By submission of this request for approval of our Wellhead Protection Program, we attest that we have included all of the following minimum elements:

Steering Committee and Public Participation:
Section 3

Wellhead Protection Area Delineation **Map/Narrative**:
Section 4

Signature of Professional Geologist who performed rigorous delineation:
Section 4

Contaminant Source Inventory:
Section 5

Wellhead Area Management and Commitment:
Section 6

Contingency Planning:
Section 7

Provisions for New Water Sources:
Section 7

Expectations for Annual Report:
Section 3

Are all water sources included in this plan? Yes No

Enclosed three complete copies of the Wellhead Protection Program

12. Signature of Requester: Deborah C Rogers

13. Title: Secretary, **Shinglehouse** Borough

14. Date: November 20, 2003

TABLE OF CONTENTS

Disclaimer

This report includes a hydrogeologic study and rigorous delineation completed by a registered geologist in Pennsylvania. This template is completed in order for a water supplier to meet the Minimum Elements for a Source Water Protection Plan as outlined by the PA DEP (see Appendix A). If a person, or organization decides contest the results of this study or the delineation, they must submit a hydrogeologic study and rigorous delineation, completed by a registered geologist licensed in Pennsylvania (at their expense), to the Borough and County Planning Departments for consideration.

INTRODUCTION

PWS SYSTEM NAME:	**Shinglehouse Borough**
PWS ID:	**6530013**
SYSTEM ADDRESS:	**40 Honeoye Street**
	Shinglehouse, PA 16748
SYSTEM PHONE:	**814-697-6711**
CONTACT PERSON:	**Deborah Resig, Secretary**
CONTACT PHONE:	**814-697-6711**

The term "source water" is used by PA DEP to represent both groundwater and surface water. In this report it represents groundwater.

Description of Area & Water Supply

The Borough of Shinglehouse is located in the northwest corner of Potter County and is the third largest Borough in the County. The Borough has a population of 1,243. The water system is owned and operated by the Borough.

The Borough of Shinglehouse Water System serves the Borough of Shinglehouse, Potter County, Pennsylvania with drinking water from groundwater resources. The groundwater sources (wells) are located within the Borough limits. The area surrounding the source is primarily residential with some agricultural use to the south. The topography of the area surrounding the source is rolling. The regional hydrogeologic setting includes sandstones, shales, siltstones, and localized coal. (see attached hydrogeologic report).

