



February 10, 2022

Distinguished Members of the Air Pollution Control Commission
1 City Hall Square, Room 709
Boston, MA 02201

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RE: A Better City's Formal Comments on Draft Phase I Regulations for BERDO 2.0

Dear Chair Gerratt, Commissioner Brizius, and members of the Commission:

On behalf of A Better City's membership representing 130 of Boston's business leaders across multiple sectors of the economy, thank you for the opportunity to provide formal comments on the draft Phase I Regulations of the Building Emissions Reduction and Disclosure Ordinance (BERDO 2.0) on data reporting, data verification, and the preservation of documents. We are grateful for the City of Boston's continued climate leadership and for your proactive, consistent, and constructive engagement with the Greater Boston business community. We are committed to working with you and the City's team to ensure the successful implementation of the BERDO 2.0 program. We appreciate the work done already by the City and Commission to incorporate stakeholder feedback into the Draft Phase I Regulations.

We are supportive of the need for effective regulations on the data and documents required to implement BERDO 2.0. A Better City's members, however, continue to have concerns around draft regulatory language for: 1) third-party verification; 2) the role of tenants; and 3) the role of utilities in timely and accurate data provision. Comments, based on this feedback, are enclosed below.

We look forward to continued dialogue and collaboration in the months ahead and thank the City for their leadership.

Sincerely,

A handwritten signature in black ink that reads 'Rick Dimino'.

Rick Dimino
President & CEO, A Better City

Enclosures: 2



ATTACHMENT A: DETAILED FORMAL COMMENTS ON DRAFT PHASE I REGULATIONS CONCERNING BERDO 2.0 DATA REPORTING, DATA VERIFICATION, AND PRESERVATION OF DOCUMENTS

A Better City strongly supports the City of Boston’s goal of achieving net zero emissions by 2050. As the City continues to develop and implement the policies needed to achieve this goal, we recognize and appreciate the continued engagement with the business community.

Many of A Better City’s members are current owners or tenants of large existing buildings in Boston and will be liable to comply with BERDO 2.0. Despite our progressive membership and wide array of expertise in peak building operations and performance, A Better City’s members have expressed concern about aspects of the draft Phase I regulatory language as currently written. They are eager to ensure that building owners, developers, and tenants can plan for and comply with BERDO 2.0 and can be leaders in helping Boston achieve its building decarbonization goals. Elements that we believe need additional attention in the Phase I regulatory language are detailed below.

In addition to the recommendations included below, we encourage the City to take proactive steps to coordinate with other municipalities and state agencies regarding data reporting and verification, and preservation of documents. This will help owners that report across multiple jurisdictions.

1. THIRD-PARTY VERIFICATION

We understand from the January 19th special hearing with the Air Pollution Control Commission that the Ordinance language states a need for external third-party verification of data for compliance with BERDO 2.0, and that there is understandable unease about the potential for falsified data produced by in-house verification options. With that in mind, our members have raised the following opportunities for consideration:

A. Clarify the Type of Data to be Verified in Different Compliance Phases

It would be helpful for the regulatory language to clarify what data must be verified in 2022, 2026, and additional reporting years following. In conversations with City staff, we understand the data required for verification in the first 2022 reporting phase, will be less than the 2026 reporting and subsequent compliance periods.

Recommendation: A Better City recommends amending the regulatory language to clarify the types of reporting data that will need to be verified in 2022, 2026, and in subsequent years.

B: Clarify the Need for Third Party Verification

- Third Party Verification has not been required for BERDO compliance in the past; it would be helpful to understand why additional third-party verification of data is needed now, when:
 - Complying with BERDO 1.0 required an energy assessment or major energy savings action every five years but to comply, third party verification was not required;
 - Some of the compliance pathways listed for BERDO 1.0’s energy assessment or major energy savings action were an EPA Energy Star Certification for 3 or more of the previous 5 years, and LEED Silver Certification with 15 points in Energy and Atmosphere—neither of these certifications required third party verification for BERDO 1.0;



