



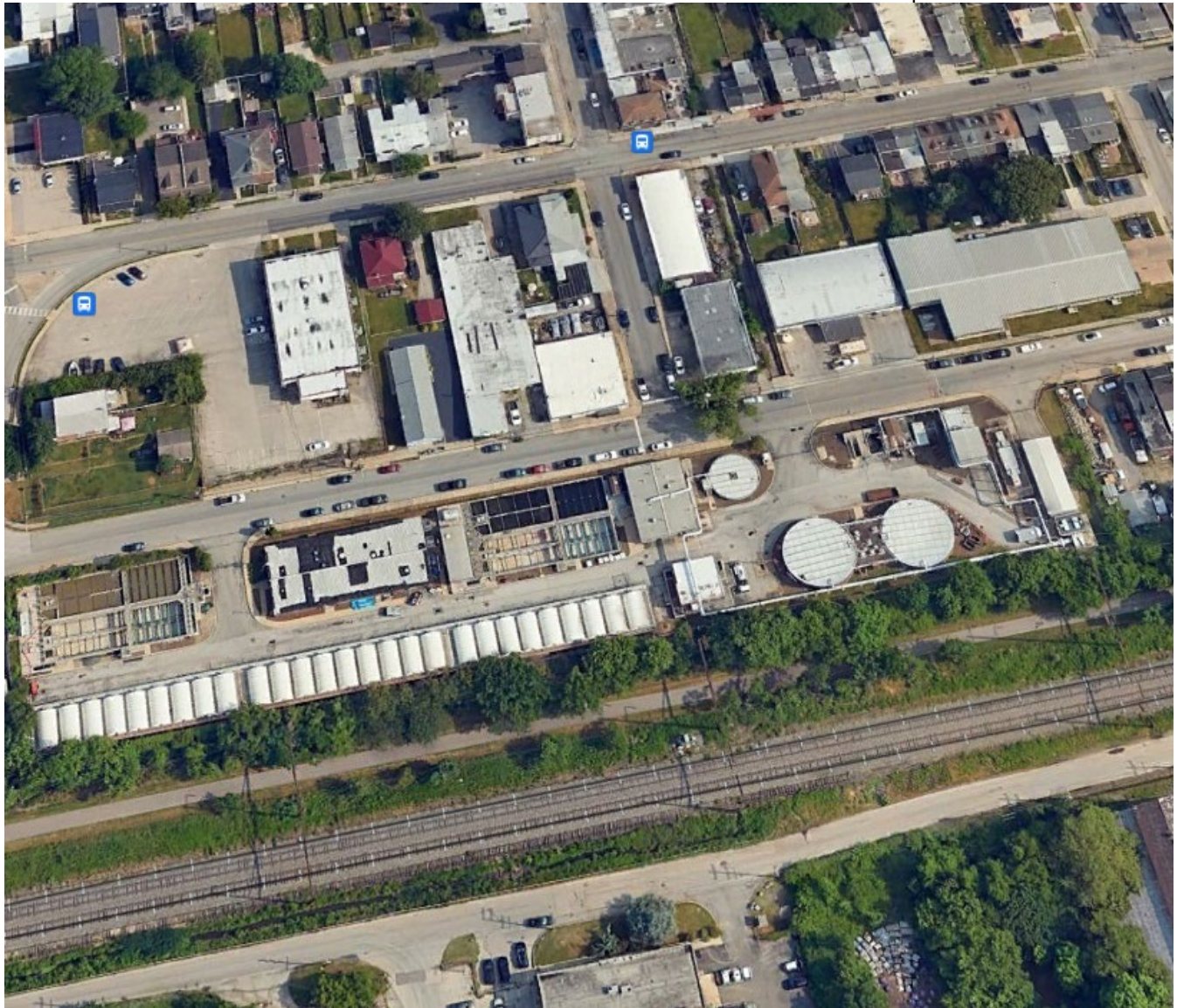
Utility Energy Audit Report

Report Prepared for:

Conshohocken Municipal Authority
601 East Elm Street
Conshohocken, PA 19428

Report Prepared by:

Chad Heister, CPA
Energy & Sustainability Circuit Rider
PA Rural Water Association
Mobile: 814-404-1335
cheister@prwa.com



Electricity Cost
Wastewater plant - \$0.082 kWh - (Average Jan - Dec)



Executive Summary

Facility Description and Energy Assessment Highlights-

Conshohocken Municipal Authority has a Rotating Biological Contactor (RBC) wastewater treatment plant. Conshohocken is located along the Schuylkill River in Montgomery County in suburban Philadelphia. This system serves the residences of Conshohocken Borough and West Conshohocken Borough. They dispose of their biosolids by pressing their digester sludge and disposed in landfills. The population as of the 2020 census is 9,261 for Conshohocken. The Median Household Income (MHI) for Conshohocken Borough is \$43,599. Their electric generator is PECO, and their transmission company is Constellation.

