

Glossary

Appropriated Agency

The agency that received funding from the capital bond proceeds on behalf of the project and is responsible for compliance review. The appropriated agency is responsible for reviewing, (but not determining), compliance with the guidelines according to the [Compliance Review](#) process based on the extent of compliance represented and documented in the Compliance Summary Form, Outcome Documentation Forms, and optional [Guideline Report](#). The Appropriated Agency also reviews and decides whether to accept applications for variance from the guidelines according to the [Variance Process](#). (See P.0 Guideline Management, Supporting Information.)

Atmospheric Lifetime (AtL)

Atmospheric Lifetime is a measure of the average persistence of the refrigerant if released. A longer lifetime has worse environmental effects.

Baseline

Baselines demark a reference case for comparison and are used to determine performance improvements for compliance with guidelines throughout this document.

Baseline(s), Measurement and Verification

Measurement and Verification Baseline(s) are used to calculate savings as part of the Measurement and Verification Process. They should be coordinated with other baselines but may have other requirements per IPMVP reference standard. See details of Measurement and Verification under Guideline P.5 Operations Commissioning and Appendix P-5a.

Benchmarking

Benchmarking is a component of the Buildings, Benchmarks, and Beyond (B3) Project (in addition to Guidelines development, project management, and project delivery process.) Benchmarking will identify the energy performance of existing public buildings in order to direct energy conservation improvements where they are most needed and most cost-beneficial. As new state-funded projects are constructed and operated in accordance with B3 Guidelines, more detailed information on energy and other sustainable performance factors will also be tracked.

Best Management Practices (BMPs) (Stormwater context)

Engineered devices or strategies implemented to control, treat or prevent storm water runoff. BMPs can include, but are not limited to, schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters or storm water conveyance systems. BMPs also include treatment practices, operating procedures and practices to control site runoff, spillage or leaks, sludge or water disposal or drainage from raw materials storage.

Biodiversity

The variety, variability, and number of plants and animals in a defined area. A term generally used to describe the health of a site, and its ability to sustain itself over time.

Buildings, Benchmarks, and Beyond (B3) Project

The State of Minnesota Sustainable Building Guidelines are a component of a larger project of the Departments of Administration and Commerce called “Buildings, Benchmarks and Beyond” (B3). The other primary component of the B3 project, called “benchmarking,” will identify the energy performance of existing public buildings in order to direct energy conservation improvements where they are most needed and most cost-beneficial. As new state-funded projects are constructed and operated in accordance with the new sustainable guidelines, more detailed information on energy and other sustainable performance factors will also be tracked. The third, management component of the B3 project facilitates integration of the guideline and benchmarking efforts and coordinates public input.

Blackwater

Blackwater is water flushed from toilets. Also, water from a kitchen sink, garbage disposal or dishwasher is considered blackwater because of high concentrations of organic waste. Only after appropriate treatment can blackwater be reused for non-potable applications, such as subsurface landscape irrigation.

Brownfields

Previously developed sites where the redevelopment, reuse, or expansion is impacted by the presence or potential presence of contaminants in the soil. Brownfields can occur in urban, suburban, and rural areas.

CSBR:

The Center for Sustainable Building Research (CSBR) at the University of Minnesota acts as the B3 Guidelines tracking team. CSBR leads the B3 Guidelines Tracking Process, updates and maintains project information with required forms and optional Guideline Reports from each phase of project development and each year of operational data. This data may be posted on a B3 Guidelines informational website. It may also be used for selected audits, to improve the usability and effectiveness of the B3 Guidelines, and to translate building performance in to state economic, human, and environmental outcomes. CSBR tracks the B3 Guidelines on direction of the State. (See P.1 Guideline Management, Appendix P-0b.)

Certified (*Materials*)

Validation by an approved, third-party resource, that material or product meets specifications for performance or prescriptive criteria. An example is the Forest Stewardship Council Certified Wood programs.