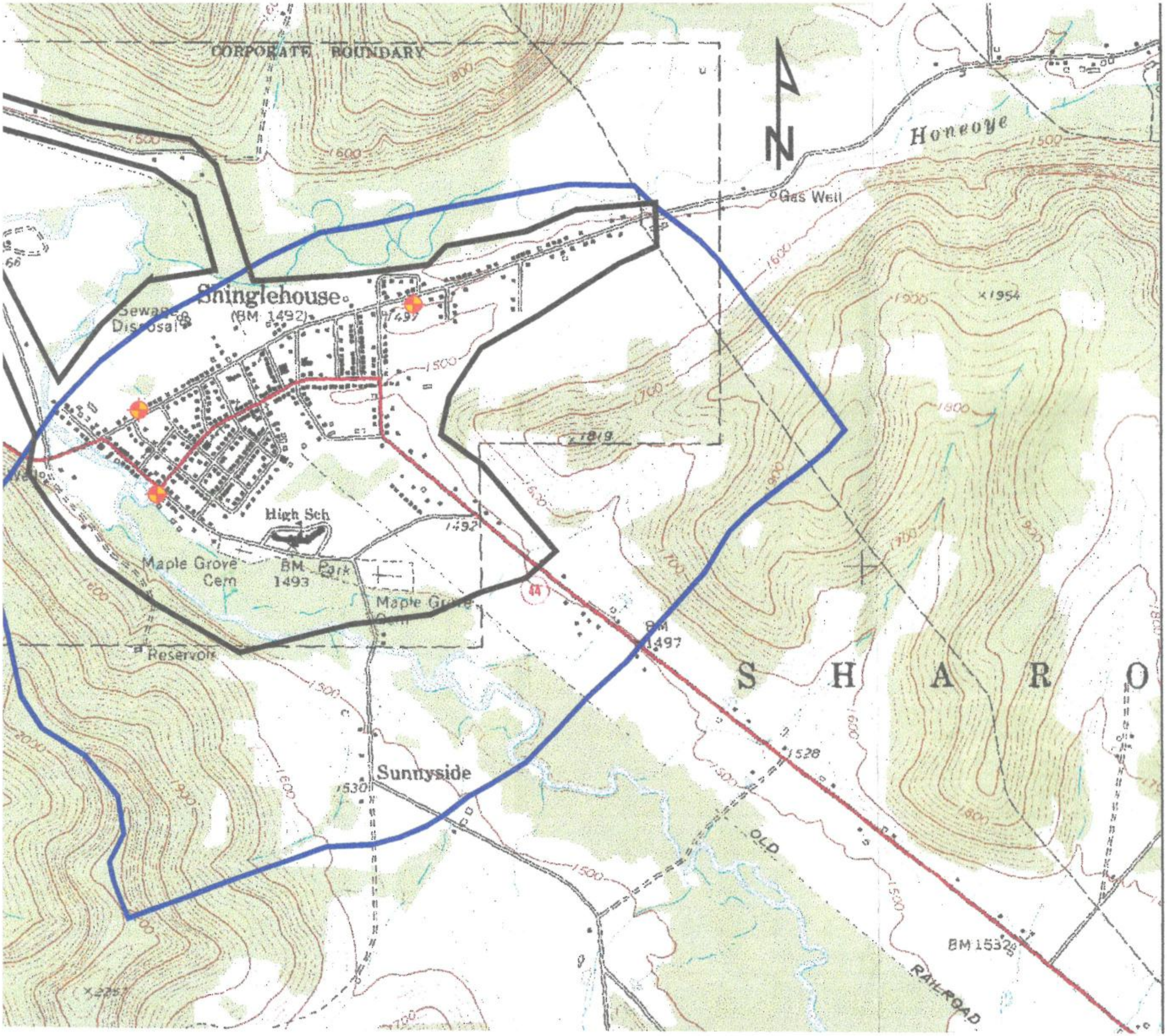
It is anticipated that the area around the source will undergo moderate growth of land uses as an overflow area to the Coudersport area growth. Most growth would be residential. As of the last census, the population of the Borough was 1,243. Most residents are employed outside the Borough. The Borough is mostly residential with a few small businesses.

The water system is operated by the Borough employees. The water system consists of two well sources. Well #3 is the primary source and has a safe yield of 288,000 gallons per day. Liquid chlorine is used for disinfection. Caustic soda is also added to control pH for corrosion control. Well #2 has a safe yield of 216,000 GPD and is treated with an electromedia filter for iron and manganese and chlorine for disinfection. The wells located on Borough property and the system is owned and operated by the Borough. The system has a 140,000 gallon finished water storage tank. The system serves 529 connections with approximately 1,243 residents, or other users. The average daily demand is 178,000 gallons per day with a peak use of 220,000 gallons per day.