The wastewater treatment plant personnel are doing an exceptional job with energy optimization.

For this energy assessment, it's recommended:

Install timers on the Aerobic Blowers and cut hours to 18 from 24. This would create savings of \$578 per month with a quick payback of 2.6 months.

Resistant heat is a major contributor to electric costs. Unit Heaters are only for freeze protection, so using smart thermostats or timers or just turning them off completely in low-risk areas where freezing is not an issue during the cold months can save an estimated \$390 a month in electric costs.

Lastly, lighting changes from fluorescent bulbs to LEDs would save about \$71 per month and a payback of about 11 months.

PECO Electric does have time-of-use pricing. Try to strategize using your systems during off-peak hours.

Electric rate structure -

The Electric rate structure is comprised of a Distribution Charge and a Consumption Charge, which are both at a single fixed rate. The Distribution Charge is the peak power demand, which is the highest energy demand for your facility during the month. This can be reduced by using equipment during non-peak times; for example, with the use of timers, only running certain equipment during the hours of 9 pm to 7 am or not running



large equipment at the same time. The Consumption Charge comprises of generation and transmission costs which is based entirely on the total actual electric usage.

Take advantage of “**Time of Use or Peak Use**” pricing plan. If you have the following electricity providers contact them for more details. You could run your equipment off-peak hours and at different times to reduce peak load. The following have “Time of Use” pricing plans:

Duquesne Light Co. - <https://www.duquesnelight.com/energy-money-savings/electric-vehicles/business-ev-rate>

PPL Utilities - <https://www.pplelectric.com/site/Ways-to-Save/Rates-and-Shopping/Time-of-Use-Plan>

PECO - <https://www.peco.com/SmartEnergy/InnovationTechnology/Pages/TimeOfUsePricing.aspx>

Major equipment sources of electric use on the following page.



Conshohocken Municipal Authority										
Equipment List										
Major energy systems - electrical, HVAC, ect.										
Equipment	Location	Hrs/Day	HP	Amps	Watts	Volts	Kwh/Day	Kwh/ Month	\$/ Kwh	\$/month
Unit Heater times 2	Dechlor Building	5.0	-	-	7,500	-	38	1,125	0.08219	92.47
Unit Heater	Admin Building	5.0	-	-	3,000	-	15	450	0.08219	36.99
Water Cooler		5.0	-	5.0	575	115	3	86	0.08219	7.09
Large Refrigerator		10.0	-	6.5	780	120	8	234	0.08219	19.23
Flight Motors A times 2	Primarty Clarifiers	24.0	1.0	3	690	230	17	497	0.08219	81.67
Flight Motors B - offline	Primarty Clarifiers	-	-	-	-	-	-	-	0.08219	-
RBC Motor A1 through A9	RBCs	24.0	5.0	7.3	3,358	460	81	2,418	0.08219	1,788.51
RBC Motor C1 through C9	RBCs	24.0	5.0	7.3	3,358	460	81	2,418	0.08219	1,788.51
Drying oven	Lab	8.0	-	18.4	2208	120	18	530	0.08219	43.56
Muffle Furnace		1.0	-	9.5	2185	230	2	66	0.08219	5.39
Refrigerator		10.0	-	6.0	690	115	7	207	0.08219	17.01
Primary Pumps 1	Raw Pump Room	10.0	5.0	7.3	3,358	460	34	1,007	0.08219	82.80
Primary Pumps 2	Raw Pump Room	10.0	10.0	14.1	6,486	460	65	1,946	0.08219	319.86
Primary Pumps 3	Raw Pump Room	10.0	3.0	-	-	-	-	-	0.08219	-
Unit Heater times 3	Raw Pump Room	10.0	-	-	10,000	-	100	3,000	0.08219	246.58
Blower K-4A	Blower Building	24.0	40.0	32.0	14,720	460	353	10,598	0.08219	871.11
Blower K-4B	Blower Building	24.0	40.0	40.0	18,400	460	442	13,248	0.08219	1,088.89
Blower K-4C	offline	-	40.0	46.8	21,528	460	-	-	0.08219	-
Air Handlers times 2	Outside Blower Building	10.0	-	22.0	5,060	230	51	1,518	0.08219	249.54
Collectgor Drive T-4A		24.0	1.0	3.1	713	230	17	513	0.08219	42.19
Unit Heater	Na Hypo Station Shed	10.0	-	-	7,500	-	75	2,250	0.08219	184.93
Unit Heater times 4	Basement of Press Building	10.0	-	-	7,500	-	75	2,250	0.08219	739.74
Air Compressor	Basement of Press Building	10.0	5.0	13.8	3,174	230	32	952	0.08219	78.26
Sludge Pump for Press Thickener	Basement of Press Building	5.0	15.0	18.0	8,280	460	41	1,242	0.08219	102.08