- Despite third party data verification not being required for BERDO 1.0 compliance, incorrect data was not a compliance concern; and
- New York City's Local Law 97, section 28-320.3.7, includes data verification that requires a registered design professional (such as an architect or engineer) to certify the annual compliance submissions, but does not specify the need for external or third-party verification.
- There are protocols that can be implemented to ensure the veracity of data reporting and to prevent misreporting or fraud, including:
 - Requiring that all in-house Qualified Energy Professionals (QEPs) meet the qualifications and credentials, as defined in Appendix C of the Phase I Regulations, and any additional trainings deemed necessary;
 - Requiring QEPs to sign legal attestations to guarantee accurate data reporting and verification and consider the use of financial penalties and legal repercussions for repeated offenses, if necessary; and
 - Conducting random data reporting audits to ensure compliance in coordination with the random inspections or audits referenced in Section 1.09, which states that owners are required to preserve documents for at least 2 years in the event of requested inspection or audit by the Air Pollution Control Commission, the Environment Department, the Review Board, and/or any other third-party acting at their discretion.
- Members are concerned that the City is not leveraging the implementation of BERDO 2.0 data reporting and verification compliance as a key workforce development opportunity for augmenting operations and maintenance staff within existing large buildings.
 - This is a time when we need to be maximizing the efficiency of our existing buildings to achieve peak performance while providing opportunities to a new workforce that is increasingly in high demand. Allowing for in-house qualified energy professionals and verification of data within the implementation of BERDO 2.0, including our recommendations for accountability mentioned above, would create a powerful incentive for large existing buildings to hire energy efficiency experts long-term.

Recommendation: A Better City recommends the City re-consider the Phase I draft regulatory language for BERDO 2.0 to allow for the use of in-house Qualified Energy Professionals as data verifiers, with protocols to ensure the veracity of data, in order to encourage workforce development in large existing buildings.

C. Explore the Concept of a Qualified Energy Professionals Cooperative

We further suggest the City explore forming a Qualified Energy Professionals (QEP) Cooperative of existing large building operations staff and energy efficiency experts to help implement BERDO 2.0 compliance for data verification. Through this model, once an in-house QEP is approved by the City after meeting a set of credentials and qualifications described in Appendix C of the Draft Phase I Regulations, they will be entered into a newly formed QEP Cooperative ("Cooperative"). QEPs from this Cooperative would then be able to verify data from other existing buildings. By relying on a Cooperative model of existing in-house QEPs, building owners would be accessing a third-party verifier employed by a different large building owner, while also supporting the retention of their own QEP.

The QEP Cooperative model for data verification could achieve:

- **Streamlined Data Verification & Best Practices:** A Cooperative of QEPs could help large existing buildings' staff have a more consistent and effective methodology for achieving deep emissions



reductions and accurate data reporting compliance for BERDO 2.0. The networking potential of such a Cooperative could help to promote co-learning within the building sector around best practices for the decarbonization of large existing buildings and could provide a transformative city building opportunity for Boston.

- **Support for QEP Hiring:** Leveraging the use of large existing buildings' staff within a QEP Cooperative would help to encourage building owners to retain and expand their building operations and maintenance staff. The hiring and retention of QEPs as long-term staff would pay considerable dividends over time, providing added in-house capacity and expertise for continuous commissioning, deep-energy retrofits, electrification, renewable energy procurement, and improved resilience and reliability in our existing building stock. As was highlighted at the January 19th special hearing, many of the initial qualifications offered in the draft language for Appendix C favored expertise in new construction rather than existing buildings, and there is a core need for energy efficiency technical experts in the existing large buildings workforce.
- **Support for Broader Workforce Curriculum Development:** Allowing the use of the QEP Cooperative for verification would support and encourage the development of building operation/energy performance curriculums in colleges and technical institutes, thereby leading to an expanded building decarbonization workforce to meet the rapidly growing need for these professionals in large buildings. As there will be additional building emissions performance standard policies coming down the track at the state- and potentially, at the federal-levels, it will be imperative for the Commonwealth to bolster its workforce in existing buildings operations and maintenance.
- **Limit the Financial Burden:** Skill sharing across a QEP Cooperative for data verification would significantly limit, if not eliminate, the substantial financial burden from hiring external QEPs for each building every 5 years, which could be especially challenging for large building campuses and portfolios.
- **Expanded Technical Capacity and Direct Line of Communication:** Establishing a QEP Cooperative would provide a cohort of technical experts to consult on how to improve BERDO 2.0 reporting and implementation over time, and could provide a direct line of communication from building owners to the City. We recommend that the QEP Cooperative meet with the City and Review Board once every quarter (at a minimum, 2x/year), to discuss challenges for data reporting and verification, to collaborate on how to provide technical expertise to newly covered buildings, and to explore additional opportunities for existing building decarbonization. We understand that the regulatory language is intended to be dynamic to respond to implementation challenges, and we believe that this consistent line of communication between the City, Review Board, and building owners through the QEP Cooperative model would help to improve compliance, suggest pragmatic regulatory amendments over time to enhance implementation, and provide added technical insight and capacity to the City's team.

