the default occupancy

values listed in ASHRAE Standard 62.1-2007 for vacant spaces. Exhaust fan test forms have been provided confirming proper function for each type of exhaust fan in the project. A memorandum from the building engineer confirms that the Ez value used in the form calculations is correct and that the calculations have been performed for worst-case conditions. A clarification narrative has been provided. The documentation demonstrates prerequisite compliance. Please note that there is an updated version of the IEQp1 form (V04). Use the Feedback form in LEED Online to gain access to the new form (http://www.usgbc.org/DisplayPage.aspx?CMSPageID=221). This form may be helpful in achieving this prerequisite and may be helpful in assessing compliance with the requirements of IEQc1.3 Indoor Air Quality Best Management Practices-Increased Ventilation. If using the revised IEQp1 Credit Form (V04), which has the ASHRAE 62 MZ calculator imbedded, and the project contains air handling units serving more than ten ventilation zones, it is acceptable to provide a calculation which combines some of the zones for the purposes of ventilation calculations.;The first ten zones listed for the project must be individual ventilation zones, and must be the most likely candidates for the critical zone (e.g. spaces with high occupant density such as conference rooms and meeting spaces, and spaces with low minimum flow per unit area or per person). It is acceptable to include less than ten potentially critical zones within the form if a narrative is provided that adequately describes the evaluation process that was used to narrow the number of zones. The remaining ventilation zones listed may group a large number of spaces, as long as the space occupant category is the same (e.g. office), the space population density is similar, the value for Ez is the same, and the Vpz value per unit floor areais similar. The values for Az, Vbz, Voz, and Vdzd should be entered as the sum of the values for all ventilation zones that are grouped into a single zone, and the value for Ds should be based on the weighted average minimum flow rate for all of the ventilation zones grouped into a single zone. The supplemental narrative should clearly denote which ventilation zones are grouped. The LEED Prerequisite Form has been provided stating that the project complies with the minimum requirements of ASHRAE Standard62.1-2007, Ventilation for Acceptable Indoor Air Quality, using the Ventilation Rate Procedure. The form has been completed for each AHU in the project and narratives describing how the measurements were taken have been provided. A copy of the periodic system maintenance status report has been provided, as has an exhaust system testing report. However, four issues are pending: 1. As noted under PIf3 Occupant and Usage Data, this project is required to follow the guidance outlined in the Reduced OccupancyGuidance for LEED for Existing Buildings: Operations and Maintenance, 2009, available on the LEED-EBOM web page (www.USGBC.org/LEED/EB). In order to meet the requirements of this prerequisite, for floors or separate tenant spaces that are completely vacant or unused throughout the entire performance period, use thedefault values for occupancy listed in ASHRAE Standard 62.1-2007 for the given space type (this maintains consistency with WEp1 Minimum Indoor Plumbing Fixture and Fitting Efficiency). 2. Although amperage tests have been provided for each type of exhaust fan in the project, it is unclear whether these tests are sufficient. As noted in the Implementation section for IEQp1 in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010), the tests should confirm proper function, such as fan speed, voltage, control sequences, and setpoints, as applicable. Please note that the BAS screenshots provided are not sufficient to verify that an HVAC system maintenance program is in place. As preventive maintenance documentation has been provided under EAp1 Energy Efficiency Best Management Practices - Planning, Documentation, and Opportunity Assessment, prerequisite compliance is not affected. For future submittals, ensure that a periodic system status report taken during the performance period is provided. 3. It appears that the calculations may not have been performed for the worst case conditions.; Generally, worst case conditions are during heating mode.;4. The values used for zone air distribution effectiveness (Ez) do not appear to be substantiated based on the type of system, and the mode of operation.; Note that this value is most often 0.8 for an overhead distribution system in heating mode.; TECHNICAL ADVICE: 1. Please revise the calculations to meet the requirements outlined in the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance, 2009. 2. Provide tests that confirm proper function for each type of exhaust fanin the project, such as fan speed, voltage, control sequences, and setpoints, as applicable. 3. Provide additional information to confirm that the ASHRAE 62.1 Ventilation Rate Procedure (VRP) calculations have been performed for the worst case conditions, or provide calculations document compliance for worst case conditions. 4. Provide additional information to justify the value used for Ez, or update the value to 0.8. Please note that a newly released optional USGBC LEED ASHRAE 62MZ Calculator and the ASHRAE Standard 62.1-2007 User Manual are available from the EQp1 and EQc2 credit resources section of LEED Online (currently only available in LEED Online v2). This calculator provides additional guidance on using the calculator and highlights the LEED documentation requirements.