pa rural water
Association

Equipment	Location	Hrs/Day	HP	Amps	Watts	Volts	KwH/Day	KwH/ Month	\$/ KwH	\$/month
Utility Water times 2 - at 95.8%	Basement of Press Building	24.0	20.0	14.3	6,578	460	158	4,736	0.08219	778.56
Brown Pumps - Small	Basement of Press Building	5.0	5.0	6.8	3,128	460	16	469	0.08219	77.13
Brown Pumps - Big	Basement of Press Building	5.0	15.0	18.8	8,648	460	43	1,297	0.08219	213.24
Return Pumps	Basement of Press Building	24.0	5.0	17.3	7,958	460	191	5,730	0.08219	470.95
Muffin Monster	Press building	24.0	3.0	4.3	1978	460	47	1,424	0.08219	117.06
Auger Press Motor	Press building	1.0	-	4.7	2162	460	2	65	0.08219	5.33
Conveyor Motor	Press building	1.0	-	4.7	2,162	460	2	65	0.08219	5.33
Belt Press Motor times 2	Press building	1.0	-	4.7	2,162	460	2	65	0.08219	10.66
Polymer motors and mixer	Press building	1.0	-	1.5	345	230	0	10	0.08219	2.55
Air Handler #1	Press building	10.0	-	22.0	5,060	230	51	1,518	0.08219	124.77
Tank Mixer for sludge thickener		24.0	1.0	1.9	851	460	20	613	0.08219	50.36
Compositor	Infuent Sampler	5.0	-	6	720	120	4	108	0.08219	17.75
Unit Heater times 2	Grit Building	5.0	-	-	7,500	-	38	1,125	0.08219	184.93
Blower K-2A	Aerobic Digester	24.0	75.0	85.0	39,100	460	938	28,152	0.08219	2,313.90
Blower K-2C	Aerobic Digester	-	75.0	85.0	39,100	460	-	-	0.08219	-
Sludge Transfer Pumps	Aerobic Digester	1.0	15.0	18.8	8,648	460	9	259	0.08219	21.32
Effluent Wiegmann Pumps - VFDs 1	Outside Grit Building	24.0	15.0	18.8	8,648	460	208	6,227	0.08219	511.78
Effluent Wiegmann Pumps - VFDs 2	Outside Grit Building	-	-	-	-	-	-	-	0.08219	-
Effluent Wiegmann Pumps - VFDs 3	Outside Grit Building	-	-	-	-	-	-	-	0.08219	-
Effluent Wiegmann Pumps - VFDs 4	Outside Grit Building	-	-	-	-	-	-	-	0.08219	-
Screen Auger	Outside Grit Building	1.0	1.0	31.0	14,384	464	14	432	0.08219	35.47
Unit Heater times 3	Grit Building	5.0	-	-	7,500	-	38	1,125	0.08219	277.40
Blower	Grit Building	24.0	5.0	6.7	3,082	460	74	2,219	0.08219	182.39
Auger Motors	Grit Building	10.0	0.8	230.0	644	2.8	6	193	0.08219	15.88
Grit Elevator motor	Grit Building	5.0	-	9	2070	230	10	311	0.08219	25.52
Grit Screw	Grit Building	5.0	-	9.0	2,070	230	10	311	0.08219	25.52
Lighting - For details on the light study see page 7										162.86
									Total	13,517.09

Saving 151,868 Kilowatts a year is equivalent to saving:

This is equivalent to greenhouse gas emissions avoided by:

36.8

tons of waste recycled instead of landfilled ?