To ensure accurate and transparent data reporting within the QEP Cooperative, the City should consider implementing the protocols for established qualifications, legal attestations, and random audits, listed in A sub-bullet two, above.

Recommendation: A Better City recommends amending the regulatory language to allow for the creation of a Qualified Energy Professional (QEP) Cooperative of data verifiers for BERDO 2.0, with appropriate accountability measures like legal attestations and random audits.



2. THE ROLE OF TENANTS IN DATA REPORTING, VERIFICATION, AND COMPLIANCE

Members have continued to express concern about the difficulty of obtaining data from tenants hindering accurate reporting, and leading to potential costs of non-compliance from tenant use that is beyond the building owner's control.

Until contracts between owners and tenants can be amended or updated to require data reporting by tenants, owners request support from the City to help incentivize tenants to report data to owners, achieve energy and emissions reductions, and conversely, ensure tenants that do not conform, agree to share the costs of compliance with BERDO 2.0 and other building decarbonization policies. We recommend that the City develop guidance documents and templates that:

- Encourage the use of sub-meters (electric, thermal (BTU), and water) in tenant spaces;
- Deploy high-performance design and construction guidelines for tenants to achieve maximum energy and emissions reductions, water reduction, and healthy buildings/indoor environmental quality, that meet required BERDO 2.0 performance targets;
- Educate project managers, brokers, architects, and engineers to ensure that green lease clauses and initiatives are implemented effectively; and
- Develop guidance documents for owners and tenants to share the cost of compliance, as appropriate.

Recommendation: A Better City recommends developing guidance documents for sub-metering, high performance design and construction of tenant spaces, green leases, and compliance cost sharing to incentivize both owners and tenants to share data and comply with energy and emissions reductions goals required by BERDO 2.0.

3. THE ROLE OF UTILITIES IN TIMELY AND ACCURATE DATA PROVISION

We agree with the current markup draft regulations that allow the Commission to grant a request for an alternative third-party verification deadline beyond the one-time, six-month extension allowed by the Ordinance. This will help in cases when delays and inaccuracies in utility data preclude a building owner from complying with timely BERDO 2.0 reporting.

Additionally, we encourage the Commission and City staff request automatically uploaded gas and electricity data from the utilities to Portfolio Manager as is the case in New York City. This will ensure timely and accurate utility data provision.

Recommendation: A Better City supports the current draft regulatory markups to consider additional reporting extensions on a case-by-case basis, and recommends working with the utilities on the automatic uploading of energy use data to Portfolio Manager.



APPENDIX B: SUGGESTED ABC MARK-UPS OF PHASE I REGULATORY LANGUAGE

[Note: items in red are mark-ups suggested by the City, items in purple and yellow highlight are additional ABC suggested mark-ups]

DRAFT – City Mark-up Revisions January 21, 2022

CITY OF BOSTON AIR POLLUTION CONTROL COMMISSION

BUILDING EMISSIONS REDUCTION AND DISCLOSURE REGULATIONS

1.01 **Introduction.** The following Regulations are promulgated by the City of Boston Air Pollution Control Commission (“the Commission”) pursuant to the authority granted to it under Chapter VII, Section 7-2.2 of the City of Boston Code.

1.02 **References.** References to Section 7-2.2 are to Chapter VII, Section 7-2.2 of the City of Boston Code.

