

Drinking Water State Revolving Fund

2010 Project Evaluation Form

Instructions and Guidance

Massachusetts Department of Environmental Protection

Division of Municipal Services

June 2009

Introduction

MassDEP seeks to finance projects that mitigate documented impacts to public health or the environment. Details supplied through the Project Evaluation Form (PEF) will help MassDEP to determine the extent to which your project meets the ideal.

Proponents seeking SRF financing for drinking water projects must complete and submit one (1) paper copy and one (1) CD containing a PDF file of the completed PEF, no later than 12:00 noon on September 18, 2009 to:

David A. Delorenzo, Deputy Director
MassDEP Division of Municipal Services
One Winter Street 6th floor
Boston, MA 02108.

The PEF measures the proponent's motivation for undertaking the project. The Department must ensure that the purpose of the project is to mitigate existing water supply problems as opposed to providing extra capacity that will encourage sprawl. DW SRF financing decisions will support the Administration's resolve to "Fix It First" concerning infrastructure projects. Whether the project is the product of a community's voluntarily addressing a pollution problem, or is a response to enforcement action is also evidenced.

The Project schedule for any proposal must meet the following deadlines:

Local Appropriation of Project Cost	June 30, 2010
Final Plans and Specifications	October 15, 2010
Completed Application	October 15, 2010

Construction Projects must adhere to the additional deadline of:

Construction Commencement	June 30, 2011
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If the proposal's schedule does not meet these deadlines, it will not be eligible for placement on the 2010 Intended Use Plan

Instructions

Part I Proponent and Project Identification and Certification

Provide the name of the Local Governmental Unit (LGU)/Public Water Supplier (PWS), the name, mailing and email addresses and telephone number of its Authorized Representative and PWS contact (if different), and engineering consultant contact. Identify the project(s) for which assistance is sought and the river basin(s) impacted. The Local Governmental Unit's (LGU's) Authorized representative must sign the certification in item 6. Federal Employer Identification Numbers are requested. These are used by MassDEP in its SRF project tracking database.

For applicants proposing more than one project, separate Project Narratives and Part II and Part III forms must be completed for each project. If all of a PWS' projects have the same contact person and engineering contact, then only one Part I form should be filed.

Part II Project Schedule and Cost Estimate

If funding in the full amount necessary to undertake the project has already been authorized, attach a copy of the appropriate document. Otherwise, indicate the schedule for obtaining the requisite appropriation.

List the project schedule, including the date you would expect to file a loan application if the project were included on the Intended Use Plan.

Provide a detailed breakdown of the estimated technical (construction services) and construction costs. Use an **ENR Index of 8795**. If available, provide a completed engineer's estimate for each construction contract. Contingency should be 10% of total estimated construction cost (Project contingencies are reduced to 5% once as-bid construction costs are established). If the project includes costs for police traffic details, provide an explanation and detailed breakdown of the estimate (Note that costs for police traffic details are a separate cost of the LGU, and are not to be included in the construction contract cost).

Part III Project Criteria Information and Documentation

While preparing the project narrative (described in the next section), use the checklist to help insure that all of the information relevant to establishing the project's priority rating has been documented.

Proponents should check all items that specifically apply and that can be documented as described below. The more items that are checked off, the more serious are the conditions being addressed.

Any item that does not include documentation within the application will not receive points.

Project Description

The purpose of the project description is to allow proponents to concisely describe their understanding of the nature of the problem being addressed and how the proposed project will remedy the problem. The narrative helps to set the scene for the reviewer, providing a sense of what the proposal will address and accomplish, and provides the key areas on which the reviewer should focus. Briefly describe the objectives of the project. What public health issues are being addressed, how severe are the situations and how well have you documented the situation(s)?

Points will only be given for contaminant or other public health problems that will be directly addressed by the proposed project. The applicable time period is the most recent 18 months of operation.

For MassDEP reviewers, this guidance should be used in conjunction with the DWSRF Reviewer's Worksheet ("2010 DWSRF Project Selection Criteria") included on MassDEP's web site at: <http://www.mass.gov/dep/water/approvals/surffms.htm> - srf. The worksheet provides important information on which particular score should be given for each question. This guidance is meant to supplement that worksheet and is not intended to repeat all of the information on the worksheet.

***ACUTE CONTAMINANTS** (Applicant must document the exceedance by submitting a copy of the relevant page(s) from the PWS report. Dates of exceedance must be included.) Only a PWS with an approved source may receive points for acute contaminant water quality problems. Also, the below mentioned acute contaminants must be the result of lack of sufficient treatment processes without an alternate source. Please provide documentation to this effect.*

(1) Microbiological during the 18 month period. Defined as exceedance of the Total Coliform Rule. The proposed project must address microbiological exceedances. See section 310 CMR 22.05 of the Drinking Water Regulations for explanation of the Total Coliform Rule (located on the MassDEP web site at <http://www.mass.gov/dep/service/regulations/310cmr22.pdf>). Project must address the violations to receive points. If cryptosporidium at least 0.075 oocyst/Liter please specifically indicate.