5.3

garbage trucks of waste recycled instead of landfilled ?



4,608

trash bags of waste recycled instead of landfilled ?



0.028

wind turbines running for a year ?



This is equivalent to carbon sequestered by:

1,754

tree seedlings grown for 10 years ?



124

acres of U.S. forests in one year ?



0.68

acres of U.S. forests preserved from conversion to cropland in one year ?



Light Study

Lighting	Initial Cost	Hours/Day in Use	Lights in use	Watts	(lamps * watts)	KwH /Day	KwH/Mo.	\$/ KwH	\$/month
Fluorescent lamps T8		8	258	32	8256	66.048	1981.44	0.0822	162.86
							Total Lights		162.86
Fluorescent lamps T8	802.38	8	258	18	4644	37.152	1114.56	0.0822	91.61
Total Costs	802.38						Total Lights		91.61
Est Replacement costs - 3.11 for Fluorescent Lights				Payback	11.3 months			Mon. Savings	71.25
Annual Savings	855.02								



Power statement usage study

Conshohocken Municipal Authority

Plant	kWh	Comments	Average \$/kWh	Peak Demand (kW)	Total Power Cost
Nov-23	181381		0.080705	317	14,638.35
Dec-23	175178		0.080408	294	14,085.79
Jan-24	198609		0.079728	328	15,834.70
Feb-24	238218		0.079667	337	18,978.07
Mar-24	171434		0.082182	342	14,088.85
Apr-24	167558		0.081688	317	13,687.41
May-24	173810		0.081111	306	14,097.88
Jun-24	152233		0.083060	307	12,644.47
Jul-24	144446		0.083211	288	12,019.43
Aug-24	147647		0.082523	280	12,184.23
Sep-24	156274		0.083434	327	13,038.59
Oct-24	151495		0.082862	298	12,553.19
Total	1503115			Total Cost	123,292.12
Avg Cost KWh	0.0821930				
Avg Month kWh	167,013			Avg month Cost	13,699.12

Energy Efficiency Loans and Grants

There are many loans and grants available for Energy Efficiency Projects. The Inflation Reduction Act is very heavy with Energy Efficiency and renewable energy initiatives. Here are some of the ways to research those programs:

- **Grants.gov** – A one-stop shop for all grants. Input your project needs and the website will tailor your applications to the right agencies. They also have training videos for grant writing, policies, eligibility, terminology, and so much more.
- **Community Block Grant** – These grants administered through the PA Department of Community & Economic Development can bring very large grants to your utility. Entitlement funding is set by Act 179 formula. This competitive program has a minimum request of \$100,000 and has no ceiling limit.
- **OneRD Guaranteed Loan Initiative** – Refinance and create cash flow, buy and develop land, install machinery and equipment, and acquire new customers.
- **Rural Utility Service (USDA)** – Apply through RD Apply
- **PennVEST – (EPA)** - Provides low-interest loans and grants for new construction or for improvements to publicly or privately-owned drinking water, stormwater, or sewage treatment facilities, as well as non-point source pollution prevention best management practices.
- **National Rural Water Association** – Can provide loans, through USDA, up to \$200,000 with very quick turnarounds, within five days for quick cash needs.
- **Act 129 Money** – Contact your electricity supplier for these rebates. It's a rebate program specifically for energy-saving projects and is relatively easy to get this money. The supplier's commercial customer service can help navigate the paperwork. This money can pay for up to 50% of your energy efficiency project. The main thought is they must be contacted **BEFORE** any work is started.
- **Dsireusa.org** – type in your zip code and see all the rebates available in your area!
- **PA Environmental Digest** – This is a blog that every week can link you to hundreds of grants thorough DEP, Fish and Boat Commission, Natural Resource Conservation Service, DCNR, PennDOT, US Forestry, EPA, and many other departments and agencies.
- **Your Local Bank** – Keep the money in your community. Some USDA loan specialists have stated that if your project is less than \$1,000,000 consider going to your local bank. That way you don't have to go through a lot of the hoops and red tape that a federal loan may require.