Churn

For any given period of time, the number of occupants who discontinue their current use of a space and require modifications to structural components, building systems, interior finishes, or furnishings, divided by the average number of total occupants. Churn rate provides insight into the life cycle cost of materials.

Clean Water Act

The federal Water Pollution Control Act (33 U.S.C. ‘1251 et seq., established in 1972.), and any subsequent amendments thereto.

Commissioning Process, Commissioning Plan, Commissioning Report for Design and Construction Commissioning

Design and Construction Commissioning refers to the commissioning process that shall begin in schematic design and conclude after the correction period or after completion of a full year of operation, whichever is last. The Design and Construction Commissioning Process is the means to verify and document that the systems of a facility operate in accordance with their design intent and that the operations staff fully understands the system operational procedures. This includes documenting system operational goals and design parameters, planning for verification and testing in the design and specifications, confirming the successful completion of the verification process, documenting the system operational procedures and training the operations staff. The Design and Construction Commissioning Process is coordinated by the Design and Construction Commissioning Leader and executed by the Design and Construction Commissioning Team. (See P.4 Design and Construction Commissioning and Appendix P-4a.)

Commissioning Process, Commissioning Plan, Commissioning Report for Operations Commissioning
Operations Commissioning shall be planned for during design, but focuses on the operations of the facility after construction through the next use of the facility. The Operations Commissioning process is the means to verify and document that the systems of a facility and the facility as a whole continue to operate in accordance with their design intent overtime. This includes planning, implementation, and documentation for regular preventative maintenance, Measurement and Verification of system and whole building performance, and improvement and correction of that performance. The Operations Commissioning process is coordinated by the Operations Commissioning Leader and executed by the Operations Commissioning Team. Initial operations input is provided by the participation of the Facility Operations Manager on the Design and Construction Commissioning Team. Later in design, the Operations Commissioning Team is formed and leads the planning for Operations Commissioning after occupancy. (See P.5 Operations Commissioning and Appendix P-5a.)

Commissioning Leader, Commissioning Team for Design and Construction Commissioning

The Design and Construction Commissioning Leader is the person who coordinates the efforts of the Design and Construction Commissioning Team and assembles the Design and Construction Commissioning Plan, commissioning design reviews and the Design and Construction Commissioning Reports. The Commissioning Leader shall be a distinct role from the design team, but may be employed within one of the firms providing design services. The Commissioning Team serves the planning and review needs to coordinate with the commissioning process and to complement the skills of the Commissioning Leader. The Commissioning Team shall include the Commissioning Leader, a representative of the owner's facilities operations team, the Guideline Leader, the architect and engineers of multiple disciplines as needed to cover the expertise to plan and execute commissioning of selected systems, the contractor, and appropriate subcontractors. (See P.4 Design and Construction Commissioning, and Appendix P-4a.)

Commissioning Leader, Commissioning Team for Operations Commissioning

The Operations Commissioning Leader is the person who coordinates the efforts of the Operations Commissioning Team and assembles the Operations Commissioning Plan, commissioning design reviews and the annual Operations Commissioning Reports. The Operations Commissioning Leader can be from any group, including a member of the owner's facilities operations team. The Operations Commissioning Team serves the planning and review needs to coordinate with the Operations Commissioning Process and to complement the skills of the Commissioning Leader. The Operations Commissioning Team shall include the Operations Commissioning Leader, the Guideline Leader for the Ongoing Occupancy Phase,

and any other staff or consultants as needed to cover the expertise to plan and execute operations commissioning. (See P.5 Operations Commissioning, and Appendix P-5a.)

Compliance Review Process

The process for regularly reviewing compliance with the guidelines over time from initial phases through ongoing occupancy. There are three key components. First, the Work Team (or its Guideline Leader) submits the end-of-phase online Compliance Summary using the B3 Guidelines Tracking Tool (www.msbgtracking.com) to the Appropriated Agency for review. Then, the Appropriated Agency reviews the extent and nature of compliance as documented by the guideline leader and decides if the extent of compliance is acceptable. (The Appropriated Agency, does not *determine* compliance.) Finally, the Appropriated Agency either approves the extent of compliance for that phase, or directs the Guideline Leader to revisit compliance measures with the team. (See P.0 Guideline Management, and Appendix P-0b.)