Purpose of Plan Development

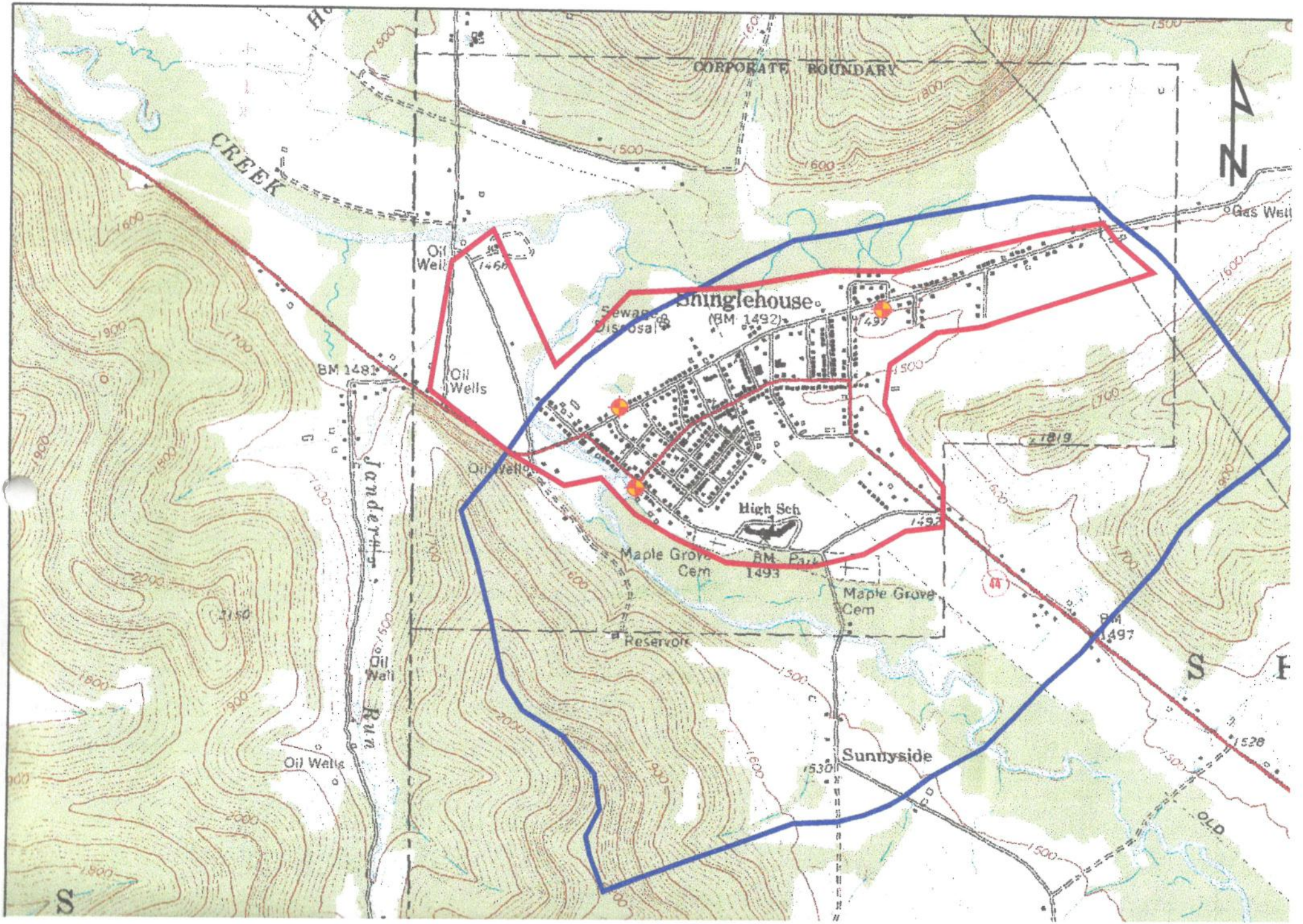
The Borough recognizes the possibility of potential threats to its water supply. In an effort to address the potential problems, which could affect the source, the Borough of Shinglehouse, with guidance from the Potter County Planning, PA DEP Mansfield Office, and the Pennsylvania Rural Water Association established the Shinglehouse Borough Source Water Protection Steering Committee to make recommendations to the Shinglehouse Borough Council and Potter County Planning.

Source Water Protection plans are necessary for the protection of the system's source from contaminants that are difficult and costly to treat through normal means. The plan clearly identifies actual and potential sources of contamination to the source. Secondly, it allows communities to effectively educate the public on the importance of their drinking water source. Third, the plan serves as the first step for long-term sustainable planning for the future of the community. Finally, it provides a comprehensive action plan in case of an emergency.


CORPORATE BOUNDARY
N
Honeoye
Gas Well
Shinglehouse
(BM 1492)
Sewage Disposal
High Sch
Maple Grove Cem
BM 1493
Park
Maple Grove Cem
Reservoir
44
BM 1497
S H A R O
x1954
1819
1528
Sunnyside
1530
OLD RAILROAD
BM 1532

Public Sewer Area

0 625 1,250 2,500 3,750



The focal point of a local WHP program is the delineated wellhead protection area (WHPA). The SDWA defines a wellhead protection area as the surface and subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. The PA DEP Safe Drinking Water Regulations define a three-tiered WHPA as follows:

Zone I: - The protective zone immediately surrounding a well, spring or infiltration gallery which shall be 100' to 400' radius depending on site-specific source and aquifer characteristics.

Note: As explained above, this area shall be controlled by the water supplier for new sources. Zone I may be determined by either using PA DEP's Zone I graphs or by a qualified consultant directly calculating the area using site-specific data. For wells permitted before the October 1995 Zone I requirement, an acceptable Zone I would also be the isolation distance as permitted. Typically, this will be a 100' radius.

The Zone I area for Shinglehouse Borough was performed by William Gough and William Miller, Geologists, Moody and Associates and is included with this reporting Section 4.