IEQp2: Environmental Tobacco Smoke (ETS) Control

Credit Status	Awarded		
Credit Type	Standard		

O and M Preliminary Review Comments:

The LEED Prerequisite Form has been provided stating that smoking is prohibited in the entire project building and that designated smoking areas are located at least 25 feet from all entries, outdoor air intakes, and operable windows. A copy of the policy prohibiting smoking in the building issued by the building property manager has been provided. Additionally, a smoking-area site plan, a general site plan, an aerial photograph of the project building, and a photograph of the smoking policy signage havebeen provided.

IEQp3: Green Cleaning Policy

Credit Status	Awarded		
Credit Type	Standard		

O and M Final Review and O and M Preliminary Review Comments:

The Green Cleaning Policy has been revised to address the issues outlined in the Preliminary Review comments and includes information regarding the duration and frequency of the training sessions. A clarification narrative has been provided. The documentation demonstrates prerequisite compliance. The LEED Prerequisite Form has been provided stating that the project has implemented a Green Cleaning Policy. A copy of the policy has been provided. However, the policy does not include sufficient information on the established guidelines surrounding staffing and training of maintenance personnel, as it does not identify the duration and frequency of training sessions. TECHNICAL ADVICE: Please revise the Green Cleaning Policy to include the duration and frequency of the training sessions.

IEQc1.1: Indoor Air Quality Best Management Practices-Indoor Air QualityManagement Program

Credit Status	Denied	**Points Attempted**	1
Credit Type	Standard		
		Points Denied	1

O and M Final Review and O and M Preliminary Review Comments:

A clarification narrative has been provided summarizing the results of the IAQ audit report. However, as noted in the Preliminary Review comments and as required on page 1 of the LEED Credit Form, although the report provided includes extensive, detailedinformation related to indoor air pollutants and analysis of the status of certain HVAC equipment, it remains unclear whether the audit included an assessment of indoor spaces, exterior spaces, and HVAC systems in accordance with I-BEAM protocols. Note that although the I-BEAM forms themselves are not required documentation, a report must be provided summarizing the results of an audit based on the I-BEAM protocols. Additionally, note that although indoor air quality testing identifies a range of potential air quality concerns (and provides more detailed information than the I-BEAM protocols require for this particular component of the IAQ audit), omission of the inspections of indoor and outdoor spaces as well as a review of the HVAC systems may result in a failure to recognize other sources of present or future air quality problems. Although the documentation includes in-depth information addressing air quality testing, and the investigation itself may have included I-BEAM compliant procedures, the documentation does not confirm that the breadth of guidance included in the I-BEAM protocols has been addressed. The documentation does not demonstrate credit compliance. For future submittals, provide a complete summary report of the IAQ audit results (based on I-BEAM protocols), including a summary of the audit procedures for indoor spaces, exterior spaces, and HVAC systems. For each audited space/system, provide a list of all IAQ-related issues or areas of opportunity discovered during the audit. Note that indoor air quality testing may be included as a significant component of the audit report, but that a narrative summarizing the results of an I-BEAM compliant analysis of indoor spaces, exterior spaces, and HVAC systems (as outlined above) must be provided to confirm that these components have been included in a comprehensive air quality assessment. The LEED Credit Form has been provided stating that the project has developed and implemented an IAQ management program based on the EPA I-BEAM guidelines. A copy of the IAQ audit results has been provided. Copies of the protocols to manage significant pollutant sources, including remodeling and renovation, painting, pest control, and shipping and receiving, have been provided. Additionally, an IAQ issue remediation log has been provided. However, while the indoor air quality report includes extensive information related to indoor air pollutants and analysis of the status of certain HVAC equipment, it is unclear whether the indoor air quality report includesa summary of the audit procedures and results for indoor spaces, exterior spaces, and HVAC systems in accordance with I-BEAM protocols, as required by the form language. TECHNICAL ADVICE: Please provide a complete summary report of the IAQ audit (based on I-BEAM) results, including a summary of the audit procedures for indoor spaces, exterior spaces, and HVAC systems. For each audited space/system, provide a list of all IAQ-related issues or areas of opportunity discovered during the audit.