Construction Activity (Site Guidelines Context).

Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of 1 acre or more. Such activities include, but are not limited to, clearing and grubbing, earthwork, and demolition.

Global Warming Potential (GWP)

Global Warming Potential is an indicator of the potency of the refrigerant to warm the planet by action as a greenhouse gas. A higher GWP has worse environmental effects.

Goal

The purpose toward which activity is directed. Goals relate the outcome sought to the issues relevant to a particular topic (site, energy, water, etc.). Goals are established on the basis of principles and associated desired outcomes.

Graywater

Graywater derives from domestic or commercial water uses, containing very low and harmless levels of organic contaminants. Water from sinks, baths, showers, and washing machines are a source of graywater, and can be used for subsurface irrigation of non-edible landscape plants and in some situations for toilet flushing.

Greenfields

Sites which have not experienced construction development and its associated uses (e.g. commercial, residential, industrial, or mining, excluding agriculture) and on which there are no known or suspected contaminants in the soil. Greenfields can occur in urban, suburban, and rural areas.

Guideline Leader: The Guideline Leader is the person who coordinates the completion, and documentation of tasks to comply with the sustainable guidelines. They shall work within the organization contractually responsible for a phase (or be a consultant hired by that organization), thus the role may be filled by different people for each phase. They are the contact person for guideline compliance. Some Agency processes may have a different name for this role, or not designate this role, leaving it up to a representative from the Work Team to coordinate the tasks of the Guideline Leader. (See P.0 Guideline Management and Appendix P-0b.)

Guideline Management Process

The process for ensuring that the project complies with the guidelines by regularly reviewing compliance with the guidelines from initial phases through ongoing occupancy. The Guideline Management Process is led by the Guideline Leader and consists of the following key components. 1) The work team for the responsible organization (planning team, design team, construction team, or operations team depending on phase) works to meet the guidelines. 2) The work team, Coordinated by the Guideline Leader, submits the online Compliance Summary using the B3-Guidelines Tracking Tool (www.msbgtracking.com) at the end of the phase, or annually during Ongoing Occupancy to the Appropriated Agency for Compliance Review. 3) The Appropriated Agency reviews the submitted materials and may approve or disapprove the extent of compliance. 4) This data is used to give feedback to the State on the guidelines and for benchmarking performance data during the ongoing occupancy phase. (See P.0 Guideline Management and Appendix P-0b.)

Guidelines

A set of rules and instructions (performance criteria), based on objectives, intended to achieve a goal and ultimately lead to the successful completion of a desired outcome. Guidelines may require total or partial compliance with rules or instructions (performance criteria). Guidelines may be of a prescriptive or performance nature. The term guidelines is used here to refer to the entire B3 document as well as the specific required or recommended items within each topic section. For example, “P.3 Planning for Conservation is the third *guideline* in the Performance Management topic of B3 *Guidelines*.”

Hazardous Materials

Any material, including any substance, water or combination thereof, which because of its quantity, concentration or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Illegal Discharge

Any direct or indirect non-storm water discharge to the storm drain system, except as exempted under this procedure.

Illicit Connections

An illicit connection is defined as either of the following:

1. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-storm water discharge including sewage, processed industrial and mining wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by a government agency; or
2. Any drain or conveyance connected to the storm drain system which has not been documented in plans, maps or equivalent records and approved by the Local Governing Unit (LGU).

Impervious / Imperviousness (*Site Surfaces*)

Surfaces that prohibit or greatly slow down the movement of precipitation from the land surface into the underlying soil. This precipitation becomes surface water and contributes to downstream impacts.

Imperviousness is expressed as the percentage of a sub-basin, watershed, sub-watershed, or site, which is covered by impervious surfaces such as roof tops, parking lots, sidewalks, driveways, streets, and highways.

Industrial Activity

Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14) (Reference: Code of Federal Regulations, Title 40: Protection of Environment, Part 122- NPDES).