Zone II: - The zone encompassing the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery. Zone II shall be a one-half mile radius unless a more detailed delineation is approved.

The Zone II WHPA delineation for Shinglehouse Borough was performed by William Gough and William Miller, Geologists, Moody and Associates and is included with this report in Section 4.

Zone III: - The zone beyond Zone II that contributes significant surface water and ground water to Zone I and Zone II.

The Zone III delineation for Shinglehouse Borough was performed by William Gough and William Miller, Geologist, Moody and Associates and is included with this report in Section 4.

OVERVIEW OF THE WELLHEAD PROTECTION PROGRAM

The 1986 amendments to the federal **Safe** Drinking Water Act (SDWA) required States to develop Wellhead Protection (WHP) Programs to protect ground-water **sources** used by public water systems from contamination. Pennsylvania's WHP Program, which is administered by the **Pennsylvania Department of Environmental Protection (PA DEP),** obtained approval from the U.S. Environmental Protection Agency in March 1999. The **responsibilities** for WHP are shared among many stakeholders, but the foremost responsibility for ensuring that groundwater is adequately protected is **at** the local government level because the authority to regulate land use resides there. WHP is a cooperative, pro-active, positive approach to protecting ground-water supplies **and should not** be interpreted as an adverse action. The **program** involves the delineation of **wellhead** protection areas **for** wells **and springs,** identification **of** potential sources of ground-water contaminants and the development of **management** measures as a means **to reduce** the potential for contamination of the ground-water supply.

Although development of a local WHP program is voluntary, PA **DEP** regulations do require some basic wellhead protection **measures** for new public water supply wells, springs, or infiltration galleries. Each new ground-water source **must** establish an innermost protection zone (Zone I WHP area) with a fixed radius of 100-400 feet depending on certain site-specific characteristics. The water supplier must show that it has ownership of, or substantially controls by a deed restriction or other acceptable means, the Zone I WHP area. In addition to this delineation, communities are encouraged to establish wellhead protection programs, which include the following:

1) The formation of a steering committee to establish and implement the wellhead protection program whose role it is to conduct a potential contaminant source inventory, provide options for the management of the WHP area (also known as the source water protection area), seek public input into the creation of the WHP plan, seek approval of the WHP program and to implement the WHP program;
2) Development of a public education program;
3) Delineation of the contributing areas of the water sources;
4) Identification of potential contamination **sources** within the wellhead protection area;
5) Development and **implementation** of wellhead protection area management actions to protect the **water** sources;
6) Development of an Emergency Contingency Plan for alternative water supply sources in the **event** the ground water supply becomes contaminated and **emergency** response planning for **incidents that may** impact **water** quality;
7) Conduct new **water source** planning **to** insure the protection of new **water** source locations and **to** augment **current** supplies.

Wellhead protection is a voluntary program, but water systems across the state are encouraged to take the above steps in protecting all ground-water sources. In addition, PA DEP has issued a set of guidelines that outline the minimum elements necessary for a local WHP program to obtain DEP approval. These guidelines are provided in Appendix A of this plan. DEP approval of local WHP programs will allow proper tracking and coordination so that local WHP efforts will be supported and recognized.

PA DEP has developed forms for submittal of WHP plans for review and approval. These completed forms, along with 3 copies of the Plan can be submitted to the DEP Regional Office for review, recommendations and approval. Electronic copies of these forms can be obtained at www.dep.state.pa.us and typing "Source Water" in the directLink box or you can contact the Bureau of Water Supply Management at 717-772-4018.

Delineation Guidance

The focal point of a local WHP program is the delineated wellhead protection area (WHPA). The SDWA defines a wellhead protection area as the surface and subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. The PA DEP Safe Drinking Water Regulations define a three-tiered WHPA as follows:

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OVERVIEW OF THE SOURCE WATER ASSESSMENT AND PROTECTION PROGRAM

To expand the benefits realized from WHP efforts, the 1996 Safe Drinking Water Act reauthorization requires (under Section 1453) States to develop a Source Water Assessment and Protection (SWAP) Program. The SWAP program assesses the drinking water sources serving public water systems for their susceptibility to pollution. This information will be used as a basis for building voluntary, community-based barriers to drinking water contamination.