1.03 **Definitions.** Terms defined in Section 7-2.2 have the same meanings for purposes of these Regulations and those definitions are hereby incorporated by reference. Terms related to data reporting that are not otherwise defined shall have the same meanings as in the ENERGY STAR Portfolio Manager. For the purposes of this section, the following additional terms are defined as follows:

Data Verification: [XXXX]

Emissions Intensity means Emissions divided by the floor area for which those Emissions are applicable.

Energy Type means any Energy source used in a Building, including, but not limited to, electricity, natural gas, fuel oil, propane, steam, and hot and chilled water, and any other Energy Types that the Commission may designate.

Energy Use Intensity means Energy consumption divided by the floor area for which that consumption is applicable.

Owner, as defined in Section 7-2.2, means a Building’s Owner of record, provided that the "Owner" may be deemed to include (i) multiple Owners in common ownership; (ii) the association or organization of unit Owners responsible for overall management in the case of a condominium; and (iii) the board of directors in the case of a cooperative apartment corporation. In the case of a Building subject to a lease that assigns maintenance, regulatory compliance and/or capital improvement costs to Tenants with a term of at least thirty (30) years, inclusive of all renewal options, the Owner may designate the lessee as “Owner” for purposes of compliance with this Subsection; such designation must be provided in writing to the Commission as required by the Regulations. An Owner may designate an agent to act on its behalf, including reporting as required by this Subsection; provided, however, that such designation (i) must be provided in writing to the Commission, and (ii) does not relieve the Owner of any compliance obligation under this Subsection.

Space Type, also referred to as Building Use, means the primary activity for which a given building or part of a building is utilized.

Tenant, as defined in Section 7-2.2, means any tenant, tenant-stockholder of a cooperative apartment corporation, and condominium unit Owner.

Verification Year, as defined in Section 7-2.2, means any year where an Owner must report third-party verified reporting data. Verification Years will be 2022, 2026, and every five years thereafter.

Commented [YT1]: A Better City recommends that the City insert specific language about what data will need to be reported in each reporting year: 2022, 2026, and every 5 years thereafter.



Whole-Building Data means complete energy consumption data for all Energy Types used in a building and complete water data for an entire building, inclusive of Tenant spaces and uses.

1.04 **Reporting Process.** Owners must annually report data through the ENERGY STAR Portfolio Manager and/or other methods as outlined in guidance documents issued by the Commission. Data should be reported in accordance with the requirements in Section 7-2.2, the following provisions and any other methods detailed in guidance documents issued by the Commission.

a. Energy and Water Use.

(i) Owners shall report Whole-Building Data for all Energy and water uses. Owners that are unable to obtain Whole-Building Data shall follow the procedures in section 1.04(e) of these Regulations.

(ii) Owners that procure Energy through the City of Boston's Community Choice Electricity (CCE) program, or Owners whose Tenants procure energy through the CCE program, may provide evidence of enrollment in the CCE program when reporting a Building's Energy use in accordance with any guidance documents issued by the Commission.

(iii) Owners that authorize an Energy or water utility or other third party to report Building-specific data on their behalf shall remain responsible for verifying the accuracy of such data. Any discrepancies between data provided by a utility or other third-party and reported data must be indicated in the "Property Notes" section of Portfolio Manager. The direct upload of such data by a utility or other third party does not relieve an Owner of the duty to report other required data.

b. Calculation of Gross Floor Area. Owners may use the Gross Floor Area listed in the Boston Assessing Department records for purposes of Section 7-2.2. Alternatively, Owners may calculate Gross Floor Area in accordance with the following provisions: (i) Gross Floor Area means the total number of square feet measured between the principal exterior surfaces of the enclosing fixed walls of the building, including Tenant areas, lobbies, common areas, restrooms, stairways, elevator shafts, mechanical equipment rooms, basement space, and storage rooms; (ii) Gross Floor Area excludes all surface parking areas, unroofed courtyards, outdoor balconies, exterior loading docks, plenums between floors, and unroofed light wells; (iii) for atria, Gross Floor Area includes only the area of atrium floors; and (iv) for Tenant spaces, interior demising walls should be measured to the centerline of the wall. Owners that calculate Gross Floor Area in accordance with this provision must preserve the supporting documentation pursuant to Section 1.09.