Intent

The portion of a guideline that summarizes its purpose and usually its relationship to the objective and goal it is trying to accomplish.

Life Cycle (Materials)

Consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to the final disposal.

Life Cycle Assessment (LCA)

Compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system or building component throughout its life cycle.

Life Cycle Costing

Life Cycle Costing is a process to determine the sum of all the costs associated with an asset or part thereof, including acquisition, installation, operation, maintenance, refurbishment and disposal costs. It is therefore pivotal to the asset management process. Life Cycle Costing incorporates both Life Cost Planning which occurs during development or manufacture and implementation of that plan by Life Cost Analysis as the asset is used or occupied. Life Cycle Costing forms an input to evaluation processes such as Value Management, Economic Appraisal and Financial Appraisal. (See Guideline P.6 Lowest Life Cycle Cost and Appendix P-6 for more details and definitions.)

Life Cycle Impact Assessment

Phase of life cycle assessment aimed at understanding and evaluating the magnitude and significance of the potential environmental impacts of a product system.

Life Cycle Impact Category Indicator

Quantifiable representation of an impact category. Note that the shorter expression "category indicator" is used throughout the text of International Standard 14040 for improved readability.

Life Cycle Interpretation

Phase of life cycle assessment in which the findings of either the inventory analysis or the impact assessment, or both, are combined consistent with the defined goal and scope in order to reach conclusions and recommendations.

Life Cycle Inventory Analysis

Phase of life cycle assessment involving the compilation and quantification of inputs and outputs, for a given product system throughout its life cycle

Locally/Regionally Manufactured

Materials manufactured regionally within a radius of 250 miles of project site to specified qualifications, or are manufactured within the State of Minnesota and contain products from state-sponsored, approved, or acknowledged recycling programs.

Minnesota Pollution Control Agency (MPCA)

Among other things, the MPCA has regulatory authority to ensure compliance with Federal Clean Water Act requirements.

B3 Guidelines Tracking Process

This process consists primarily of updating and maintaining the project information. Related activities may include posting data from the project on an informational B3 website, using project information to improve the usability and effectiveness of the B3 guidelines, and translating reported building performance into economic, human, and environmental outcomes for use by the State of Minnesota. The steps of this process consists of the following elements: Appropriated Agency submits online Compliance Summary form at the end of each phase, and annually during operations to CSBR for use in the B3 Tracking Process. Depending on the phase, Outcome Documentation may also call for Commissioning or other reports to be attached. CSBR uses the information received to update and maintain project information at the direction of the State of Minnesota. (See P.0 Guideline Management and Appendix P-2.)

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permits

General, group and individual storm water discharge permits that regulate facilities defined in federal NPDES (Phase I enacted in 1990 and Phase II enacted in 2003) regulation pursuant to the Clean Water Act or under state adopted implementation plans as applicable.

Non-Storm Water Discharge

Any discharge to the storm drain system that is not composed entirely of storm water.

No Net Increase

No net increase in nonpoint source pollution - Stormwater control systems designed to prevent the degradation of water quality in receiving watercourses from nonpoint source pollution associated with stormwater runoff.

1. No net increase in sediment loadings - Stormwater control systems designed to reduce to the maximum extent possible, the total suspended solids (TSS) from stormwater runoff for storm events with magnitudes as high as the Water Quality Storm and to retain, as closely as possible, the pre-development hydrologic response of the site and the watershed.
2. No net increase in stormwater runoff rates and stream channel erosion - Stormwater control systems designed so that, to the maximum extent possible, the postdevelopment stormwater runoff rates from the site and at any point in the watershed between the site are no greater than pre-development rates, in order to retain as closely as possible the pre-development hydrologic response of the site and the watershed.
3. No net increase in stormwater runoff volumes - Wherever suitable infiltration, soil permeability, and favorable geological conditions exist, stormwater control systems designed so that all stormwater runoff is infiltrated into the soil or retained on-site for re-use for the 1.25" rainfall (Source: NRSC TR-55).