IEQc1.3: Indoor Air Quality Best Management Practices-Increased Ventilation

Credit Status	Denied	**Points Attempted**	1
Credit Type	Standard		
		Points Denied	1

O and M Final Review and O and M Preliminary Review Comments:

A revised LEED Credit Form has been provided referencing the supporting documentation. The IEQp1 Minimum Indoor Air Quality Performance documentation has been revised to address the issues outlined in the Preliminary Review comments and includes the default occupancy values listed in ASHRAE Standard 62.1-2007 for vacant spaces, exhaust fan test forms, and a memorandum confirming the Ez values used in the form calculations. A clarification narrative has been provided. However, although calculations have been provided demonstrating a 30% increase in outside air at the system level (Step 1 below), documentation has not been provided to confirm that a 30% increase in outside air for mechanically ventilated spaces has been provided at the zone level. For future submittals, provide calculations for the worst case condition (e.g. winter heating) showing that the minimum outdoor airflow available in the breathing zone in the critical zone for each system exceeds 30% of the minimum outside airflow required by ASHRAE 62.1-2007. 1. At the system level, the uncorrected outside air requirement for the system (Vou) must be multiplied by 130%. 2. For the critical zone, the outside air required at the breathing zone (Vbz) must be multiplied by 130%. 3. For the critical zone, the zone ventilation efficiency (Ev) must be recalculated based on the revised values for Vou and critical zone Vbz. 4. At the system level, the total outside air intake required as a fraction of primary supply air must be

recalculated using the newcritical zone ventilation efficiency (Ev), and the new uncorrected outside air requirement for the system (Vou). Please note that there is an updated version of the IEQp1 form (V04). Please use the Feedback form in LEED Online to gain access to the new form (http://www.usgbc.org/DisplayPage.aspx?CMSPageID=221). This form may be helpful in achieving this credit, as well as IEQp1. The LEED Credit Form has been provided stating that the project is mechanically ventilated and that the outdoor air ventilation rates provided by each air handling unit serving occupiable spaces in the project building exceed the minimum required by ASHRAE 62.1-2007 by at least 30% under all normal operating conditions. Supporting documentation has been provided under IEQp1 Minimum Indoor Air Quality. However, this credit is pending clarification of IEQp1 Minimum IAQ Performance. Additionally, further documentation is required to demonstrate that the breathing zone outdoor air ventilation rates exceed the minimum rates requiredby ASHRAE 62.1-2007 by 30%. ; TECHNICAL ADVICE: Please address the comments provided under IEQp1 and resubmit this credit. Additionally, provide calculations for the worst case condition (e.g. winter heating) showing that the minimum outdoor airflow available in the breathing zone in the critical zone for each system exceeds 30% of the minimum outside airflow required by ASHRAE 62.1-2007. 1. At the system level, the uncorrected outside air requirement for the system (Vou) must be multiplied by 130%. ; 2.For the critical zone, the outside air required at the breathing zone (Vbz) must be multiplied by 130%. ; 3. For the critical zone, the zone ventilation efficiency (Ev) must be recalculated based on the revised values for Vou and critical zone Vbz. ; 4. At the system level, the total outside air intake required as a fraction of primary supply air must be recalculated using the new critical zone ventilation efficiency (Ev), and the new uncorrected outside air requirement for the system (Vou).

IEQc1.4: Indoor Air Quality Best Management Practices-Reduce Particulates in AirDistribution

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that air filtration media with a minimum efficiency reporting value (MERV) greater than or equal to 13 were in place and functioning properly for all outside air intakes in the project building during the performance period. A list of all filtration media that was in place during the performance period has been provided. Additionally, a narrative describing the schedule for regular maintenance and replacement of MERV 13 filters has been provided.

