



State Revolving Fund Loan Program
an Indiana Finance Authority Environmental Program

100 North Senate Avenue, Room 1275
Indianapolis, Indiana 46204
www.srf.in.gov

MEMORANDUM

TO: Official Loan File

FROM: Richard J. Ziembra

DATE: October 25, 2011

RE: Green Project Reserve (GPR), Business Case for Town of Brownsburg, New Water Treatment Plant No. 1, SRF Project # DW10132201

Summary

1. The Town of Brownsburg proposes to construct a new water treatment plant to replace their existing undersized water treatment plant (WTP) that has exceeded its useful life. Project elements consist of a new well with a well house, new raw water transmission main, finished water transmission main, and a new horizontal pressure filter treatment plant.
2. The green project reserve components (GPR) that are environmentally innovative are a new on-site sodium hypochlorite generation system, ductile iron pipe materials for the water main and horizontal drilling for the installation of the raw water main. Business cases were developed by GRW Engineers.
3. The town has historically utilized chlorine gas for water treatment/disinfection. The town has chosen to use an on-site sodium hypochlorite system for economical and safety reasons. By utilizing the on-site generation system, the Town will be able to save approximately \$5,400 per year in chemical costs versus purchasing chlorine gas. The payback period for this installation is 8 years. The total estimated construction cost is approximately \$324,000.
4. The use of ductile iron pipe for the water main improvements is environmentally innovative because the material makeup of the ductile iron pipe consists of approximately 95% recycled material as certified by the ductile iron pipe manufacturer. The total estimated construction cost is \$100,000.
5. Utilization of the horizontal drilling construction method for the installation of the water mains is considered to be environmentally innovative because there will be very little disturbance to the environment thereby saving the Town installation costs. The cost savings for this component is \$50,000.



6. The total estimated GPR cost is \$507,000, which the construction cost is estimated at \$474,000 and the engineering cost is \$33,000.
7. The Town of Brownsburg plans on closing a SRF loan in the approximate amount of \$4,506,000 on October 26, 2011.

Conclusions

1. The business cases were reviewed internally and found to meet the GPR requirements for the environmentally innovative category.