Pennsylvania's assessment program will:

> (1) Delineate the boundaries of the areas providing source waters for all public water systems; and
>
> (2) Identify (to the extent practicable) the origins of regulated and certain unregulated contaminants in the delineated area to determine the susceptibility of public water systems to such contaminants.

These assessments are of the raw water quality, not the finished water compliance. DEP will conduct assessments for community water systems supplied primarily by ground water and serving a population of 3,300 or more. The ground-water sources of public water systems serving less than 3,300 will be initially assessed using readily available data from the program's geographic information system (GIS). Assessments for the larger community water systems supplied primarily by surface-water sources will be conducted through contracted services. DEP staff will conduct assessments for community water systems supplied by surface water in basins less than 100 square miles and 90% forested.

Acknowledgement

Standard language used within this document describing potential contaminant sources and management of those sources was provided by Acer Engineering of Lancaster, PA. The original template was designed by PA Rural Water Association and was partially based on previous Plans developed by Moody & Associates - Meadville, PA and Spotts, Stevens & McCoy - Wyomissing, PA. Review and revisions to the template were made by PRWA and PA DEP.

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STEERING COMMITTEE AND PUBLIC PARTICIPATION

The initial Shinglehouse Borough Source Water Protection Steering Committee consisted of Shinglehouse Borough employees, Borough Council representatives, residents, and Potter County representatives. William Gough and William Miller, Hydrogeologists, Moody and Associates and PA Rural Water Association provided technical assistance. A public meeting for comment on the draft plan was held on June 10, 2003.

Steering Committee

Name	Role	Title	Represent
Mark Meachan	Committee person		Public Works
Deborah Resig	Secretary		Borough
George Donovan	Committee person		Business
David Fox	Emergency Management		Fire Department
Barry Church	Committee person		Borough Citizen

Consultants:

William Gough and William Miller, Hydrogeologists, Moody and Associates

Technical Assistance

Judy Muehl, PA Rural Water Association
John McLaughlin, PA DEP, Mansfield Office
Mike Kear, Potter County Planning

Steering Committee Meeting Dates

Date	Location	Purpose
5-9-01	Shinglehouse Library	Committee meeting/Grant App.
6-19-01	Shinglehouse Library	Committee meeting/Mgt.
7-24-01	Shinglehouse Library	Review Grant Agreement
8-28-01	Shinglehouse Library	Committee meeting/GW model
3-13-02	Potter County Planning	Joint WHP Meeting/western county
4-24-02	Shinglehouse Library	Committee meeting with Moody & Associates
5-28-02	Potter County Planning	Joint WHP Meeting/delineation
1-14-03	Shinglehouse Borough	Review of Draft WHP Plan
2-26-03	Potter County Planning	Training on Groundwater Model
6-10-03	Shinglehouse Library	Public Meeting Moody & Associates

SOURCE WATER PROTECTION AREA DELINEATION
SHINGLEHOUSE BOROUGH WATER SYSTEM
POTTER COUNTY, PENNSYLVANIA

INTRODUCTION

A source water protection plan is a proactive strategy to ensure a clean and safe public water supply. Wellhead protection attempts to limit the potential that ground water utilized as a source of drinking water could become contaminated. It can be very expensive to clean up contaminated ground water. Reducing the risk of contamination to ground water supplies is thus important for both public health and economic reasons.

Wellhead protection is simply the protection of the area surrounding a well or well field. This wellhead protection area (WHPA) is defined as the surface and subsurface area, surrounding a well or spring that supplies a public water system, through which contaminants are likely to pass and eventually reach the water well or spring. The size and shape of the WHPA are dependent on such factors as pumping rates, time-of-travel of ground water flowing to a well, aquifer characteristics and the geologic setting of the aquifer.

The Shinglehouse Borough Water System (SBWS) is completing their Wellhead Protection Plan to protect their water supply. This report will present the wellhead protection areas (WHPAs) calculated for the SBWS Wells #1, #2 and #3.

STUDY AREA BACKGROUND

Shinglehouse Borough is located in Potter County, Pennsylvania, at the confluence of Oswayo and Honeoye Creeks. Based on pumping data from 2001 and January and February 2002, the SBWS draws an average of approximately 169,000 gallons per day (gpd), with a peak daily usage for this time period of 240,000 gpd, from primarily Well #3. A second well, Well #2, is used for system backup. Well #1 is no longer used. This report will address the primary well, Well #3, the backup well, Well #2 and the unused Well #1. The locations of the SBWS wells are shown in FIGURE 1.