IEQc2.1: Occupant Comfort-Occupant Survey

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project conducted an occupant comfort survey offered to all regular occupants of the project building and that at least a 30% response rate was obtained. A narrative has been provided describing themanner in which the survey was administered, a summary of the survey results, and the corrective actions taken. A copy of the survey language has been provided.

IEQc2.2: Controllability of Systems-Lighting

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and indicates that the project contains compliant lighting controls for 57% of shared multi-occupant spaces. A clarification narrative has been provided. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project contains lighting controls that enable adjustments to suit the task needs and preferences for 51% of individual workstations and 100% shared multi-occupant spaces. However, it is not clear whether multi-occupant spaces have the required level of lighting control. According to the Calculations for Group Multi-occupant Spaces section of IEQc2.2 in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010), lighting controls for group multi-occupant spaces must be adjustable to suit group activities and allow flexibility in lighting for different uses. Various switches for different lighting levels, dimmer switches, or an on/off switch accompanied by blinds or glare control devices on windows to the outside are examples of acceptable lighting controls for multi-occupant spaces. Occupancy sensors and on/off switches are not acceptable multi-occupant space lighting controls for the purposes of this credit. Note that on/off switches for task lighting are acceptable controls for individual workstations. TECHNICAL ADVICE: Please provide a narrative to describe the lighting controls in the multi-occupant spaces and ensure that the spaces allow for more than two levels of lighting. Revise the form as necessary.

IEQc2.4: Daylight and Views

Credit Status	Awarded	**Points Attempted**	1

Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project has achieved direct line of sight to vision glazing in 50.45% of regularly occupied spaces. Copies of project drawings and photographs have been provided showing the line of sight from interior spaces through exterior windows for representative floor plans and building space types. The form narrative indicates that the floor plans provided are representative of all building floors due to similar space requirements and cubicle configurations.Supplementary credit calculations have been provided. Please note that the supplementary calculations indicate a value for the compliant floor area (487,818 square feet) that is inconsistent with the value listed on the form (491,502 square feet). When recalculated to include the value from the supporting documentation, the project has demonstrated that 50.08% of individual occupant spaces and group multi-occupant spaces have access to views and credit compliance is not affected. For future submittals, ensure consistency between the LEED Credit Form and the supporting documentation.

IEQc3.1: Green Cleaning-High Performance Cleaning Program

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The IEQp3 Green Cleaning Policy documentation has been revised to address the issues outlined in the Preliminary Review comments and includes information regarding the duration and frequency of the training sessions. A clarification narrative has been provided. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has in place a high-performance cleaning program that addresses staffing, training of maintenance personnel, the use of chemical concentrates, the use of sustainable cleaning materials, the use of sustainable hard-floor and carpet-care products, and the use of sustainable cleaning equipment. A copy of the high-performance cleaning program has been provided. However, IEQp3 Green Cleaning Policy is currently denied pending clarifications. IEQp3 must be achieved before EQc3.1 may be awarded.
TECHNICAL ADVICE: Please address the comments provided for IEQp3 and resubmit this credit.

IEQc3.2: Green Cleaning-Custodial Effectiveness Assessment

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that an audit in accordance with APPA Leadership in Educational Facilities Custodial Staffing Guidelines has been conducted and that the facilities received a score of 1.32. The overall appearance level score is based on a single audit. The form has been signed by the property manager and confirms that the third-party auditor has the technical capacity to accurately conduct the audit relative to the appearance level standards provided by APPA. Additionally, a narrative has been provided to describe the opportunities identified for improved custodial effectiveness based on the audit results. The form indicates that the project building is comprised of multiple tenants and confirms that the data in the form exempts up to 10% of the building gross floor area. Information has been provided in Table L-1 for each space exempted from this credit, and a narrative describing the reason for the exemption and efforts made to acquire information related to IEc3.2 documentation has been provided.

IEQc3.3: Green Cleaning-Sustainable Cleaning Products and Materials Purchases

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project maintained a sustainable purchasing program for cleaning materials and products, disposable janitorial paper products, and trash bags, and that 89% of the purchases during the performance period satisfy sustainability criteria. Manufacturer data verifying product compliance with the specified sustainability criteria has been provided for at least 20% of the purchases, by cost. The form indicates that the project building is comprised of multiple tenants and confirms that the data in the form exempts up to 10% of the building gross floor area. Information has been provided in Table L-1 for each space exempted from this credit, and a narrative describing the reason for the exemption and efforts made to acquire information related to IEQc3.3 documentation has been provided.

