

# PRELIMINARY ENGINEERING REQUIREMENTS

for WASTEWATER SRF Projects

The **PRELIMINARY ENGINEERING REPORT** (**PER**) is a document that provides the information necessary for the State Revolving Fund Loan Program (SRF) to determine the technical, economic and environmental adequacy of the proposed treatment works &/or collection system project. **SRF Staff** *may request additional information to complete a* **PER**.

This document is based on the State Revolving Fund Loan Program Guidance in effect on March 2, 2009. Because the requirements for SRF projects are subject to change, you should contact SRF Staff before submitting your PER and application to be sure that you are complying with current requirements. All applications will be reviewed in accordance with the provisions of IC 5-1.2-10. Approval of a PER by the SRF Section is for planning purposes only and SRF does not relieve the Participant of its responsibility to properly design, build and effectively operate and maintain the proposed facilities.

#### \*\*JULY 2018 REVISIONS TO THIS GUIDANCE SHOWN IN RED\*\*

- \* ALL CORRESPONDENCE and PER REVISIONS MUST BE DATED, 3-HOLE PUNCHED, & TRANSMITTED BY THE AUTHORIZED REPRESENTATIVE
- \* SUBMIT 3 COPIES OF THE PER IN 3-RING BINDERS TO:
  SHELLEY LOVE
  SRF WW PROGRAM ADMINISTRATOR
  STATE REVOLVING FUND LOAN PROGRAM
  100 N. SENATE AVE. RM. 1275
  INDIANAPOLIS, INDIANA 46204
- \* INCLUDE GRAPHS/TABLES WHERE APPLICABLE See ATTACHMENTS following the document.
- \* INCLUDE A TABLE OF CONTENTS, LIST OF GRAPHICS, LIST OF TABLES & LIST OF APPENDICES
- \* Access http://www.in.gov/ifa/srf/ for guidance under Wastewater Documents

PREFACE Briefly describe the Project NEED and SCOPE and ENVIRONMENTAL BENEFITS. The project must address an existing water pollution abatement need.

#### CHAPTER 1 PROJECT LOCATION

- \* Describe the Study Area, the existing and 20-year Service Areas, and Project Area(s)/locations(s).
- \* Identify the USGS Quadrangle map(s) and Section(s), Township(s) line(s) and Range(s) lines involved.
- \* Provide **a map(s)** (*USGS Quadrangle*) displaying:
  - 1. Study area
  - 2. Existing & 20-year service areas
  - 3. Project area(s)/location(s) (proposed WWTP sites, line routings, lift stations, etc.)
- \* Provide a description of the project area/location/route
- \* Include a statement indicating whether the entire project is being constructed within the city/county/town's right-of-way or easements. If it is not, the participant will need to provide evidence that it has, or will have by a mutually agreeable date, the required property rights prior to SRF's issuance of bid authorization.

Note: All GRAPHICS except schematics must display North arrow & Bar Scale

#### **CHAPTER 2 CURRENT SITUATION**

- \* Describe the *existing* Wastewater Treatment Plant (WWTP) & Collection System *including* age & upgrades.
- \* Provide Layouts/Site **maps** of existing Collection System, WWTP or other applicable site(s), where applicable.
- \* Provide a description of the current condition of facilities (if applicable), current pollutant loadings and flows in order to establish the *project need to abate existing water pollution*.
- \* Document operating problems/failures of properly constructed & maintained *on-site systems* based on:
  - 1. *Direct* evidence of water pollution or public health hazards (such as ponding, well contamination, direct discharges, etc.)
  - 2. *Indirect* evidence establishing need/failure (such as soil type, terrain, lot size, etc.)
  - 3. Letter from County Sanitarian
- \* Collection Systems problems/needs
  - 1. Chronic operational problems
    - a. Surcharging
    - b. Surface ponding
    - c. Basement back-ups
    - d. Unauthorized overflows/bypasses, etc.
  - 2. Rehabilitation/Replacement needs
    - a. Broken/collapsed sewers
    - b. Inadequate capacity of pipes/interceptors/lift stations
    - c. Facilities exceeding useful life
  - 3. Document:
    - a. Sewer Ban Early Warning Letter
    - b. Sewer Ban Notification
    - c. Agreed Order (signed/pending)
    - d. Consent Decree
    - e. Other
  - 4. Indiana CSO Strategy requirements:
    - a. 9 minimum controls
    - b. Long-Term Control Plan
- \* WWTP problems/needs
  - 1. Chronic operational problems
    - a. Hydraulic &/or Organic Overloading
    - b. Solids Washout
    - c. NPDES Permit Violations
    - d. Unauthorized overflows/bypasses, etc
    - e. Other

- 2. Renovation/Replacement/Upgrade/Expansion
  - a. Facilities exceeding useful life
  - b. New NPDES Permit Limits
  - c. CSO Requirements
  - d. Other
- 3. Document:
  - a. Notice of Violation (NOV)
  - b. Warning of Non-Compliance (WONC)
  - c. Agreed Order (AO) [signed/pending]
  - d. New NPDES Requirements [w/Schedule of Compliance]
  - e. Sewer Ban Early Warning or Sewer Ban Notification
- \* Sludge Handling & Disposal problems/needs
  - 1. Federal 40 CFR Part 503 Sludge Regulations
  - 2. NPDES Requirements
  - 3. Land Application Permit Requirements
  - 4. Facilities exceeding useful life
- \* Provide tables for Current Flows & Wasteloads (*Refer to* **Tables I, II, III),** which include:
  - \* average design flow (mgd or gpd)
  - \* peaking factor
  - \* peak design flow (mgd or gpd)
  - \* peak sustained infiltration
  - \* peak hourly inflow/wet weather infiltration
  - \* wasteload concentrations
  - \* wasteload pounds
- \* Significant contributors
  - 1. Commercial
  - 2. Industrial
  - 3. Institutional (schools, jails, hospitals, etc.)
  - 4. Semi-publics
  - 5. State/other facilities

**NOTE:** <u>Certify</u> that the existing wastewater collection & treatment system has and will have during the 20-year study period, adequate capacity to transport & treat all wastewater flows generated from the service areas (except for permitted CSOs, which should be addressed under the Indiana CSO strategy) without surcharges, bypasses, basement back-ups, or other chronic operational problems.