Native Plants

Indigenous species that were present in a defined area prior to European human contact and settlement.

Objective

A plan of action that sets the path to be used to reach the goal that is sought.

Outcomes

The desired end result, based on guiding principles, that is to be accomplished by meeting performance criteria. Here, the desired outcomes are beneficial impacts to human, community, environment, and life-cycle economic conditions. Specific units and methodologies for measuring outcome performance will be developed further in subsequent versions of the B3 Guidelines.

Outdoor Environmental Quality (OEQ)

Refers to characteristics of the exterior environment with regard to the impact of air quality, lighting, acoustics, microclimate, and spatial orientation on human health, safety and comfort. Air quality refers to characteristics with regard to movement, temperature, humidity, and contaminants (particulate matter, gases, pollen, allergens and fumes).

Performance (*guideline, performance criteria*)

A description of a guideline which stipulates a calculable and measurable desired result as part of the criteria for meeting a goal. Usually, the method to calculate the result is also a part of the criteria. The result and calculation method (based on desired impacts) are defined; the physical means of achieving the result are left to the design team. (“Achieve this result, and show us how it was calculated and can be verified.”)

Performance Criteria

The portion of a guideline that describes the rules and instructions for meeting the intent of the guideline. Performance criteria may include units of measure, specific analysis methodology, and documentation requirements. Here, each performance criteria is followed by “Tasks by Phase” which describe in more detail the steps to be taken throughout the planning, design, construction, and occupancy process.

Pollutant

Anything which causes or contributes to pollution (sources that generate discharges include but, are not limited to: industrial, commercial, mining, and agriculture). Pollutants may include, but are not limited to, paints, varnishes and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter or other discarded or abandoned objects, articles and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides and fertilizers; hazardous substances and wastes; sewage, fecal coliform, endocrine disruptors, and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure (including but not limited to sediments, slurries and concrete rinsates); and noxious or offensive matter of any kind.

Pre-Development or Pre-Existing Conditions

Site conditions existing prior to proposed improvements.

Pre-Settlement Conditions

Conditions prevalent before European human contact and settlement.

Post-Development Conditions

Site conditions after site improvements are completed.

Premises

Any building, lot, parcel of land or portion of land whether improved or unimproved including adjacent sidewalks, parking strips, and utility connections.

Prescriptive (guideline)

A description of a guideline which stipulates a norm or standard as *the* means for meeting a goal. The physical means are defined (based on perceived connection to a desired result); the actual resulting impact is unknown. (“Do THIS and we’ll call it compliance without ever knowing its true impact or merits.”)

Principle

A (social) principle is an agreed upon set of moral or ethical standards or judgments governing the behavior of a collective. Here, the principles pertain to human (building occupants), community, environmental sustainability, and life-cycle economic performance.

Project Archive

The Project Archive is the performance planning, design, and ongoing maintenance history of the project. This body of information should include: performance parameters and basis for design, design actions taken towards B3 Guidelines criteria, ongoing monitoring, measurement and verification over time, actions to resolve problems over time, and results of those actions. It includes each released version of the Guideline Reports and Commissioning Reports. The Guideline Leader and Work Team maintain the Project Archive each phase and facilitate its transition to leaders of following phases. (See P.0 Guideline Management.)

Proxy (guideline)

A description of a guideline (or guideline system) that is a surrogate, not well linked to the desired outcome. Any requirement that is not a direct measure of impacts on desired outcomes (the environment, the economy, the community or people.) Any score-keeping, award or credit system is inherently a proxy. Prescriptive guidelines are often proxies. The concept of a proxy is relative to how the desired outcomes are defined. For example, money is not a proxy in the economy but it is a proxy in terms of human performance and for environmental impacts. Point based guideline systems are all proxies for impacts on the environment, the economy, the community or people.