IEQc3.4: Green Cleaning-Sustainable Cleaning Equipment

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and identifies additional maintenance equipment at the project site that meets the required sustainability criteria. The revised form indicates that 26% of janitorial equipment (as measured by the number of equipment items) meets one of the required sustainability criteria. Manufacturer documentation for those pieces of janitorial equipment that meet sustainability criteria has been provided, along with a clarification narrative. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has implemented a program for the use of janitorial equipment within the project building and associated groundsthat reduces building contaminants and minimizes environmental impact during the performance period. At the close of the performance period, 37% of janitorial equipment, as measured by the number of equipment items in use within the project building and associated grounds, meets one of the required sustainability criteria. A janitorial equipment log showing all repair and maintenance activity during the performance period has been provided. No cleaning equipment purchases occurred during the performance period. The form indicates that the project building is comprised of multiple tenants and confirms that the data in the form exempts up to 10% of the building gross floor area. Information has been provided in Table L-1 for each space exempted from this credit, and a narrative describing the reason for the exemption and efforts#made to acquire information related to IEc3.4 documentation has been provided. Manufacturer documentation for those pieces of janitorial equipment that meet sustainability criteriahas been provided. However, it appears that the Sanitaire SC888 vacuum cleaner does not meet the noise minimization requirements of this credit. The manufacturer documentation provided for the Sanitaire SC888 indicates that the vacuum operates at 79 dBA,which exceeds the credit requirement that vacuums must operate at a sound level of less than 70 dBA. TECHNICAL ADVICE: Please provide manufacturer documentation demonstrating that the Sanitaire SC888 operates with a sound level of less than 70 dBA. Alternatively, revise the credit calculations to indicate that at least 20% of the janitorial equipment servicing the project building meets one or more of the specified sustainability criteria other than the requirement for equipment safeguards.

IEQc3.5: Green Cleaning-Indoor Chemical and Pollutant Source Control

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that the project building utilizes entryway systems to reduce the amount of dirt, dust, pollen, and other particles entering the building. A floor plan highlighting all entryways and installed entryway systems has been provided, along with floor plans for two upper levels within the project.

IEQc3.6: Green Cleaning-Indoor Integrated Pest Management

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Preliminary Review Comments:

The LEED Credit Form has been provided stating that an indoor integrated pest management plan was in place and fully implemented during the performance period. Copies of the indoor IPM plan, the pollutant source management plan, and a log noting the dateand circumstances of any pesticide application that occurred during the performance period have been provided.

IOc1.1: Exemplary Performance - MRc4

Credit Status	Awarded	**Points Attempted**	1
Credit Type	Standard	**Points Awarded**	1

O and M Final Review and O and M Preliminary Review Comments:

The MRc4 Sustainable Purchasing: Reduced Mercury in Lamps documentation has been revised to address the issues outlined in the Preliminary Review comments and includes the information required for multi-tenant facilities. In order to achieve exemplary performance for MRc4, the project must demonstrate thatat least 90% of the lamps purchased during the performance period have an average mercury content of 70 picograms per lumen-hour or less. The MRc4 form calculations indicate achievement of a mercury performance level of 64.39 picograms per lumen-hour during the performance period, which meets the exemplary performance requirement. The documentation demonstrates credit compliance. The LEED Credit Information has been provided stating that the project achieves exemplary performance for MRc4 Sustainable Purchasing: Reduced Mercury in Lamps as specified in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). However, the base credit is pending clarifications. TECHNICAL ADVICE: Please see the comments provided under MRc4 and resubmit this credit.