Bedrock in the Shinglehouse area consists of nearly flat-lying shale, siltstone and sandstone. FIGURE 2 is a map of the Shinglehouse area showing the mapped geologic bedrock units of the area, from the *"Atlas of Preliminary Geologic Quadrangle Maps of Pennsylvania"*, which was complied and edited by Thomas M. Berg and Christine M. Dodge and published by the Pennsylvania Bureau of Topographic and Geologic Survey in 1981. The bedrock formations are, from oldest to youngest, the Devonian Age Chadakoin and Catskill Formations and the Mississippian Age Shenango through Oswayo Formations (undivided). Generally, the Chadakoin Formation is found in the Oswayo and Honeoye Creek valleys. The Catskill Formation is found on the ridges, with the tops of the higher ridges capped by the Shenango through Oswayo Formations. The Shinglehouse area is located on the northern flank of the Smethport Anticline, with area bedrock exhibiting a slight dip to the northwest.

Based on the log of SBWS Well #2 and mapping presented in Water Resource Report 68, *"Hydrogeology and Groundwater Quality of the Glaciated Valleys of Bradford, Tioga and Potter Counties, Pennsylvania"*, prepared by John Williams, Larry Taylor and Dennis Low and published by the Pennsylvania Bureau of Topographic and Geologic Survey in 1998, the Oswayo and Honeoye Creek valleys have been filled with over 100 feet of unconsolidated outwash deposits. This material was deposited at the conclusion of area glaciation and consists of well-sorted, sand and gravel deposits. The outwash deposits are found primarily beneath the creeks. The unconsolidated deposits beneath the developed are of Shinglehouse are mapped as ice-contact deposits, which are generally finer-grained and more poorly sorted. FIGURE 3 is a geologic map showing the orientation and extent of the unconsolidated valley-fill deposits in the Shinglehouse area.

A drillers log was available for SBWS Well #2. The earth materials encountered during the installation of Well #2 are summarized below.

Summary of SBWS Well #2 Drillers Log

Depth (feet below ground)	Description
0 – 27'	Gravel
27 – 37'	Gravel and clay
37 – 42'	Sand and gravel
42 – 48'	Sand, fine gravel, clay
48 – 53'	Sandy gravel
53 – 58'	Sand
58 – 61'	Sandy gravel
61 – 64'	Clean gravel
64 – 78'	Sandy clay
78 – 91.5'	Gravel with clay
91.5 – 95'	Sand
95 – 98'	Gravel with clay
98 – 101'	Sand
101 – 112'	Gravel with clay and sand
112 – 117'	Gravel and clay
117 – 120.5'	Sand
120.5 – 121.67'	Gravel and clay
121.67 – 125.5'	Sand
125.5 – 131'	Gravel with clay and some sand
131 – 135'	Gravel
135 – 142'	Clay

Well #2 was installed with 15 feet of screen, from the interval of 120 to 135 feet. The total finished depth of Well #2 is 135 feet. Well logs were not available for Wells #1 and #3 and the depths could be determined due to poor access into the wells. It is assumed that Wells #1 and #3 are similar to Well #2 in depth and aquifer materials.

DELINEATION OF THE SOURCE WATER PROTECTION AREAS (SWPA)

In Pennsylvania, wellhead protection areas (WHPA) are defined as consisting of three zones. Zone 1 is defined as the area immediately surrounding a well and may range from a radius of 100 to 400 feet depending on the pumping rate and geologic setting of the well. Zone 2 is the surface area overlying the portion of the aquifer through which water is diverted to a well or flows to a spring. The default size of a Zone 2 delineation is a one-half mile radius, unless a more detailed delineation is established through more

precise methods. Zone 3 is the area which contributes surface or ground water to Zone 2 which may be significant to protecting the quality of the water supply.

The "Recommended Wellhead Protection Area Zone 1 Delineation Methodology" Compliance Assistance Document, published by the Pennsylvania Department of Environmental Protection in May 1996, was used to determine the Zone 1 WHPAs for the three SBWS wells. Based on a geologic setting of high porosity, an average pumping rate of approximately 167 gallons per minute (gpm), (240,000 gpd), and an open interval of less than 200 feet, the Zone I WHPA radius for each well is 175 feet. FIGURE 4 shows the Zone I WHPAs for the SBWS wells.