If the participant <u>cannot certify</u>, then the proposed project should address known problem areas; otherwise, the participant must conduct appropriate **sewer studies** in order to identify and address the problems. The **PER** should include information on the sewer studies done (what was done, where, when, why, what was found), including the recommendations and anticipated results (in terms of residual I/I). <u>SRF does NOT need copies of the actual sewer studies.</u>

#### CHAPTER 3 FUTURE SITUATION

- \* Current Population
- \* Population Projections (20-year) w/explanation for reasonable growth, based upon:
  - 1. Census data
  - 2. Building permits
  - 3. Current development trends
  - 4. Active Regional Planning Commission; if applicable
  - 5. Other
- \* Tables for proposed (Refer to **Tables IV & V**)
  - 1. Design (20-year) flows
    - a. Domestic
    - b. Commercial/Institutional
    - **c.** Industrial
    - d. Peak sustained or residual infiltration
    - e. **Average** design flow (mgd or gpd)
    - f. Peaking factor
    - g. Peak hourly or Residual peak hourly Inflow/Wet weather infiltration
    - h. Peak design flow (mgd or gpd)
  - 2. Wasteloads
    - a. Concentrations
    - b. Pounds
- \* Proposed WWTP effluent limits based on:
  - 1. Design flows
  - NPDES Permit (Contact Municipal/NPDES Permit Section Chief @ 317/232-8670)
  - 3. Receiving Stream
  - 4. Wasteload Allocation (WLA)
- \* Evaluation of ability to transport & treat all flows (*except* permitted overflows)

#### CHAPTER 4 EVALUATION of ALTERNATIVES

- \* Identify a couple of *feasible* alternatives
- \* Description of alternatives considered, *including*:
  - 1. No action
  - 2. Optimum operation/integration of existing facility
  - 3. Collection System Rehabilitation/Replacement
  - 4. New Collection System/Interceptor routes and alternative routes
  - 5. WWTP
    - a. Upgrade/Expansion
    - b. Regionalization potential
    - c. Alternative WWTP sites
  - 6. New WWTP
    - a. Regionalization potential
    - b. Alternative WWTP sites
    - c. Treatment alternatives
  - 7. Sludge Handling & Disposal Alternatives
  - 8. Phasing
- \* Rationale for selection of Recommended Alternative
  - 1. Monetary
  - 2. Technical
  - 3. Reliability
  - 4. Implementability
  - 5. Environmental Impacts
- \* Cost and Effectiveness Analysis, i.e. Life Cycle Present Worth Cost Analysis <sup>1</sup>
  - 1. Perform for each technically feasible alternative
  - 2. The analysis should convert all costs to present day dollars
  - 3. The planning period to be used is 20 years
  - 4. The discount rate to be used should be the "real" discount rate taken from Appendix C of OMB circular A-94 and found at www.whitehouse.gov/omb/circulars/a094/a94 appx-c.html
  - 5. The total capital cost (construction plus non-construction costs) should be included
  - 6. Annual O&M costs should be converted to present day dollars using a uniform series present worth (USPW) calculation
  - 7. The salvage value of the constructed project should be estimated using the anticipated life expectancy of the constructed items using straight line depreciation calculated at the end of the planning period and converted to present day dollars
  - 8. The present worth of the salvage value should be subtracted from the present worth costs

continued

<sup>&</sup>lt;sup>1</sup> None of these examples, resources, or background information should be interpreted as endorsing or requiring a particular approach.

9. The net present value (NPV) is then calculated for each technically feasible alternative as the sum of the capital cost (C) plus the present worth of the uniform series of annual O&M (USPW (O&M)) costs minus the single payment present worth of the salvage value (SPPW(S)):

$$NPV = C + USPW (O&M) - SPPW (S)$$

- 10. A table showing the capital cost, annual O&M cost, salvage value, present worth of each of these values, and the NPV should be developed for state or federal agency review. All factors (major and minor components), discount rates, and planning periods used should be shown within the table.
- 11. Short lived asset costs should also be included in the life cycle cost analysis if determined appropriate by the consulting engineer or agency. Life cycles of short lived assets should be tailored to the facilities being constructed and be based on generally accepted design life. Different features in the system may have varied life cycles.
- 12. Either within or following the summary table, provide an explanation of each alternative's potential for water and energy efficiency and associated cost savings.
  - a. Water efficiency efforts to consider include water reuse, water efficient devices, water meters, water audits and conservation plans.
  - b. Energy efficiency efforts to consider include energy audits and assessment results, energy use of proposed alternatives, emissions of various alternatives and greenhouse gas reductions, use of renewable energy.
  - c. If SRF's GPR incentive is being pursued, water and energy efficiency can be addressed via the GPR discussion and/or business case.
- 13. Provide a written statement in Chapter 4 including, "A cost and effectiveness analysis was completed and meets the minimum requirements of the Water Resources Reform and Development Act of 2014."
- 14. Provide a completed *Cost & Effectiveness Certification Form* (refer to blank certification form attached to this guidance) prior to PER approval.

#### CHAPTER 5 EVALUATION OF ENVIRONMENTAL IMPACTS

## To avoid comments, follow the text and graphics guidance provided at the Project Planning Meeting

- \* Discuss *NEGATIVE IMPACTS* only. Please be clear, concise & complete.
- \* Note: Projects which propose treatment capacity increases or new upsized lines must include the "Induced Impacts" language provided in the <u>SRF Environmental</u> Evaluation Section: Procedures & Language guidance.
- \* The PER **must** discuss <u>direct</u> (primary impacts due to construction, operation & maintenance of the treatment/collection system) and <u>indirect</u> (secondary or induced impacts made possible by the project) impacts of the feasible alternatives (including the no-action alternative) on:
  - 1. Disturbed/Undisturbed Land (provide soils maps only if in undisturbed land)
  - 2. Historic/Architectural Resources (provide Interim Report maps, if available)
  - 3. Wetlands (provide wetland maps [not from federal internet mappers])
  - 4. Surface waters (provide wetland and/or topographic maps)
    - a. Natural, Scenic and Recreational Rivers and Streams [312 IAC 7-2]
    - b. Waters of High Quality; [327 IAC 2-1-2(3)]
    - c. Exceptional Use Streams; [327 IAC 2-1-11(b)]
    - d. streams, rivers, lakes
    - e. label stream crossings on a map