c. Building Use Classifications. For purposes of Section 7-2.2, the Building Use classifications in Appendix A are assigned to ENERGY STAR Portfolio Manager property types. Owners are encouraged to report all Building Uses and associated square footage in Portfolio Manager, including Building Uses that occupy less than ten percent (10%) of the Building's square footage.

d. Vacant Space. Owners must account for any vacant or unoccupied space in Portfolio Manager in accordance with Portfolio Manager instructions or with guidance documents issued by the Commission.

e. Buildings without Whole-Building Data. If an Owner is not able to obtain Whole-Building Data for any Energy Type or water use, then the Owner must report such Energy Type use or water use as provided in this Subsection. In the event that an Owner does not have Whole-Building Data because Tenant(s) failed to respond to data requests and utilities have not provided Whole-Building Data within the time period specified in Section 7-2.2(o), the Owner shall also comply with the requirements in Section 1.05.



(i) **Common Area Energy and Water Use.** The Owner shall submit Energy and water use data for all common areas and all centrally metered areas.

(ii) **Calculating Energy Use in Tenant Spaces.** For each Energy Type used in separately metered Tenant space, the Owner must report known Energy usage data and then use one of the following methods to determine Energy usage for the areas in which it is unknown, for each month.

1. **With Significant Partial Data for a Building Use.** If an Owner has actual Energy use data for at least 50 percent of a given Building Use, the Owner shall extrapolate the energy data for the remainder of Gross Floor Area with the same Building Use. This extrapolation shall be applied only to those areas for which Energy use is unknown and shall be calculated by (i) multiplying the average Energy Use Intensity of the floor areas for which Energy Use Intensity is known by the total floor area for which the Energy Use Intensity is not known, and (ii) multiplying the result from step (i) by one hundred and fifty percent (150%).

2. **Without Significant Partial Data for a Building Use.** If an Owner does not have actual Energy use data for at least 50 percent of any particular Building Use, the Owner shall utilize the default values set by the Commission, applied only to those areas for which Energy use is unknown. The appropriate energy use per square foot per month from Appendix B shall be multiplied by the floor area of that Building Use for which Energy use is unknown. The Commission may revise the tables in Appendix B as it deems appropriate.

(iii) **Noting When Whole-Building Use Data Are Not Available.** In accordance with guidance documents issued by the Commission, Owners shall indicate when Whole-Building Data for Energy or water use is not available and where extrapolated data is used.

g. **Contextual Information.** Owners may supply contextual information regarding their required data, including hyperlinks, in the “Property Notes” section of Portfolio Manager or via any supplemental reporting methods detailed by the Commission in guidance documents. Such contextual information may be included in public disclosures. Contextual information shall conform to guidance that the Commission may issue regarding acceptable length and formats.

h. **New Information.** If, after having submitted a report to the Commission, the Owner of a Building changes or an Owner receives or becomes aware of new or updated information that would result in a change to Emissions, Energy or water use, or Emissions or Energy Intensity of two percent (2%) or more, the Owner shall, within thirty (30) Days of the change or of receiving the new information, submit the additional or corrected data to the Commission in accordance with guidance documents issued by the Commission, and notify the Commission accordingly. Owners may submit other updates at any time. The Commission will include such updates in its annual disclosure of data.

i. **Utility Data Provision.** The City, Air Pollution Control Commission, and Review Board shall work with utility companies to ensure the provision of timely and accurate data required for BERDO compliance. In partnership with utilities, the City shall explore opportunities for automated utility data uploading to the City’s benchmarking tool.

1.05 Obligation to Request and Report Information from Building Tenants.

a. **Delegating Reporting Duties to Single Tenant.** If an Owner has leased a Building to a single Tenant and that Tenant has assumed management, maintenance, regulatory compliance and/or



capital improvement costs of the entire building, the Owner may, with the consent of the Tenant, delegate all responsibility regarding reporting under 7-2.2 to that Tenant. The Owner shall report such delegation in accordance with guidance documents issued by the Commission.

b. **Tenant Non-Response.** Owners shall report in writing to the Commission if any non-residential Tenant fails to respond to data requests from the Owner within the time period specified in Section 7-2.2(o), accompanied by documentation of the Owner's request. Owners seeking data from Tenants shall document reasonable steps to collect such data, including making the written request using the most up-to-date contact information for the Tenant at least twice.