The Zone 2 WHPA for the individual wells was delineated using semi-analytical modeling. The RESSQC Module of the WHPA: A Modular Semi-Analytical Model for the Delineation of Wellhead Protection Areas, Version 2.0, developed and published by the USEPA, was utilized to delineate an initial Zone 2 WHPA. The initial Zone 2 WHPA delineated extended beyond the unconsolidated valley-fill deposits onto the valley walls, where the valley-fill aquifer is absent. The delineated WHPAs were refined to include only those areas where the aquifer supplying the wells was present to produce the final Zone 2 WHPA delineations shown in FIGURE 5.

Pumping yields and pumping level data for Well #2 were available from the SBWS. This data and Moody's in-house records were reviewed and the available data was used to calculate several parameters describing the area aquifer supplying the wells used in the semi-analytical model. In addition, Moodys collected site-specific data regarding the direction of ground water flow and its gradient.

The transmissivity, which describes the ability of the aquifer to transmit water, was estimated from the results of the available pumping test data for Well #2. The transmissivity of the valley-fill aquifer was determined using recorded specific capacity of Well #2. Specific capacity is a measure of well yield and drawdown and is expressed as gallons per minute per foot of drawdown. The average specific capacity, measured

from two pumping tests conducted in 1971 and 1982, was approximately 50 gpm/ft. The transmissivity of an aquifer can be approximated from a measured specific conductance. Utilizing the charts presented in the *"Ground Water Manual"*, published by the U.S. Department of the Interior Bureau of Reclamation in 1977, the transmissivity of the sand and gravel aquifer utilized by Well #2 was determined to be 1,200 ft²/day. The porosity of the sand and gravel aquifer was assumed to be 0.25. The saturated thickness was set at 100 feet. The well yield for each well was set assuming that one well was supplying the entire system at the peak usage recorded in 2001 of 240,000 gpd.

The water table or potentiometric surface is defined as the elevation to which water would rise in a well penetrating the aquifer. The direction of ground water flow in the area is determined by the orientation of the potentiometric surface. Three wells, not oriented in a straight line are necessary to determine the gradient and direction of flow of the potentiometric surface. With known ground water elevations in the three wells, the three point problem can be solved to yield the direction of ground water flow and the ground water gradient.

The locations of Wells #1, #2 and #3 form a triangle and can be used to determine the direction of ground water flow and its gradient. The elevations of the top to the casings of SBWS Wells #1, #2 and #3 were surveyed and the depth to the static ground water level was measured. The ground water elevations in these three wells were then used to calculate the ground water gradient of 0.006, with ground water flow to the northwest. The graphical determination of the ground water gradient in the area of Well #2 is shown in FIGURE 6. This calculated ground water flow direction is consistent with what would be expected within the orientation of the sand and gravel aquifer.

The RESSQC model was run assuming a ten-year time of travel. Based on the assumptions and values used in the model, the model calculated Zone 2 WHPA delineation shows the theoretical location of a particle of water within the ground water flow system that would reach the wells in ten years.

The Zone 2 WHPA delineations shown in FIGURE 5 were derived from the initial delineations calculated by the RESSQC model. The Zone 2 WHPAs for the three SBWS wells were modified by truncating the delineated area where it extended beyond the boundary of the valley-fill aquifer. The delineated area was then expanded to replace the truncated area.

The Zone 3 WHPA for Wells #1, #2 and #3, shown in FIGURE 5, is based on ground surface topography. The Zone 3 wellhead protection area is defined as the area which contributes surface or ground water to Zone 2 which may be significant to protecting the quality of the water supply. The Zone 3 WHPA for the three wells contains the bedrock uplands that may contribute overland flow to the valley bottom, which would infiltrate to recharge the sand and gravel aquifer.

The Zone 2 WHPA for Wells #1 and #2 covers 0.22 square miles. The Zone 2 WHPA for Well #3 covers 0.14 square miles. The Zone 3 WHPA for the three wells covers 1.42 square miles.

Revised from:
(1) 1960 state map compilation sheet.
2. 2nd. Geol. Survey Repts. G3 and R.

From: Berg, T. and Dodge, C., 1981

EXPLANATION

Pp
Pottsville Gp.

MDhm
Huntley Mountain Fm.

MDso
Venango Fm. through Oswayo Fm., undiv.

Dck
Catskill Fm.

Dch
Chadakoin Fm.

NOTE: The facies change between MDso and MDhm is approximately located and not based on detailed studies.