#### 5. Groundwater

- a. impact to local wells and water table
- b. SRF will supply a map of the St. Joseph aquifer area for use in the PER, if necessary (for projects in far north central IN)
- 6. 100-year floodplain (provide FEMA or other floodplain maps, if available)
  - a. Cannot be used for borrow or fill w/o DNR approval
  - b. Operability & Accessibility of the facilities during 100-year floods
- 7. Plants and Animals
  - a. streams, wetlands, wooded and scrub/shrub areas
  - b. no need to research endangered species records
- 8. Prime Farmland Impacts and Influence of Local Geology
  - a. The consultant will initiate and complete the Farmland Conversion Impact Rating form process for all SRF projects which will turn dirt to install anything. State whether or not the project will affect prime/unique farmland.

- b. Discuss the influence, if any, of karst and bedrock areas on the project
- 9. Air Quality
- 10. Open Space and Recreational Opportunities
- 11. Lake Michigan Coastal Management Zone Impacts (applies only to projects in the north part of Lake, Porter and LaPorte counties; SRF will supply a map of the IDNR Coastal Zone Program Area for use in the PER).
- 12. National Natural Landmarks Impacts (see <a href="http://www.nature.nps.gov/nnl/Registry/USA\_Map/States/Indiana/indiana.htm">http://www.nature.nps.gov/nnl/Registry/USA\_Map/States/Indiana/indiana.htm</a>)
- 13. Mitigation Measures to avoid negative impacts (such as erosion into nearby waterways or wetlands, air pollution, growth, odors, etc.) of project construction and implementation.
- \* Further environmental review will be necessary (1) if work on an SRF-approved project still remains to be done and more than 5 years have passed since PER approval, (2) if additional work is proposed after that time, or (3) if additional work is proposed within the 5-year period in areas not vetted previously.

#### CHAPTER 6 SELECTED PLAN

- \* Describe the Selected Plan components & processes
- \* Discuss Phasing (if applicable)
- \* Include a completed *Preliminary Design Summary*
- \* Provide Schematics/Layouts/Maps/Design flow train of the proposed project or selected plan, *including* North arrow & bar scale (*not necessary* for schematics).
- \* Provide the *Project Component Costs* (refer to **Table VI**) and the *Selected Plan Cost* (refer to **Table VII**).
- \* Include a Project Schedule/Milestone dates for:
  - 1. PER Submittal
  - 2. Anticipated PER approval
  - 3. Plans & Specs submittal
  - 4. Plans & Specs approval
  - 5. Land and easement acquisition
  - 6. Advertise for Bids
  - 7. Loan closing (after bids are received for subsidized loans)
  - 8. Contract Award
  - 9. Initiation of construction
  - 10. Substantial completion of construction
  - 11. Initiation of operation
- Discuss Contract operations
  - 1. Operation and/or Lab work
  - 2. Land application
  - 3. Landfilling
  - 4. Other
- \* Discuss Green Project Reserve (GPR) Sustainable Infrastructure components in PER or as an appendix to PER (if applicable).
  - 1. Complete the SRF Loan Programs Green Project Reserve (GPR) Sustainability Incentive Waste Water Checklist (Attachment C)
  - 2. Identify on the Checklist, the proposed/selected components
  - 3. In an attachment to the Checklist:
    - a. Describe how the project will incorporate/meet the intent of each proposed component
    - b. Provide the estimated additional cost associated with incorporating each selected component.

NOTE: For projects funded by multiple funding sources, SRF must fund the PER-approved GPR components to the extent possible. All GPR-eligible disbursement requests must be submitted to SRF until SRF's portion of the PER-approved GPR components has been fully paid. SRF's payment for GPR-eligible components is a condition of receiving the GPR Sustainability Incentive interest rate discount.

#### **CHAPTER 7**

#### LEGAL, FINANCIAL & MANAGERIAL CAPABILITIES

- \* Include the 2 required **Resolutions** (*refer to* **ATTACHMENTS A** & **B**):
  - 1. Authorized Representative
  - 2. PER Acceptance
- \* Include the completed SRF Project Cost/Financing Information Form Table VIII
- \* Include Letter(s) of intent from:
  - 1. Land/easement owners
  - 2. Significant flow/wasteload contributors
  - 3. Contract operators
- \* Include Inter-local Governmental Agreement and/or Contracts or intent to obtain either. SRF Loan Program can not close on a loan until the Inter-Local Government Agreement or Contract between the affected parties is signed and executed.

Please note that two certification forms will be required.

- 1) Fiscal Sustainability Plan (FSP) Certification Form and
- 2) Asset Management Program (AMP) Certification Form

Please provide the status of both the FSP and AMP as indicated below in the guidance. Please understand that the AMP is inclusive of the FSP minimum requirements, therefore, only one document (AMP) is required which should cover both the federal (FSP) and the state (AMP) requirements.

- \* Include the status of the Fiscal Sustainability Plan (FSP) related to the SRF project. SRF requires either a FSP Self-Certification Form or FSP Certification Form (refer to blank certification forms attached to this guidance). If the loan recipient already has an FSP, the completed self-certification form must be submitted prior to SRF PER approval. If the loan recipient does not have an FSP, the completed certification form must be submitted prior to request for the final disbursement related to the primary project.
  - 1. Sample language if an FSP is already in place: "The town's existing Fiscal Sustainability Plan meets the minimum requirements listed in the Federal Water Pollution Control Act Section 603(d)(1)(E)(i). The town's completed FSP Self-Certification form is located in the PER Appendix."
  - 2. Sample language if the FSP is not in place: "The town will develop a Fiscal Sustainability Plan that meets the minimum requirements listed in the Federal Water Pollution Control Act Section 603(d)(1)(E)(i) and will submit a completed FSP Certification Form prior to request for final disbursement related to the primary project."
- \* Include the status of the Asset Management Program (AMP) development by the Loan Recipient. If the loan recipient already has an AMP, the completed certification form must be submitted prior to SRF PER approval. If the loan recipient does not have an AMP, the completed certification form must be submitted prior to request for the final

disbursement related to the primary project. The certification form is located at the end of this PER guidance.