1.06 Requesting Alternative Reporting Dates. A request for an alternative reporting date to that otherwise required by Section 7-2.2(e)(ii) must explain the extenuating circumstances that make an Owner unable to complete the report **or third-party data verification** by the deadline and must be submitted prior to the applicable deadline. Such requests must comply with any procedures created by the Review Board or guidance documents issued by the Commission. The Commission may grant a request for an alternative reporting date **and/or third-party verification deadline** for a period not to exceed six months. **In 2022, the Commission may grant a request for an alternative third-party verification deadline beyond the one-time, six-month extension allowed by the Ordinance.**

1.07 Special Conditions.

a. **Multiple Buildings on a Single Tax Lot or on Multiple Tax Lots that Share Energy or Water Systems.** If there are multiple buildings on a single tax lot **or on multiple tax lots that share energy or water systems**, the Owner(s) shall report data required by Section 7-2.2 as follows:

- (i) For any **building whose** Energy **and/or** water use **that** is separately metered or sub-metered, data must be reported for each **such** building.
- (ii) For **any** buildings **that are classified as the same Building Use** whose Energy **and/or** water use is not separately metered or sub-metered, the total shared Energy and or water use should be apportioned by the Gross Floor Area of each building and reported for each such building. The apportioned data shall be marked as an "Estimation" in Portfolio Manager.
- (iii) **If all the Buildings that are not classified as the same bBuilding Use type in Portfolio Manager and whose Energy or water use is not separately metered or sub-metered, they should must** be reported as a campus as defined in Portfolio Manager.
- (iv) The Commission may approve an alternative apportionment process proposed by the Owner.

~~b. Buildings on Multiple Tax Lots that Share Systems. If there are multiple buildings on multiple tax lots that share utility systems and are not separately metered or sub-metered for Energy or water use, the Owner(s) shall report data required by Section 7-2.2 as follows:~~

- ~~(i) If all the buildings are classified as the same property type in Portfolio Manager, then they shall, if practicable, be reported as individual buildings, with Energy and water use apportioned by the Gross Floor Area of each building. The apportioned data shall be marked as an "Estimated Value" in Portfolio Manager.~~**
- ~~(ii) If all the buildings are not classified as the same building type in Portfolio Manager, they must be reported as a campus as defined in Portfolio Manager.~~**



b. ~~e~~. **Newly Constructed Buildings.** The first reporting requirement for newly-constructed buildings shall be the first full calendar year following the issuance of a **Temporary Certificate of Occupancy for the building** or a Certificate of Occupancy for the building, **whichever is earlier.**

c. ~~d~~. **Change of Ownership.** When a building changes ownership, the previous Owner shall provide to the new Owner any required data that has been collected and is necessary for completing the next required report under Section 7-2.2.

1.08 **Third-Party Data Verification.** Third party verifications of a Building Owner's reporting data shall be performed by a qualified energy professional who ~~is not~~ **may be** on the staff of a Building's Owner or Building's management company. Pursuant to 7-2.2(h), third-party verification is required for all reporting data for the specified time period, including, but not limited to, data necessary to show compliance with and qualification for Emissions Standards, Individual Compliance Schedules and Hardship Compliance Plans, if applicable.

a. **Qualified energy professionals** include individuals who hold an active qualification of at least one of the credentials listed in Appendix C. ~~Starting in 2023, individuals with different qualifications may apply to the Review Board for designation as a qualified energy professional.~~ **Individuals may apply to become qualified energy professionals through a form found on the BERDO 2.0 website.** ~~The Review Board may approve additional credentials for designation as qualified energy professionals.~~

b. **Corrections to Reported Data.** In the event of errors found in previously reported data or discrepancies between previously reported data and third-party verified data, Owners shall submit an updated report as outlined in guidance documents provided by the Commission.