Power Resilience for Your Utility

With climate change becoming more of a threat, it's good to have a better plan in place for resiliency in your system.

1. Make sure your Emergency Response Plan is up-to-date. Make sure all the emergency contacts and organizational chart is also current. Communication is key in emergencies. Get to know your emergency responders and let them know the critical infrastructure, power poles, reservoirs, hazardous chemicals, and how to prepare for those specific emergencies.
2. Let the emergency response teams have all the street addresses of all critical structures e.g. pump stations, reservoirs, and treatment facilities.
3. Enlist Amateur Radio clubs. During prolonged power outages and if cellular phones no longer work, they can be vital in providing communication service.
4. If you have private power lines through forests, make sure that no trees can come down on your lines. Keep the trees cut back to prevent wind or ice from disabling your power lines to your pump stations and treatment facilities.
5. Talk to your local Emergency Management Agency about how they can help with restoring power. They can up your priority to get the power restored. Let your electric supplier know that you are a public water system and need to be on the Priority Power List.
6. Properly maintain your generators and exercise them weekly. Ensure you have the proper amount of fuel so you can keep those generators running in an emergency.
7. Have the most energy-efficient equipment feasible for your system, so you can run more equipment with less power in an emergency.
8. Do a power assessment for your system.
9. Consider solar to generate your electricity. Contact Chad Heister at 814-404-1335 to set up a feasibility study.
10. There are a lot of grants and loans not just for water and sewer infrastructure upgrades, but money available to do detailed resilient and vulnerability studies.
11. Plan, train, and conduct exercises. Work out the kinks before you have an actual emergency. Conduct tabletop exercises see EPA's Training module as a template. [ttx.epa.gov/Docs/PrintableTrainingModule.pdf](https://www.epa.gov/sites/default/files/2016-03/documents/160212-powerresiliencguide508.pdf)
12. Consider a microgrid. When municipalities and departments have buildings and facilities near each other, you can draw power from a common source like solar, wind, or other generating equipment.
13. Black Sky Planning – Planning for long-duration, extensive, and widespread power outages.

For more information about Power resilience look up “Power Resilience: Guide for Water and Wastewater Utilities. <https://www.epa.gov/sites/default/files/2016-03/documents/160212-powerresiliencguide508.pdf>



The Following Areas are Outside the Scope of this Audit. They are general energy-saving tips that may not pertain to your plant.

Other Recommendations

- 1.) Install a motion sensor on exterior lighting and building lighting and a timer on parking lot lighting to improve energy efficiency and building security.
- 2.) Have the HVAC system balanced after the completion of energy efficiency upgrades.
- 3.) Install Oxygen Sensors and Variable Frequency Drives for the blowers.
- 4.) Recycle effluent for use at the wastewater treatment plant.
- 5.) Try to reduce energy use during peak times from 8 am to 6 pm as much as feasible.
- 6.) In the next upgrade consider more energy-efficient technology, anaerobic digestion for biogas generation of electricity, micro-turbines for the effluent flow for energy generation, etc.

Areas not Examined in this Audit:

- 1.) No testing was performed to ascertain total building air leakage or total leakage from ductwork.
- 2.) We did not perform combustion analysis or carbon monoxide testing of your combustion appliances. Significant reduction in the ventilation of your building can result in flue gasses containing carbon monoxide leaking into the conditioned space of your building.



Energy Efficiency Program Overview:

The Pennsylvania Rural Water Association (PRWA) has implemented a program to assist water and wastewater utility systems in evaluating and lower their energy consumption and costs. We believe we all have a part in reducing greenhouse gases, reducing our increasing energy demands, and helping sustain our current energy supply. Energy savings have multiple advantages besides environmental. These initiatives can reduce operating costs, freeing up capital for other priorities and additional investments.

This energy efficiency assessment considers current and past energy use, identifies the primary energy-consuming components, and identifies methods to lower energy use and costs. These methods to lower energy usage include; more efficient equipment such as pumps, motors, and lighting; changes in operational methods; and suggest other heating and cooling efficiencies. This report will also look at the payback for your initial investment and savings accumulated from the reduction of energy used.

This energy and sustainability program is just one program of the many that PRWA provides for its members that include G.I.S. mapping, water, wastewater, sourcewater, and wellhead protection technical assistance, stormwater management assistance, free equipment rental, financial services, legislative and regulation updates, and many PA DEP approved training events.