- Sample language if an AMP is already in place: "The town's existing Asset
  Management Program meets the requirements defined by the State Revolving
  Fund's Asset Management Program Guidelines pursuant to Indiana Code 5-1.210-16. The town's completed AMP Certification form is located in the PER
  Appendix ."
- 2. Sample language if the AMP is not in place: "The town will develop an Asset Management Program that meets the requirements defined by the State Revolving Fund's Asset Management Program Guidelines pursuant to Indiana Code 5-1.2-10-16 and will submit a completed AMP Certification Form prior to request for final disbursement related to the primary project."

#### CHAPTER 8 PUBLIC PARTICIPATION

- \* Include a copy of the Publisher's Affidavit from the newspaper with the Public Hearing notice.
- \* Notify contract customer and/or significant flow/wasteload contributors or rate payers.
- \* Have completed PER available for public review 10 days prior to Public Hearing.
- \* Include a Sign-in sheet showing who attended the Public Hearing.
- \* Include either meeting minutes or a Transcript of the Public Hearing.
- \* Include *all written comments* submitted by the public, including comments submitted during the public hearing and during the 5-day period following the hearing. <u>Also</u> include any *response* to comments provided by or on behalf of the Participant.
- \* Provide prepared, self-sticking **Mailing Labels** for:
  - 1. Interested parties (those individuals, industries, groups, organizations which demonstrated an interest in receiving copies of the Environmental Assessment/Finding of No Significant Impact). Be sure to include everyone who attended the public hearing.
  - 2. County Drainage Board
  - 3. County Health Department
  - 4. Active Regional Planning Commission for the planning area
  - 6. Local media outlets (newspaper, radio, or t.v. station)
  - 7. Customer Communities

## **ATTACHMENTS**

- A. Authorized Representative *Model*
- B. PER Acceptance *Model*
- C. WW GPR Checklist

#### **Tables**

- I. EXISTING WW FLOWS OF SEWERED & UNSEWERED COMMUNITIES MODEL
- II. CURRENT TREATMENT PLANT OPERATION MODEL
- III. EST. INFLUENT STRENGTH & LOADINGS MODEL
- IV. DESIGN TREATMENT PLANT FLOWS MODEL
- V. DESIGN TREATMENT PLANT LOADINGS MODEL
- VI. EST. CONSTRUCTION COSTS of the SELECTED ALTERNATIVE MODEL
- VII. SELECTED PLAN COST SUMMARY MODEL
- VIII. SRF PROJECT FINANCING INFORMATION MODEL

## **Certifications**

- 1. Fiscal Sustainability Plan Self-Certification Form
- 2. Fiscal Sustainability Plan Certification Form
- 3. Cost & Effectiveness Certification Form
- 4. Asset Management Certification Form

#### Α.

## MODEL AUTHORIZED REPRESENTATIVE RESOLUTION

WHEREAS, t	the (PARTICIP	ANT) of	, Indiana, herein called	
			ater pollution control project to meet State ar	ıd
		s the NPDES discha ion of such works:	arge limitations, and the community intends to	0
proceed wit	ii tiic constiucti	on or such works.		
WHE	EREAS, the (PAR	<u>RTICIPANT)</u> has ad	lopted this Resolution dated	
	, THEREFORE, B , that:	E IT RESOLVED by th	he Council/Board, the governing body of said	
1.		he	authorized to make application for an SRF	
1.	data and doc all loan closin specimen, etc	ovide the State Revo uments pertaining t ng documents such a	olving Fund Loan Program such information, to the loan process, including but not limited to as the financial assistance agreement, bond d, and otherwise act as the authorized	
2.		e State of Indiana a	y with all requirements of the Indiana Financ and all Federal requirements as they pertain t	
3.	_	ies of the resolution Preliminary Engin	be prepared and submitted as part of the eering Report.	
ADO	PTED this	day of	, 20	
	THE (PARTI By An	CIPANT) OF D THROUGH ITS COU	, Indiana uncil/Board of Trustees	
AUTHORIZE	d Signatory			
		By:		

# B. MODEL PER ACCEPTANCE RESOLUTION

WHEREAS, the (PARTICE)	<u>PANT</u> ) of	County, Indiana, has cau	used a
<b>Preliminary Engineering Report</b>	, PER, dated	, to be prepare	ed by the
consulting firm of			·
WHEREAS, said PER has b	-	ne public at a public hearing l nents; and	held
WHEREAS, the (PARTICI evidence presented in objection t Report.		uncil finds that there was not I project in the Preliminary E	
Now, Therefore be it ri	ESOLVED THAT:		
	Preli	iminary Engineering Report (	dated
(PARTICIPANT's)Board	/Council; and	olving Fund Loan Program f	or review
_ ·	e ( <u>PARTICIPANT</u> larly scheduled med	<u>'s)</u> Board/Council this eting.	day of
President/Mayor			
Member			
Member			
Member			
Attest:			

## $\begin{array}{c} \textbf{MODEL FOR EXISTING WASTEWATER FLOWS (in gallons per day)} \\ \textbf{OF SEWERED } \underline{\textbf{AND}} \ \textbf{UNSEWERED COMMUNITIES} \end{array}$