(2) Nitrate level during the 18 month period. If the nitrate level was greater than 5 mg/l but less than 10 mg/l during the 18 month period, 3 points will be given. If greater than 10 mg/l (exceeded MCL), 5 points will be given. Project must address the violations to receive points.

(3) Arsenic level during the 18 month period. If arsenic level of finished water exceeds 10 ppb during the 18 month period then points should be given. Project must address the violations to receive points.

(4) Perchlorate level during the 18 month period. If 1 ppb was exceeded during the 18 month period then points will be given as noted in the Reviewer's Worksheet. Project must address the violations to receive points.

(5) System under DEP/DWP boil order during the 18 month period. Documentation of the boil order needs to be submitted.

(6) Turbidity during the 18 month period. Applies only to surface water treatment plants or Ground Water Under the Influence. Points will be assigned if an MCL violation occurs under 310 CMR 22.08 or 310 CMR 22.20 (A,B,C or D). Points will also be assigned if the system was required to perform a Comprehensive Performance Evaluation (CPE) under 310 CMR 22.20D(6)(b)(3) if the project addresses the recommendations in the CPE. Project must address the violations to receive points.

***CHRONIC CONTAMINANTS** Applicant must document the exceedance by submitting a copy of the relevant page(s) from the PWS report. Dates of exceedance(s) must be included. Project must address the violations to receive points. Only a PWS with an approved source may receive points for chronic contaminant water quality problems. Also, the below mentioned chronic contaminants must be the result of lack of sufficient treatment process without an alternate source. Please provide documentation to this effect.*

(7) Inorganic during the 18 month period. Exceedance of MCL for the contaminants listed at 310 CMR 22.06(2) of the internet version of MassDEP's Drinking Water regulations located at: <http://www.mass.gov/dep/service/regulations/310cmr22.pdf>: OR exceedance of a lead and copper action level. Inorganic contaminants include: fluoride, asbestos, arsenic, barium, cadmium, chromium, nitrates, nitrite, selenium, antimony, beryllium, cyanide, nickel and thallium as well as lead and copper (action level).

(8) Radiological during the 18 month period. There are 3 MCLs for radiological contaminants generally of concern in Massachusetts: (a) gross alpha activity - MCL of 15 pCi/L (b) uranium – MCL of 30 ug/L and (c) combined radium (radium 226 and 228) – MCL of 5 pCi/L. If either of radium 226 or radium 228 exceeds the combined standard it would be considered a violation. For more information on MCLs see section 310 CMR 22.09(A)(1) at <http://www.mass.gov/dep/service/regulations/310cmr22.pdf> Project must address the violations to receive points.

(9) Organics during the 18 month period. Project must address the violations to receive points. Organic compounds are defined as follows: synthetic compounds as listed in Section 22.07A, VOCs as listed in section 22.07B and Disinfection By-Products as listed in section 22.07E of the internet version of MassDEP's Drinking Water regulations located at:
<http://www.mass.gov/dep/service/regulations/310cmr22.pdf>

(10) Exceedance of any individual SDWA Rule. Examples include: Lead & Copper Rule, Surface Water Treatment, Disinfection by-products, etc.

(11) Secondary contaminants during the 18 month period. Secondary contaminants are listed at 310 CMR 22.07D of the web version of MassDEP's Drinking Water regulations (located at:
<http://www.mass.gov/dep/service/regulations/310cmr22.pdf>) and are aluminum, chlorides, color, copper, foaming agents, iron, manganese, odor, pH, silver, sulfate, TDS and zinc.

(12) Average finished water storage capacity of less than 2 days. Project must increase storage capacity with a storage tank, or for communities that depend solely on groundwater sources, project must increase storage capacity by providing a new well. Refers to the inability to have enough source water to put into the distribution system to supply its customers. Does not refer to the inability of the water system to transfer water from one location in the distribution system to another or the inability to provide adequate pressure in the distribution system.

(13) Water quantity problems not related to declared emergency. Problem(s) must be identified and the date(s) of occurrence specified to receive points. Refers to the inability of a public water supplier to have enough water to supply its customers despite a conservation program. To be considered an active conservation program it needs to have performed and documented two or more of the following: a leak detection program, a consumer conservation education program and/or a program that addresses unaccounted for water.

(14) Pressure not maintained at 20 psi or greater. To receive points, pressure situation must be described such that reviewer can determine whether this project will help correct problem.