Financing Energy Efficiency

Energy improvements create a stream of savings in the form of reduced monthly energy bills. The savings may cover the monthly cost of financing the improvements. Financing energy efficiency improvements as part of your commercial mortgage is the best possible way to go—you have the advantage of (i) low monthly payments due to a long-term and relatively low-interest rate; and (ii) interest that is deductible from your income tax.

Local Resources

Utility Rebate or Loan Programs

Several utilities offer special energy efficiency rebates and/or loan programs. Program details vary so check what energy efficiency products or services qualify for these programs in your area. In some cases, utility rebates may cover most of the product or service cost. Visit your utility's website to find out if it offers energy efficiency rebates or loans. Additional information may also be available at www.dsireusa.org, a website dedicated to tracking incentives for energy efficiency and renewable energy.

Other funding sources for loans, grants and rebates could include the USDA RUS/RD loans and grant funding, the Rural Water Loan Fund, PRWA revolving loan funds, federal/state/ and



local agencies, ect. Rebates from government agencies or your electric provider. You can find additional rebates or loans available in your area by visiting www.dsireusa.org. Be sure to check the federal incentives as well. This website is maintained and updated regularly by NCSU under contract with the U.S. Department of Energy. You need to know which electric and gas companies that serve you.

Check out the USDA Rural Development Website at <https://www.rd.usda.gov/>. Get signed up in the RD Apply for low-cost financing and grant awards. This report will be submitted to the National Rural Water Association and the USDA Rural Development Agency.

Other Recommendations or energy-saving things to look for

Replace Unsatisfactory Windows Doors

Glass is a very poor insulator and much heat is lost through windows during the winter. A single pane of glass loses fifteen times more heat than a section of an insulated wall of the same size. By adding a second pane of glass, the amount of energy lost through windows is cut almost in half.

Using low-e glass for the second pane reduces energy loss by an additional 10%. In warm climates, the heat of the sun shining through windows accounts for up to half of the cooling costs. Solar-tinted glass, solar film, or a solar shade, can reduce total air-conditioning costs by up to 25%. Replacing windows is expensive, but if the window frames are in poor condition, this may be the best solution. The National Fenestration Rating Council rates the energy efficiency of replacement windows. The quality of the installation is as important as the quality of the product, therefore check the references of the installer before signing a contract.

The combination of a single-glazed primary interior window and an intact exterior storm window is comparable to a double-glazed window. Ensure that the upper and lower sashes are fully in place during the heating season, so that "dead" air is trapped between the windows.

Install Solar Shades

Windows account for about 50% of heat gain in hot weather. Installing either solar film or solar shades on windows that receive direct sunlight will help to reduce heat gain.

Solar shades reduce solar heat gain. The most effective solar shades are those installed on the outside of the window because they block the solar heat before it passes through the window. If possible, the shades are installed indoors, they should be sealed to the window frame. If not sealed, much of the rejected solar heat escapes into the room around the sides of the shade. In climates with heating and cooling seasons, install solar shades that can be raised to allow solar heat inside during the heating season.



Solar window film applied directly to the interior glass deflects heat in the summer and can reduce solar heat gain by 30-40%.

Replace Air Conditioner and Heating Units

Central air conditioning systems are expected to last from 15 to 20 years. Waiting for an older air conditioner to stop working before replacing it makes little sense since the old one will cost twice as much to operate each day you wait. Older buildings often have air conditioners that require twice as much electricity as the current Energy Star® air conditioner.

Replace or Put a Timer on Your Water Heater

Energy Auditor Comments:

It is advisable to replace a water heater if it is older than its design life rather than waiting until it unexpectedly breaks down. If a water heater is not working properly, a technician should decide whether it should be repaired or replaced.

Lower the temperature of the water heater to 120° F to save energy and reduce the chance of scalding. If the hot water supply is insufficient at this setting, increase the water heater temperature by 5 degrees Fahrenheit and try it for a few days. CAUTION: If your dishwasher does not have a booster heater and your dishes do not come out clean, you should raise the water temperature to the setting recommended by the dishwasher manufacturer.

Energy can be saved by installing an insulating blanket around the water tank to reduce standby heat losses. When the water heater is located in a conditioned space that requires cooling in the summer, insulating will also lower the cooling load. Many business owners can install this product themselves. CAUTION: If the tank has a warning label against the installation of additional insulation, do not install a wrap.