	Existing Treatment Facilities Design Flows (for Sewered Communities only)  Average Design Flow (gpd) Peak Design Flow (gpd)
Dor	nestic <sup>1</sup> (D) Peak DCI (Total DCI X
Inst	Peaking Factor) <sup>4</sup> nmercial/ itutional <sup>1</sup> (C) Peak Hourly Inflow &/or Wet Weather Infiltration <sup>5</sup>
	el DCI
101	<u> </u>
	k Sustained Filtration <sup>2</sup>
TO	OTAL EXISTING FLOW <sup>3</sup>
2.	<ul> <li>DCI flows must be based upon actual water use records where possible. Flows may be estimated by one of the following methods:</li> <li>a) Billing records for the most recent 24 months (less 10-20 % consumption) are to be used whenever available;</li> <li>b) When billing records are unavailable, pumped water volumes (less 20-40 % consumption and losses) for the most recent 12 months are to be used;</li> <li>c) In communities (or portions thereof) without a water supply system, use 310 gpd/connection or 100 gpcpd.</li> <li>Based on I/I analysis reviewing the most recent MRO's (24 months) during a high groundwater non-rainfall day period (preferably 7-14 consecutive days) and taking the average followed by subtracting the average DCI (sewered communities only). For unsewered communities, infiltration could be based on 200 gpidm (Conventional Gravity Sewers).</li> </ul>
3.	Total DCI + Peak Sustained Infiltration
4.	System Peaking Factor (check which applies)
	<ul> <li>a) Measured from hourly flow data (the preferred method for existing conventional gravity sewers)</li> <li>b) i. Estimated from 10-States Standards (Conventional Gravity Only)</li> <li>ii. Estimated from other source (list)</li> </ul>
5.	Sewered Communities only.  Yes or NA  1. Flow meter calibrated 2. Flows appear accurate 3. Based on subtracting the dry weather peak flows from the influent peak flow including all bypassed flows. If this information is not available verify if the peak hourly flow can be determined based on flow data obtained from the influent pumping station(s).

## TABLE II

## MODEL FOR CURRENT TREATMENT PLANT OPERATION

	Concentration mg/l	Daily Load lbs
INFLUENT		
CBOD5		
TSS		
NH3-N		
P		
Other		
<b>EFFLUENT</b>		
CBOD5		
TSS		
NH3-N		
P		
Total Residual	Cl	
DO		
Other		
page # or NA		
A	Above values are der	rived from the 24 most recent consecutive MROs &/or DN
		tes of MROs:
	dat	tes of DMRs:

## TABLE III

## 

## **Conventional Gravity, Pressure, Vacuum Sewers**

	Concentrati	on (mg/l	)	Daily	y Load (lb)	
	D	C	I	D	C I	[
CBOD <sub>5</sub>	/	/	/	/	/	/
TSS	/	/	/	/	/	/
NH <sub>3</sub> -N	/	/	/	/	/	/
P	/	/	/ _	/	/	/
Source(s) of Data:						
Domestic ( <b>D</b> )		-				
Commercial/Inst	titutional (C)	-				
Industrial ( <b>I</b> )						

## **TABLE IV**

## MODEL FOR DESIGN TREATMENT PLANT FLOWS (gpd or mgd)

Domestic ( <b>D</b> )	
Commercial/ Institutional (C)	
Industrial (I)	
Total DCI	
+ Residual Infiltration	
AVG. DESIGN FLOW	
Peak DCI	 (peaking factor =)
Residual Infiltration	 -
Residual Peak Hourly Inflow	
&/or Wet Weather Infiltration  PEAK DESIGN FLOW	 _
TEAR DESIGN FLUW	=

## TABLE V

## MODEL FOR DESIGN TREATMENT PLANT LOADINGS

	Concentration	Daily Load
	(mg/l)	(lb)
INFLUENT		
CBOD5		
TSS		
NH3-N		
P		
Other		
	<del></del>	
	<del></del>	<del></del>
	- <del></del>	
	<del></del>	- <u></u>

# TABLE VI ESTIMATED CONSTRUCTION COSTS OF THE SELECTED ALTERNATIVE MODEL

Item	Quantity	Unit Cost	Total Cos
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			
10)			

## MODEL SELECTED PLAN COST SUMMARY

Item	<b>Total Cost</b>
Non-Construction Costs	
Administrative and Legal	
* Land & Rights-of-way Acquisition	
Relocation	
Engineering Fees Design	
Construction	
Other	
Project Inspection	
Costs Related to Plant Start-up	
Non-Construction Subtotal	
Construction and Equipment Subtotal	
Contingencies (not to exceed 10%)	
TOTAL PROJECT COST	

<sup>\*</sup> Ineligible for SRF unless it represents administrative costs to acquire easements and/or land. Land may be eligible if it is an integral part of the treatment process.

2.

3.

4.

## SRF PROJECT FINANCING INFORMATION

(Wastewater)

1.	Projec	et Cost Summary
	a.	Collection/transport system cost
	b.	Treatment System cost
	c.	Non-Point-Source (NPS) cost (septic tank removal)
		Subtotal Construction Cost
	d.	Capacity Reservation Fees
	e.	Contingencies
		(should not exceed 10% of construction cost)
	f.	Non-construction Cost
		e.g., engineering/design services, field exploration studies, project management & construction inspection, legal & administrative services, land costs (including capitalized costs of leased lands, ROWs, & easements), start-up costs (e.g., O&M manual, operator training).
	g.	Total Project Cost (lines a+b+c+d+e+f)
	h.	Total ineligible SRF costs* (see next page)
		Total ineligible SRF costs will not be covered by the SRF loan.
	i.	Other funding sources (list other grant/loan sources & amounts)
		(1) Local Funds (hook-on fees, connection fees, capacity fees, etc.)
		(2) Cash on hand
		(3) Community Development Block Grant - Community Focus Fund (CFF)
		(4) US Dept. of Agriculture Rural Development (RD)  (5) Other
		Total Other Funding Sources
		Amount (line g minus line item h+i*) re are adequate funds available under (i) to cover (h) then subtract (i) only.
Fina	ncial A	dvisor
a.	Firm _	
b.	. Name	·
c.	Phone	Number
Bono	d Coun	sel
a.	Firm _	
b.	. Name	·
		Number

1.	Land cost (unless it's for sludge application)	\$
	Only the actual cost of the land is <b>not eligible</b> ; assite title opinion and the like) <b>are eligible</b> .	sociated costs (such as attorney's fees
2.	Materials & work done on private property	\$
	(Installation/repair of laterals, including disconne abandonment of on-site systems [septic tank or m vacuum stations and other appurtenances/installat treat/transport ARE fundable IF owned and maint	ound systems]). Grinder pumps, ions on private property to
3.	Grant applications and income surveys done for or	ther agencies (e.g., OCRA, RUS, etc.
4.	Any project solely designed to promote economic	development and growth is ineligible
5.	Costs incurred for preparing NPDES permit applie SRF project.	cations and other tasks unrelated to the

Cleaning of equipment, such as digesters, sand filters, grit tanks and settling tanks.