c. **Qualified Energy Professionals Cooperative.** To help implement the 3rd party data verification components of the Ordinance, approved Qualified Energy Professionals can elect to be entered into a citywide QEP Cooperative to verify and cross-check data in buildings outside of their own, to lessen administrative burden for 3rd party verification, and to encourage workforce development in buildings operations and maintenance staff for large existing buildings. For 3rd party verification performed by in-house QEPs across the QEP Cooperative, such verifiers shall sign legal attestations to accurate data reporting and verification, coupled with random data audits performed by the City. In addition to performing third-party verification, the QEP Cooperative will meet with City staff once every quarter to discuss data reporting and verification challenges and potential opportunities for regulatory amendments. The QEP Cooperative will also be available to the Review Board and Air Pollution Control Commission for technical consultation, as needed.

1.09 **Preservation of Records.**

a. Building Owners shall retain, in printed or electronic format, the following records until at least two years after the reporting deadline in the Building's next Verification Year:

(i) All records and information submitted pursuant to 7-2.2, including records and information that is optional to report, whether submitted via the ENERGY STAR Portfolio Manager or otherwise;

(ii) All records and information necessary to demonstrate compliance with 7-2.2, including, but not limited to, any back-up information substantiating a Building's Energy and water data, Emissions, and qualifications for Building Portfolios, blended Emission standards, Individual Compliance Schedules or Hardship Compliance Plans, if applicable;



- (iii) Confirmation of submissions from ENERGY STAR Portfolio Manager or other systems designated for reporting by the Commission;
- (iv) Requests to Tenants for information pursuant to 7-2.2(o) or as otherwise needed to comply with Section 7-2.2;
- (v) Third-party verifications and a copy of the credentials and the contact information for the qualified energy professional that were uploaded to Portfolio Manager or other systems designated for reporting by the Commission; and
- (vi) Requests for extensions of reporting deadlines.

Building owners shall make such records and information available for inspection or audit upon request by the Commission, Environment Department, Review Board or any third-party acting at their direction.

1.10 *Disclosure of Records and Information.*

- a. All records and information submitted pursuant to 7-2.2, including records and information that is optional to report, whether submitted via the ENERGY STAR Portfolio Manager or otherwise, may be disclosed as determined appropriate by the Commission, Environment Department or Review Board.
- b. The Commission's public disclosure of any Building's compliance with the Emission Standards in 7-2.2 may include information regarding a Building Owner's use of "Estimated" data and the Additional Compliance Mechanisms in Section 7-2.2(m), including, but not necessarily limited to, the type and amount of each Additional Compliance Mechanism used in a compliance period.

1.11 *Enforcement and Penalties.*

- a. **Penalties.** The violation of any provision of these Regulations is subject to the imposition of penalties as outlined in Sections 7-2.2(q) and 7-2.2(r).



APPENDIX A: BUILDING USE CLASSIFICATIONS

Building Use	Energy Star Portfolio Manager Property Type
<u>Assembly</u>	Aquarium Convention Center Fitness Center/Health Club/Gym Heated Swimming Pool Indoor Arena Ice/Curling Rink Museum Movie Theater Other - Entertainment/Public Assembly Other - Recreation Other - Stadium Performing Arts Race Track Social/Meeting Hall Stadium (Open) Swimming Pool Worship Facility
<u>College/ University</u>	College/ University
<u>Education</u>	Adult Education K-12 School Other - Education Pre-school/Daycare Vocational School
<u>Food Sales & Service</u>	Bar/Nightclub Fast Food Restaurant Food Sales Food Service Other - Restaurant/Bar Restaurant Supermarket/Grocery Store
<u>Healthcare</u>	Ambulatory Surgical Center Hospital (General Medical & Surgical) Medical Office Other - Specialty Hospital Outpatient Rehabilitation/Physical Therapy Urgent Care/Clinic/Other Outpatient Veterinary Office



Building Use	Energy Star Portfolio Manager Property Type
<u>Lodging</u>	Barracks Hotel Other - Lodging/Residential Residence Hall/Dormitory Residential Care Facility Senior Care Community Senior Living Community Single Family Home
<u>Manufacturing/ Industrial</u>	Manufacturing/ Industrial
<u>Multifamily housing</u>	Multifamily housing
<u>Office</u>	Financial Office Office
<u>Retail</u>	Automobile Dealership Bank Branch Enclosed Mall Lifestyle Center Other - Mall Retail Store Strip Mall Wholesale Club/Supercenter
<u>Services</u>	Convenience Store without Gas Station Courthouse Energy/Power Station Fire Station Library Other - Public Services Other - Services Other - Utility Personal Services (Health/Beauty Dry Cleaning etc.) Police Station Repair Services (Vehicle, Shoe, Locksmith, etc.)