Rainwater Harvesting

Rainwater is non-human generated precipitation (rain, snow, ice, etc.) collected and concentrated to meet water needs. This type of water is normally used to supplement common residential water requirements. Rainwater is most commonly used for above ground exterior irrigation systems and for watering gardens. Other uses include toilet flushing, car washing, swimming pool make-up water, and in the southern United States evaporative coolers. Rainwater is considered a subset of Graywater (see separate listing.)

Raw Material

Primary or secondary material that is used to produce a product.

Recharge, On-site Water Recharge Areas

Those areas on a site where the soils are porous and allow water infiltration deep enough to recharge the water table and deep and shallow aquifers.

Remanufactured

Products or systems reassembled, after dismantling, cleaning, and repair, to prescribed standards and specifications using state-of-the-art equipment and components. During this process, new components may be installed which meet or exceed performance standards of the original product.

Renewable Bio-Based Materials

Materials must be either: (a) residues from the processing of renewable, bio-based materials; OR (b) grown or harvested under a recognized sustainable management system.

Salvaged

Salvage is the act of removing something for reuse. Salvaged materials or products may be installed at the same site, in new construction on the same site, or installed at a different location.

Site Hydrologic Cycle

The cyclical process of how precipitation normally acts upon a site. Water falls to the ground as rainfall precipitation. Managing water in a sustainable manner at the site, sub-watershed, and watershed level is based on an understanding of this process. Some of the rainfall runs off the site into surface water bodies (approximately 10%), some evaporates into the atmosphere (approximately 40%), some infiltrates into the soil recharging the water table and deep and shallow aquifers (approximately 50%). The water that is not infiltrated into the water table is taken up by plants for growth. The remaining water is in turn evapotranspired back into the atmosphere through the plants' leaves. Once the water is transpired into the atmosphere, the cycle is complete, and the process starts over again.

Storm Drain System

Facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention, and detention basins, natural and human-made or altered drainage channels, reservoirs and other drainage structures.

Storm Water

Any surface flow, runoff and discharge consisting entirely of water from precipitation events.

Storm Water Pollution Prevention Plan

A document which describes BMPs and activities to be implemented by a person, department or operational area to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Storm Water, Storm Water Conveyance Systems and/or Receiving Waters to the Maximum Extent Practicable.

Strategy

An individual or set of resources, including technologies, procedures or operations, that is part of a plan of action for meeting the performance criteria of a guideline. Strategies are implemented (– they are things you can DO to achieve what you WANT.)

Variance Review Process

The Variance Review Process defines the steps for reviewing a request to not adhere to a portion of the guideline as written. This is intended to be used very sparingly, for issues such as non-applicability to a building type or scale. It is led by the Appropriated Agency and consists of the following key steps: The Work Team (or Guideline Leader if applicable) submits a variance request using the online B3 Guidelines Tracking Tool (www.msbgtracking.com) to the Appropriated Agency before the completion of the schematic design phase. The request shall document the reasons for each variance request. After review, the Appropriated Agency either accepts or rejects the request for variance, or may specify a compromise equivalency or conditions for the variance. (See P.0 Guideline Management and Appendix P-0b.)

Wastewater

Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

Waters of the United States

Surface watercourses and water bodies as defined in 40 CFR Section 122.2 (Reference: Code of Federal Regulations, Title 40: Protection of Environment, Part 122- NPDES) including all natural waterways and definite channels and depressions in the earth that may carry water, even though such waterways may only carry water during rains and storms and may not carry storm water at, and during, all times and seasons.

Watershed

The entire land area drained by a waterway that empties into a water body. Spatial area is determined by the topographic high points (human made and natural) without regard to human-created jurisdictional boundaries on the land at which point surface water flows in two different directions.

Work Team

The Work Team is responsible for the facility performance progress in a particular phase. Depending on the phase, this may be the planning team, predesign team, design team, construction team, or operations team. This team works towards the guideline performance criteria appropriate to their phase, and completes Compliance Summary and Outcome Documentation using the B3 Guidelines Tracking Tool at www.msbgtracking.com at the end of each phase (or annually during Ongoing Occupancy.) (See Appendix P.0 Guideline Management and Appendix P-0b.)