These items should have been maintained through routine operation, maintenance and replacement by the political subdivision. Sewer cleaning is **ineligible** for SRF *unless* the cleaning is required for sewer rehabilitation such as sliplining and cured in place

6.

piping (CIPP)



## Clean Water GPR Checklist, July 1, 2010, Revised October 23, 2015

# STATE REVOLVING FUND LOAN PROGRAM GREEN PROJECT RESERVE SUSTAINABILITY INCENTIVE CLEAN WATER CHECKLIST

	Name:	
Project Nai	ne/Location:	
Date:	Revision No.	
Instruction		
This check	ist shall be completed by the SRF Loan Program participant and be updated as the projec	
changes fro	m concept to design through construction completion. For instance, a checklist should be with:	;
	The SRF Loan Program Application,	
	The Preliminary Engineering Report, along with GPR project description and cost estimate	es,
	The Post-Bid Documents, including GPR construction costs, and	,
	Construction completion.	
of eligibilit	the <i>U.S. EPA Green Project Reserve Guidance</i> available at www.srf.in.gov for a detailed y, definition of the GPR categories; examples of ineligible projects; categorical projects are equire business cases. <b>All GPR projects, components and activities must be eligible for</b>	and
J	hat apply to the project.	
Check an i	hat apply to the project:	
I. GREEN	NFRASTRUCTURE	
1. Categori	cal Projects	
	Implementation of green streets (combinations of green infrastructure practices in	
	transportation rights-of-way), for either new development, redevelopment or retrofits	
	including:	
	☐ Permeable pavement,	
	Bioretention,	
	☐ Trees,	
	☐ Green roofs, and	
	Other practices such as constructed wetlands that can be designed to mimic natural	Į.
	hydrology and reduce effective imperviousness at one or more scales, and	
	☐ Vactor trucks and other capital equipment necessary to maintain green infrastructu projects.	re
	Wet weather management systems for parking areas including:	
	☐ Permeable pavement,	
	☐ Bioretention,	
	□ Trees,	
	☐ Green roofs, and	
	☐ Other practices such as constructed wetlands that can be designed to mimic natura	ĺ

hydrology and reduce effective imperviousness at one or more scales.

		Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.		
	* *			
_	of tree boxes to manage additional stormwater and enhance tree health.			
		ization of harvested stormwater, including pipes to distribute stormwater for reuse.		
		vnspout disconnection to remove stormwater from		
		Sanitary,		
		Combined sewers, and		
		Separate storm sewers and manage runoff onsite.		
		apprehensive retrofit programs designed to keep wet weather discharges out of all types of		
		er systems using green infrastructure technologies and approaches such as:		
		,		
		Green walls,		
		Trees and urban reforestation,		
		Permeable pavements		
		Bioretention cells, and  Trust removed and replacement with notive vegetation on trace that improve normal hility.		
		Turf removal and replacement with native vegetation or trees that improve permeability. blishment or restoration of:		
_		Permanent riparian buffers,		
		Floodplains,		
		Wetlands (federal rules prevent the SRF Loan Programs from providing financing		
		assistance for a wetland required as a mitigation measure)		
		Vegetated buffers or soft bioengineered stream banks		
		Stream day lighting that removes natural streams from artificial pipes and restores a		
		natural stream morphology that is capable of accommodating a range of hydrologic		
		conditions while also providing biological integrity.		
	-	ects that involve the management of wetlands to improve water quality and/or support		
	gree	en infrastructure efforts (e.g., flood attenuation).		
		Includes constructed wetlands.		
		May include natural or restored wetlands if the wetland and its multiple functions are not		
_	TD1	degraded and all permit requirements are met.		
		water quality portion of projects that employ development and redevelopment practices		
		preserve or restore site hydrologic processes through sustainable landscaping and site		
	des	simple purchase of land or easements on land that has a direct benefit to water quality,		
_		h as riparian and wetland protection or restoration.		
	Buc	in as riparian and wedana protection of restoration.		
2. D	ecisi	on Criteria for Business Cases		
		Green infrastructure projects that are designed to mimic the natural hydrologic conditions		
		of the site or watershed.		
		Projects that capture, treat, infiltrate, or evapotranspire water on the parcels where it falls		
		and does not result in interbasin transfers of water.		
		GPR project is in lieu of or to supplement municipal hard/gray infrastructure.		
		Other - Please provide an attachment explaining the scope of the project and brief		
		explanation of the approach for the business case.		
	2 -			
		Example of Project Requiring a Business Case		
		Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer		
		vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients and other pollutants.		
		for the outlet to function as a fried for seamlent, numerits and other pollutants.		

## II. WATER EFFICIENCY

1. Catego	rical Proje	ects
	lnstall	ing or retrofitting water efficient devices, such as plumbing fixtures and appliances.
		For example, shower heads, toilets, urinals and other plumbing devices.
		Implementation of incentive programs to conserve water such as rebates.
		Water sense labeled products.
		ing any type of water meter in previously unmetered areas, if rate structures are based on
	meter	· · · · ·
		Can include backflow prevention devices if installed in conjunction with water meter.
		cing existing broken/malfunctioning water meters, or upgrading existing meters, with:
	Î 🗆	Automatic meter reading systems (AMR), for example:
		☐ Advanced metering infrastructure (AMI),
		☐ Smart meters,
		☐ Meters with built in leak detection,
		Can include backflow prevention devices if installed in conjunction with water meter
		replacement.
	Retrof	itting/adding AMR capabilities or leak detection equipment to existing meters (not
		ing the meter itself).
	•	audit and water conservation plans, which are reasonably expected to result in a capital
	projec	
		ling and water reuse projects that replace potable sources with non-potable sources:
		Gray water, condensate and wastewater effluent reuse systems (where local codes
		allow the practice),
		Extra treatment costs and distribution pipes associated with water reuse.
	l Retrof	it or replacement of existing landscape irrigation systems to more efficient landscape
		ion systems, including moisture and rain sensing controllers.
	_	it or replacement of existing agricultural irrigation systems to more efficient agricultural
		ion systems.
	_	
2. Decisio	on Criteria	a for Business Cases
	Water	efficiency can be accomplished through water saving elements or reducing water
	consu	mption. This will reduce the amount of water taken out of rivers, lakes, streams,
	-	dwater, or from other sources.
		efficiency projects should deliver equal or better services with less net water use as
		ared to traditional or standard technologies and practices.
		ent water use often has the added benefit of reducing the amount of energy required by a
	POTV	V, since less water would need to be collected and treated; therefore, there are also
	energy	y and financial savings.
	Other	- Please provide and attachment explaining the scope of the project and brief explanation
	of the	approach for the business case.
3. Examp		s Requiring a Business Case
		meter replacement with traditional water meters.
	v	ts that result from a water audit or water conservation plan.
		e tank replacement/rehabilitation to reduce loss of reclaimed water.
	New v	vater efficient landscape irrigation system.
	New v	vater efficient agricultural irrigation system.