(15) Provides needed corrosion control. A pH of < 6.5 or an alkalinity of <30 is presumed to need corrosion control. Any project where the source water needs corrosion control and the project will provide it should get points here.

(16) Lead services of the water supplier will be replaced. Addresses should be provided.

(17) Breaks per mile. 1-2 breaks per mile – 1 point, 3 or more per mile – 2 points Dates of breaks should be provided. Breaks/per mile relate to the area of the distribution system to be replaced not the overall distribution system.

(18) Replace vinyl-lined pipe

(19) Replace asbestos cement pipe

(20) Eliminate dead end OR provide hydrants, bleed valves and/or blow-offs at dead ends. No points are given for replacement of existing hydrants.

(21) Provides back-up emergency power to treatment facility

(22) Adequate interconnection to other Public Water system. Gets points if project would include adequately sized interconnections with another public water system.

(23) System affected by tuberculation and/or biofilm. The project proponent can use results from studies, representative photos and/or the Hazen-Williams formula to justify receiving points for this criterion.

(24) Security measures as part of the project including (but not limited to) facility fencing, alarms, and cameras. SCADA and alarm systems cannot be separately given points as two different security features.

(25) Population size. Modifications to treatment plant should receive points for population served by treatment plant, addition or replacement of distribution line. Population size should receive credit only for area served by or off of the distribution line/area.

(26) Eliminates identified public drinking water threat. If the public drinking water threat is microbiological and there are Total Coliform Rule violations in multiple parts of town and the project only will address one area then it should receive points for “addresses moderate threat”. Projects that address secondary contaminants but not MCL exceedances should get points for “addresses moderate threat”. If upgrade of WTP will eliminate MCL violations (of any type) then it should receive points for “addresses substantial threat”.

To be eligible to receive points for “addresses substantial threat”, a contaminant should be identified within “acute” and “chronic” contaminants above, have been found within an appropriate time period (18 months or longer if justified, i.e. taken off-line), and documented testing of contamination included. Elimination of a source where contamination is expected to increase, should be considered to “address substantial threat” of contamination.

Projects expected to violate the LT2 Rule (with documentation) may be considered to “address substantial threat”.

Fixing a water treatment or distribution related public health threat may be considered to “addresses moderate threat”.

(27) Compliance with Enforcement Order. Both parties must sign an Administrative Consent Order (ACO) or MassDEP or EPA must issue a Unilateral Administrative Order (UAO) by August 31, 2009. Notice of Noncompliance (NON) is not considered an enforcement order. The project must be cited in the Enforcement Order, be approved by DEP, and state that it will address an underlying issue. A project which reports on an issue will not qualify for points under this item.

(28) Project includes disinfection of a ground water source. Could include upgrade of a disinfection system of a groundwater source to a different or more efficient disinfection system but not just repair of the same system

(29) Provides DEP-required proper well construction. Must be part of a well rehab project and/or a replacement well for a contaminated well.

(30) Provides proper management of water treatment residuals

(31) Provides corrosion control treatment which is REQUIRED BUT NOT AVAILABLE or is NOT ADEQUATE AND DOES NOT MEET STANDARDS. Points should not be given for projects that are replacing existing corrosion control system that meets standards as part of upgrading other unit processes at the treatment facility.

(32) Zero SDWA violations within the 12 months prior to the application. Refers to MCL and “action level” violations. If MCLs or “action levels” exceeded the project is not eligible for these points.

(33) Project includes upgrading or replacing pump stations

(34) Project includes upgrading or replacing wells

(35) Provides automation of treatment facility- Automation of a treatment facility does not include pump stations without treatment.

(36) Project includes upgrade or replacement of intake structure

(37) DEP approved surface water or wellhead protection plan. No specific documentation is required. DEP will confirm internally with staff from the Drinking Water Program for each community that claims to have an approved plan.

(38) Water supplier has taken significant local action to promote conservation. Would include actions such as increasing block rates, water bans, etc.

(39) Project achieves compliance with a new or proposed requirement. Includes but not necessarily limited to: the Long Term 2 Enhanced Surface Water Treatment Rule (adding treatment for cryptosporidium to comply with this rule), and Groundwater Rule (adding disinfection for groundwater sources would get points regardless of what treatment is currently required).

(40) Systems with service area that has a median household income (MHI) income of \$40,402 or less (80% of the State Median Household Income of \$50,502.) If the service area includes more than one such designated MHI area, a weighted overall average based on population served in each of the covered MHI areas times the MHI for that area plus the same for any other such area, and divided by the total number served, shall be used to calculate the combined MHI. Alternatively, applicants may provide a service-area specific MHI from an independent income survey covering the service area, provided that said independent survey is no more than eleven years old at the time of application.

(41) Systems that have user rates (factoring in proposed project) in excess of 1% of the median household income (see #45 above relative to median household income).