IOc1.2: Residential E-Waste Recycling Program

Credit Status	Awarded	**Points Attempted**	1

Credit Type	Standard	Points Awarded	1

O and M Final Review and O and M Preliminary Review Comments:

A clarification narrative has been provided confirming that the e-waste included in the calculations for this credit was generated from sources other than the project building site and has been excluded from the MRc8 Solid Waste Management: Durable Goodscalculations. The documentation demonstrates credit compliance. The LEED Credit Information has been provided stating that the project building diverts a significant volume of waste generated from other sources other than that project building site and associated grounds via an expanded waste management and diversion program. A residential e-waste recycling policy has been provided. The policy lists the e-waste collection firm, the dates on which the building collected residential e-waste, the e-waste collection receipt, and the estimates as to how much of the collected waste is residential. However, it is unclear whether the recycled residential e-waste has already been included under MRc8 Solid Waste Management: Durable Goods. Although the policy and the e-waste collection receipt indicate that 1,174 pounds of e-waste was counted under MRc8, the MRc8 form only lists 447 pounds of mixed e-waste. Therefore, it is unclear how much e-waste has been attributed to the residential e-waste program and how muchhas been attributed to building tenants under MRc8. TECHNICAL ADVICE: Please confirm that the waste recycled through the residential e-waste program was generated from sources other than the project building site and associated grounds. Ensure that any such goods are not included in the MRc8 documentation. Revise the documentation for this credit and for MRc8 as necessary.

IOc1.3: Exterior Infrared Scanning Program

Credit Status	Awarded	Points Attempted	1
Credit Type	Standard	Points Awarded	1

O and M Final Review and O and M Preliminary Review Comments:

A clarification narrative has been provided confirming that all potential issues were investigated by the building staff and the infrared scan consultants and that no remediation measures were required. The documentation demonstrates credit compliance. The LEED Credit Information has been provided stating the project building underwent an infrared scan of the building to enhance efforts to maintain the thermal integrity of the building envelope during the performance period. An ongoing infrared thermography policy and a report documenting the results of the scan have been provided. The project has confirmed that the program is ongoing and will be repeated every 2 years. However, the documentation does not confirm that the issues have been remedied. TECHNICAL ADVICE: Please provide documentation demonstrating the findings of the scan, the steps taken to remedy identified issues, and the parties responsible for the completion of those steps.

IOc1.4: Innovation in Operations - EQc3.3

Credit Status	Awarded	Points Attempted	1
Credit Type	Standard	Points Awarded	1

O and M Preliminary Review Comments:

The LEED Credit Information has been provided stating that the project achieves exemplary performance for IEQc3.3 Green Cleaning: Purchase of Sustainable Cleaning Products and Materials as specified in the LEED Reference Guide for Green Building Operations and Maintenance, 2009 Edition (Updated April 2010). In order to achieve exemplary performance for IEQc3.3, 60% or more of the total annual purchases of cleaning products and materials must meet at least one of the required criteria for this credit. Theproject has provided documentation demonstrating that 89% of the total annual purchases of cleaning products and materials are sustainable, which meets the exemplary performance requirement.

IOc2: LEED® Accredited Professional

Credit Status	Awarded	Points Attempted	1
Credit Type	Standard	Points Awarded	1

O and M Preliminary Review Comments:

The LEED Credit Information states that one of the principal participants on the project is a LEED Accredited Professional. The LEED AP certificate for Adam Fransen has been provided.

IOc3: Documenting Sustainable Building Cost Impacts

Credit Status	Awarded	Points Attempted	1
Credit Type	Standard	Points Awarded	1

O and M Final Review and O and M Preliminary Review Comments:

The LEED Credit Form has been revised to address the issues outlined in the Preliminary Review comments and includes the occupancy level for each year listed on the form. A clarification narrative has been provided. The documentation demonstrates credit compliance. The LEED Credit Form has been provided stating that the project has documented the overall operating costs of the project building for the previous five years. A completed LEED-EBOM IOc3 cost analysis tool has been provided. However, as noted under PIf3 Occupant and Usage Data, this project is required to follow the Reduced Occupancy Guidance for LEED for Existing Buildings: Operations and Maintenance 2009 document (available at http://www.usgbc.org/ShowFile.aspx?DocumentID=6292). In order tomeet the requirements of this credit, the average building occupancy level for each year must be included with the cost data. For example, if the data are listed yearly, and the occupancy level is 85% when averaged over a given year, show that number in the data table for that year. TECHNICAL ADVICE: Please provide a revised form including the occupancy level for each year.