## III. ENERGY EFFICIENCY

1. Categ	goric	al Pr	ojects
		com	ewable energy projects such as wind, solar, geothermal, micro-hydroelectric, and biogas abined heat and power systems that provide power to a POTW. Micro-hydroelectric ects involve capturing the energy from pipe flow.  POTW owned renewable energy projects can be located onsite or offsite.  Include the portion of a publicly owned renewable energy project that POTW's energy needs.  Must feed into grid system that the utility draws from and/or there is a direction
			connection. We energy management planning, including energy assessments, energy audits,
		area Proj GPI	mization studies, and sub-metering of individual processes to determine high energy use as, which are reasonably expected to result in a capital project are eligible. ects that achieve a 20% reduction in energy consumption are categorically eligible for R. If a project achieves less than a 20% reduction in energy efficiency, then it may be
			ified using a business case. ection system Infiltration/Inflow detection equipment.
2. Decis	sion (	Crite	ria for Business Cases
	Pre	oject	must be cost effective. An evaluation must identify energy savings and payback on capital eration and maintenance costs that does not exceed the useful life of the asset.
	Th	e bu	siness case must describe how the project maximizes energy saving opportunities for the or unit process.
	( <u>h</u> Uj	ttp:// p Pro	existing tools such as Energy Star's Portfolio Manager <a href="https://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager">www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager</a> ) or Check <a href="https://www.epa/cupss">gram for Small Systems (CUPSS)</a> ) ( <a href="https://www.epa/cupss">https://www.epa/cupss</a> ) to document current energy
	Ot	her -	and track anticipated savings.  Please provide and attachment explaining the scope of the project and brief explanation of broach for the business case.
3. Exam	noles	of P	rojects Requiring a Business Case
	PC	TW	projects or unit process projects that achieve less than a 20% energy efficiency ement may be justified using a business case.
	ca	tegoi	s implementing recommendations from an energy audit that are not otherwise designated as rical.
	Inf	iltrat sts a	s that cost effectively eliminate pumps or pumping stations. iion/Inflow (I/I) correction projects that save energy from pumping and reduced treatment are cost effective.
	□ I/I	how	ects that count toward GPR cannot build new structural capacity. These projects may, rever, recover existing capacity by reducing flow from I/I. ection projects where excessive groundwater infiltration is contaminating the influent
_	re	quiri	ng otherwise unnecessary treatment processes (i.e. arsenic laden groundwater) and I/I ion is cost effective.
	_As	ssoci	ing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers ation (NEMA) premium energy efficiency motors.
			MA is a standards setting association for the electrical manufacturing industry o://www.nema.org/gov/energy/efficiency/premium/).
	_	grad	e of POTW lighting to energy efficient sources (such as metal halide pulse start logies, compact fluorescent, light emitting diode (LED)).
	SC	CADA	A systems can be justified based upon substantial energy savings.  e Frequency Drive can be justified based upon substantial energy savings.

## IV. ENVIRONMENTALLY INNOVATIVE

1. Categoric	cal Projects
	Total/integrated water resources management planning likely to result in a capital project.
	Utility Sustainability Plan consistent with EPA's SRF sustainability policy.
	Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry).
	Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.
	Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.
	Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.
2. Decision	Criteria for Business Cases
	Technology or approach whose performance is expected to address water quality but the actual performance has not been demonstrated in the state;
	Technology or approach that is not widely used in the state, but does perform as well or better than conventional technology/approaches at lower cost; or
	Conventional technology or approaches that are used in a new application in the state.
	Other - Please provide and attachment explaining the scope of the project and brief explanation of the approach for the business case.
2 E1	of Decises Bearing and Decise of Con-
	s of Projects Requiring a Business Case  Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or
	effluent disposal.
	□ Natural wetlands.
	☐ Project may not further degrade.
	Projects or components of projects that result from total/integrated water resource management
	planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.
	Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.
	POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.
	Application of innovative treatment technologies or systems that improve environmental
	conditions and are consistent with the Decision Criteria for environmentally innovative
	projects such as:
	☐ Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment.
	☐ Treatment technologies or approaches that significantly reduce the volume of residuals,
	minimize the generation of residuals, or lower the amount of chemicals in the residuals.  Includes composting, Class A and other sustainable biosolids management approaches.
	Educational activities and demonstration projects for water or energy efficiency.
	Projects that achieve the goals/objectives of utility asset management plans.
	Sub-surface land application of effluent and other means for ground water recharge, such as
	spray irrigation and overland flow.
	Spray irrigation and overland flow of effluent is not eligible for GPR where there is no other cost affective alternative

#### V. CLIMATE AND EXTREME WEATHER RESILIENCY

1. Categorical Projects – none at this time. 2. Decision Criteria for Business Cases Utility functions and performance can be disrupted by climate change/extreme weather events. ☐ Flooding □ Drought ☐ Tornado ☐ Lightning strikes ☐ Earthquake Incorporate project elements that provide flexibility to adapt operations and functionality as external conditions change over time. ☐ Project components designed to perform beyond the minimum Building Code or Design Standards. Utilize climate resiliency and adaptation strategies when siting or routing key project structures or components. ☐ Ability to modify or expand proposed facilities based on future climate change issues. Other - Please provide and attachment explaining the scope of the project and brief explanation of any aspects in the planning, construction or operation phase that support the approach for the business case. 3. Examples of Projects Requiring a Business Case ☐ Utilizing natural, native and drought resistant planted elements that are economically replaced at project sites for storm water control or landscaping. ☐ Siting new structures away from flash flood areas or poor structural soils in former waterway ☐ Consideration of finished floor elevation above the 100 year flood elevation or normal code requirements. ☐ Increasing structural, roof (snow) or wind loadings beyond code requirements for new structures. ☐ Incorporate passive cooling systems for instrumentation, control or power panel rooms subject to high heat conditions.