Building Use	Energy Star Portfolio Manager Property Type
<u>Storage</u>	Distribution Center Non-Refrigerated Warehouse Parking Refrigerated Warehouse Self-Storage Facility
<u>Technology/Science</u>	Data Center Laboratory Other - Technology/Science



APPENDIX B: DEFAULT ENERGY USE VALUES

Building Use	Electricity (kBtu/sq ft/month)	Natural Gas (kBtu/sq ft/month)	Fuel Oil (kBtu/sq ft/month)	District heat (kBtu/sq ft/month)	District Cooling (kBtu/sq ft/month)	If all energy uses are unknown (kBtu/sq ft/month)
Assembly	6.629	5.448	0.104	1.554	0.317	13.659
College/ University	6.493	6.730	0.104	3.045	0.720	17.011
Education	2.220	7.065	0.104	2.131	0.317	9.292
Food Sales & Service	22.530	11.468	0.104	2.131	0.317	33.998
Healthcare	11.369	5.744	0.104	12.822	2.415	32.366
Lodging	5.121	5.632	0.104	0.894	0.144	11.833
Manufacturing/ Industrial	3.152	50.196	0.327	2.131	0.317	53.675
Multifamily housing	2.802	4.786	0.238	0.221	0.317	8.047
Office	6.734	1.468	0.076	1.115	0.317	9.394
Retail	4.698	2.031	0.104	0.140	0.317	6.869
Services	5.321	6.623	0.104	2.930	0.072	14.946
Storage	2.268	1.447	0.104	0.166	0.317	3.921
Technology/ Science	15.419	9.653	0.104	7.376	1.029	33.477



APPENDIX C: QUALIFIED ENERGY PROFESSIONAL CREDENTIALS

Profession	Credential	Organization
Engineer	Professional Engineer (PE)	National Society of Professional Engineers (NSPE)
Architect	Licensed Architect	National Council of Architectural Registration Boards (NCARB)
Architect	Registered Architect (RA)	American Institute of Architects (AIA)
Energy Modeler	Passive House	Passive House Institute US (PHIUS)
Energy Auditor	Building Energy Assessment Professional (BEAP)	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Energy Auditor	Certified Energy Auditor (CEA)	Association of Energy Engineers (AEE)
Energy Auditor	Building Energy Modeling Professional (BEMP)	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Energy Auditor	RPA/FMA High Performance Designation (RPA/FMA-HP)	BOMI International
Energy Auditor	Certified Measurement and Verification Professional (CMVP)	Association of Energy Engineers (AEE)
Energy Auditor	LEED Advanced Professional (AP) Building Operations & Maintenance Building Design Construction	U.S. Green Building Council (USGBC)
Commissioning Professional	Commissioning Process Management Professional Certification (CPMP)	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Commissioning Professional	Certified Commissioning Professional (CCP)	Building Commissioning Association (BCA)



Profession	Credential	Organization
Commissioning Professional	Associate Commissioning Professional (ACP)	Building Commissioning Association (BCA)
Commissioning Professional	Certified Building Commissioning Professional (CBCP)	Association of Energy Engineers (AEE)
Commissioning Professional	Existing Building Commissioning Professional (EBCP)	Association of Energy Engineers (AEE)
Commissioning Professional	Certified Commissioning Authority (CxA)	AABC Commissioning Group (ACG)
Energy Manager	Operations and Performance Management Professional (OPMP)	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Energy Manager	Certified Energy Manager (CEM)	Association of Energy Engineers (AEE)
Energy Manager	Energy Management Professional (EMP)	Energy Management Association (EMA)
Building Operator	Building Operator Certification Level 1 & 2	Northwest Energy Efficiency Council