(42) Consolidation/Restructuring of a Public Water System. The reason for the proposed consolidation/restructuring must be included. Points should be given if it is to eliminate a public health problem or a technical, financial or managerial capacity problem.

(43) Consolidation/Restructuring of a Public Water System to replace a contaminated source instead of treating contamination in the system to be taken over. The reason for the proposed consolidation/restructuring must be included. Points should also be given for otherwise addressing a threat of contamination as determined by a MassDEP-approved study indicating a plume of contamination moving towards a source. A project will not be considered a contaminated source for only being located in a nonconforming Zone I.

(44) Project implements a planning recommendation. Proposed project should receive 4 points if implements a recommendation in either a system master plan or facility plan, 2 points if a local planning recommendation, and 1 point if MassDEP regional priority. Points for different categories should not be added; only the highest justifiable category should be used.

(45) Project offers multi-community or regional solution to a problem. (a) The regional problem must be identified and (b) the manner and the extent to which the proposed project would provide resolution of the identified problem must be discussed. Examples include: combining systems, creating economies of scale, elimination of contaminated source in GUEST community, creation of Intermunicipal Agreement to address regional problem, etc.

(46) Commonwealth Capital Application score for your community. The Commonwealth Capital Application is found on the OCD web site at: <http://www.mass.gov/?pageID=gov3subtopic&L=5&L0=Home&L1=Key+Priorities&L2=Job+Creation+%26+Economic+Growth&L3=Clean+Energy+%26+Smart+Growth-Smart+Energy&L4=Commonwealth+Capital&sid=Agov3>) For points on this item, submit a copy of the Commonwealth Capital application, submitted as indicated in the website above. *Any applicant for SRF financing is strongly urged to submit a Commonwealth Capital Application to the Office of Commonwealth Development. Applicants with ZERO score for Commonwealth Capital are at a distinct disadvantage in the competition for SRF financing.*

WATER CONSERVATION/ WATER MANAGEMENT CRITERIA

(47) Metering to >95% of customer base. Must have already been accomplished or will be accomplished by this project.

(48) Do you have an ongoing program to inspect, recalibrate, repair and replace service meters that are more than 10 years old? Please attach description of program including funds spent to implement program.

(49) Provide the following information about the water system:

(a) Has the system completed a system water audit within last 2 years?

(b) Has the system performed a leak detection survey of 100% of system over the last 2 years?

(c) What percentage of leaks greater than 3 gpm (detected in the above referenced survey) have been fixed?

(d) What is the residential per capita water use? – <http://www.mass.gov/dep/water/resources/rgpcd06.htm>

(e) Were all venturi metering systems calibrated twice/year and all inline meters calibrated annually?

(50) Continual shortages as evidenced by a DEP emergency declaration. Project must address shortages. Refers to the inability to have enough source water to put into the distribution system to supply its customers. Does not refer to the inability of the water system to transfer water from one location in the distribution system to another or the inability to provide adequate pressure in the distribution system.

(51) Unaccounted for water. Source: MassDEP web page <http://www.mass.gov/dep/water/resources/rgpcd06.htm>

(52) Do you account for all unmetered water use volumes (i.e. street sweeping, main flushing, fire fighting, etc.)?

(53) Does the municipality or organization you serve have a nonessential outdoor water use restriction bylaw?

(54) Did you implement mandatory nonessential outdoor water use restrictions in 2008?

(55) Do you have a program in place to provide to your customers retrofit or rebate services for water-saving devices? Attach a description of the program, including funding description and monies spent to implement the program.

ENERGY

(56) Will the project include a recommendation within an energy audit? Include the applicable portion of the audit and an explanation of the energy savings performed within the project.

(57) Will the project result in energy efficiencies? If the project includes an energy efficient resource (i.e. Lighting replacement and optimization, variable speed pumps or other pumping efficiencies, or HVAC optimization), calculate the energy consumption expected to be saved through the proposed project. Energy consumption will be the percent of total kW hours expected to be saved by the energy efficient resource, in relation to total kW hours of the entire facility (i.e. the pump station or treatment plant) per year. Projects which will reduce energy consumption over 20% will get points for “Substantial EE”. Projects which will reduce energy consumption between 10-20% will get points for “Moderate EE”. Projects which will reduce energy consumption up to 10% will get points for “Nominal EE”.

(58) Will the project result in on-site renewable energy power generation? If the project includes a renewable energy resource component such as wind power, solar (either photovoltaic or solar thermal), hydropower, biogas generation, or combined heat and power (CHP) power, calculate the expected renewable energy production benefit percentage. Projects which produce over 15% in renewable energy will get points for “Substantial RE”. Projects which produce between 5-15% will get points for “Moderate RE”. Projects which produce up to 5% in renewable energy will get points for “Nominal RE”.