#### Fiscal Sustainability Plan Self -Certification Form

(Pursuant to Section 603(d)(1)(E)(ii) of the Federal Water Pollution Control Act)
(To be submitted prior to Participant's Wastewater Loan Closing)

Participant Name				
Street Address		P. O. Box Number		
City	State		Zip Code	

Section 603(d)(1)(E) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan for a project that involves the repair, replacement or expansion of a publically owned treatment works to develop and implement a Fiscal Sustainability Plan (FSP). The requirement pertains to those portions of the treatment works paid for with Clean Water SRF Loan Funds. The FSP must include the following minimum requirements as set forth in Section 603(d)(1)(E)(i): (I) an inventory of critical assets that are a part of the treatment works; (II) an evaluation of the condition and performance of inventoried assets or asset groupings; (III) a certification that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and (IV) a plan for maintaining, repairing, and as necessary, replacing the treatment works and a plan for funding such activities; or per Section 603(d)(1)(E)(ii) certify that the recipient has developed and implemented a plan that meets the requirements above.

I certify that I am an authorized representative for the above listed Participant. I hereby certify pursuant to Section 603(d)(1)(E)(ii) that the Participant has developed an FSP that meets the above minimum requirements and the FSP is being implemented and will be updated as necessary. I further certify that the Participant has evaluated and will be implementing water and energy conservation efforts as part of the FSP. Upon the request of the Environmental Protection Agency (EPA) or the Indiana State Revolving Fund Loan Program (SRF), the Participant agrees to make the FSP available for inspection and/or review.

Signature of Authorized Representative	Date
Printed Name	Phone Number

## **Fiscal Sustainability Plan Certification Form**

(Pursuant to Section 603(d)(1)(E)(i) of the Federal Water Pollution Control Act) (To be submitted prior to final disbursement of Participant's loan proceeds related to the project)

Participant Name				
Street Address		P. O. Box Numbe	er	
City	State		Zip Code	

Section 603(d)(1)(E) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan for a project that involves the repair, replacement or expansion of a publically owned treatment works to develop and implement a Fiscal Sustainability Plan (FSP). The requirement pertains to those portions of the treatment works paid for with Clean Water SRF Loan Funds. The FSP must include the following minimum requirements as set forth in Section 603(d)(1)(E)(i): (I) an inventory of critical assets that are a part of the treatment works; (II) an evaluation of the condition and performance of inventoried assets or asset groupings; (III) a certification that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and (IV) a plan for maintaining, repairing, and as necessary, replacing the treatment works and a plan for funding such activities; or per Section 603(d)(1)(E)(ii) certify that the recipient has developed and implemented a plan that meets the requirements above.

I certify that I am an authorized representative for the above listed Participant. I hereby certify pursuant to Section 603(d)(1)(E)(i) that the Participant has developed an FSP that meets the above minimum requirements and the FSP is being implemented and will be updated as necessary. I further certify that the Participant has evaluated and will be implementing water and energy conservation efforts as part of the FSP. Upon the request of the Environmental Protection Agency (EPA) or the Indiana State Revolving Fund Loan Program (SRF), the Participant agrees to make the FSP available for inspection and/or review.

Signature of Authorized Representative	Date
Printed Name	Phone Number

#### **Cost & Effectiveness Certification Form**

(Pursuant to Section 602(B)(13) of the Federal Water Pollution Control Act)
(Applies to all assistance recipients submitting an application on or after October 1, 2015)
(To be submitted prior to Participant's Wastewater Loan Closing)

Participant Name			
Street Address		P. O. Box Numb	er
City	State		Zip Code

Section 602(B)(13) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan to certify that the recipient:

- 1) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under the Clean Water State Revolving Fund Loan Program; and
- 2) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, recapture, and conservation, and energy conservation, taking into account
  - (i) the cost of constructing the project or activity;
  - (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and
  - (iii) the cost of replacing the project or activity

#### Certification

We hereby certify pursuant to Section 602(B)(13) that the Participant has completed the requirements of Section 602(B)(13) as set forth in items (1) and (2) above.

Signature of the Authorized Representative	Signature of Consulting Engineer	
Printed Name:	Printed Name:	
Signature:	Signature:	
Date:	Date:	

# State Revolving Fund Loan Program Asset Management Program Certification Form

(To be submitted either at the time of loan closing or no later than the final disbursement of a Participant's loan proceeds)

Participant Name			
Street Address		P. O. Box Num	ıber
City	State		Zip Code

Effective July 1, 2018, Indiana Code 5-1.2-10-16 requires a Participant that receives a loan or other financial assistance from the State Revolving Fund Loan Program certify that the Participant has documentation demonstrating it has the financial, managerial, technical and legal capability to operate and maintain its water or wastewater collection and treatment system. A Participant must demonstrate that it has developed an asset management program as defined in the Indiana Finance Authority's (Authority) Asset Management Program Guidelines. The Asset Management Program (AMP), shall include at a minimum the following: (1) A system map (2) An inventory and assessment of system assets (3) development of an infrastructure inspection, repair, and maintenance plan, including a plan for funding such activities (4) An analysis of the customer rates necessary to support the AMP (5) Audit performed at least every two years (6) Demonstration of the technical, managerial, legal and financial capability to operate and maintain the system, per the guidelines established by the Authority.

I hereby certify that I am an authorized representative for the above listed Participant and pursuant to IC 5-1.2-10-16, the Participant has developed and is implementing an AMP that meets the requirements established by the Authority.

Signature of Authorized Representative	Date
Printed Name	Phone Number/Email Address