Another energy-saving option is an electric timer which shuts off an electric water heater when hot water is not needed, thus reducing standby losses. This measure typically saves between 5%–12% of the energy used by the water heater. CAUTION: Contact a qualified electrician to perform the installation of the electric timer (the breaker must be turned off or the fuse must be disconnected).



Additional Energy Efficiency Measures

Lighting Options

Compact fluorescent light bulbs use only one-third of the electricity consumed by incandescent bulbs and last up to ten times as long. They produce less heat, are available in warm colors, and can be screwed into many existing light fixtures. While they cost more initially, their energy savings and long-life save money and hassles in the long run. Consider installing hardwired fluorescent lights throughout your building. You may also want to put outside lights on a timer so that they are lit only during the specific hours that your business is open.

Recycling and Disposal of CFLs

Compact fluorescents have become a popular form of efficient lighting, and they are starting to be seen in our landfills. Because of their mercury content, it's best to handle CFLs the same way you would other household hazardous waste products like paint or batteries. They should never be incinerated. While most states and communities do not require recycling of compact fluorescents, check with your community recycling center or local government about your disposal options. For information on disposal laws and recycling programs in your area, see www.epa.gov/bulbrecycling.

If you break a CFL, the Environmental Protection Agency recommends you take the following steps:

- Carefully scoop up the fragments and powder with stiff paper or cardboard and place them in a sealed plastic bag; use disposable rubber gloves if available. Do not use your bare hands.
- Wipe the area clean with damp paper towels or disposable wet wipes and place them in the plastic bag.
- Place the plastic bag in a second sealed plastic bag and dispose of in the trash.
- Open a window to disperse any vapor that may escape and leave the room for 15 minutes or more.
- Some states require that broken and unbroken CFLs be taken to a recycling center.
- Do not use a vacuum cleaner or broom to clean up the broken bulb on hard surfaces.
- For carpet cleaning and additional information on CFL disposal, see the Energy Star CFL page.

Guidance on Indoor Air Quality

Inadequate Ventilation

Most older buildings need to be weatherized to reduce energy loss. This can reduce the amount of air infiltrating the building. Inadequate ventilation increases the concentrations of indoor air pollutants from sources inside the building. Signs of inadequate ventilation include stuffy air, musty smell, moisture condensation on cold surfaces and mold growth (see www.epa.gov/mold). If the



building is too tight, an air-to-air energy recovery ventilator should be installed to increase air circulation without losing conditioned air. Having adequate air ventilation is crucial to maintaining good indoor air quality.

Reducing Toxins

Many building improvement products have significant "off-gassing." Chemicals leach out of the product and into the indoor air. Painting and carpeting are two common improvements and, both may release toxic chemicals.

Paints

There are serious health and environmental concerns surrounding paint. Using paints that are free of Volatile Organic Compounds (VOCs) such as benzene and toluene and free of heavy metals such as cadmium, can aid in reducing exposure to toxins for both you and your environment. However, the fact that a paint is VOC-free does not necessarily mean that it is free of toxins such as formaldehyde, ammonia, acetone, or odor-masking agents. Fortunately, paints with reduced levels of VOCs, or even VOC-free, are available.

Resources

The Environmental Protection Agency (EPA) has a consumer booklet, The Inside Story: A Guide to Indoor Air Quality. www.epa.gov/iaq/pubs/insidest.html

New American Dream has information on Green Seal-certified paint manufacturers: www.newdream.org/consumer/paint.php

Statement of Limited Liability for Services Performed

Implementing the recommendations in this report will reduce your energy bills and make your building more comfortable. It will also help the environment. The estimates in this Energy Audit Report ("Report") are based on the data obtained from measuring and inspecting your facility. The information was analyzed using standard energy audit techniques, which take into account local weather, energy prices implementation costs, and other relevant factors. The savings estimates in this Report can be adversely impacted by variations in the behavior of the occupants, the weather, and other factors. Your actual implementation costs may vary from our estimates due to price differences among contractors and suppliers as well as unforeseen issues.

Pennsylvania Rural Water Authority does not offer any warranty, either expressly or implied, for the estimated savings or costs in this Report. Should you find an error in the report, please call Chad Heister, PRWA Energy Circuit Rider at (814) 404-1335.