REFERENCES

Ashburner, C. A., (1880). *The geology of McKean County, and its connection with that of Cameron, Elk and Forest*, Pennsylvania Geological Survey, 2nd ser., Report R, 371 p., and separate volume of maps and charts.

Sherwood, Andrew, and Platt, Franklin (1880), *The geology of Potter County [and] Report on the coal fields*, Pennsylvania Geological Survey, 2nd ser., Report GGG, 121 p.

SCALE 1:62500

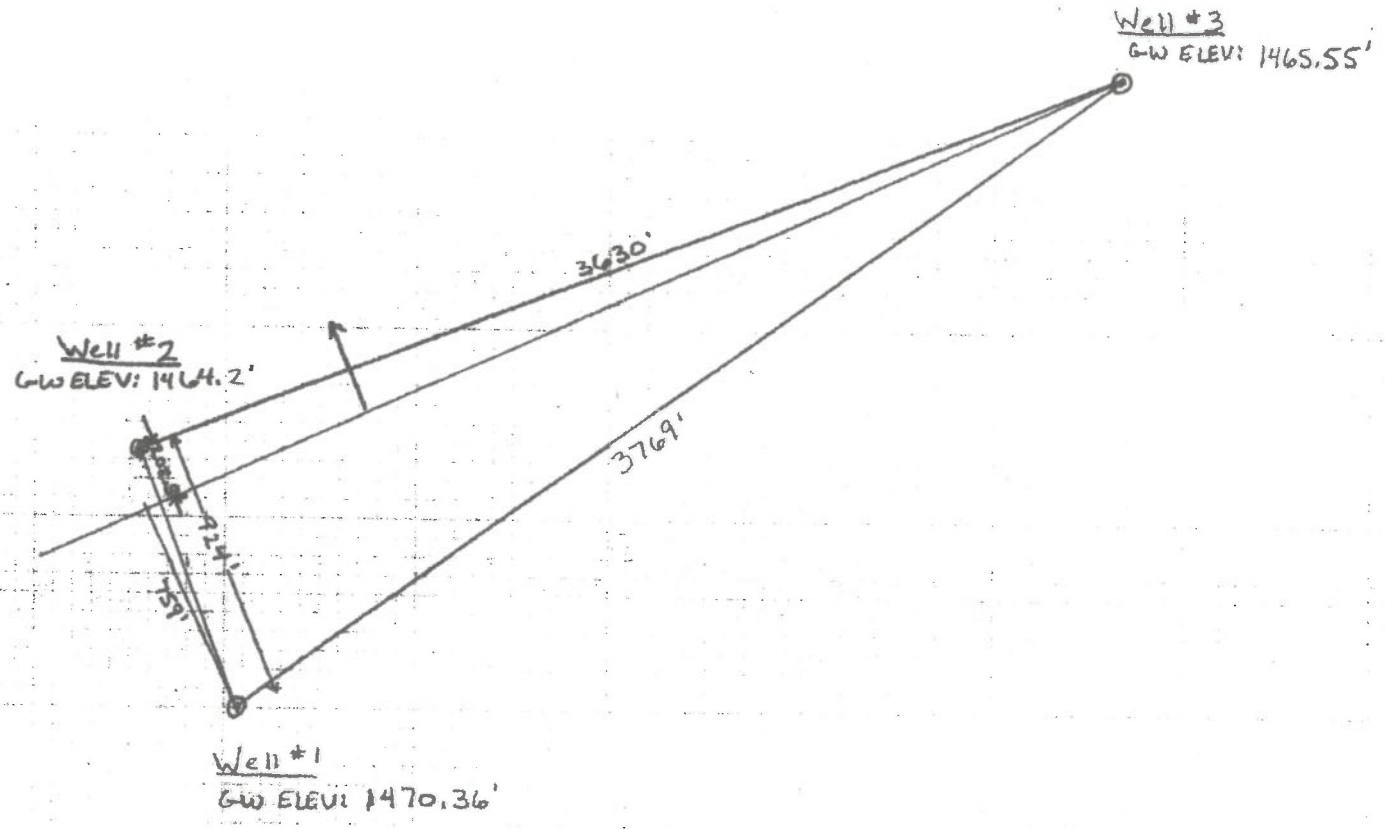
0 1 MILE

0 1 KILOMETER

Compiled by W. E. EDMUNDS, 1977

COUDERSPORT 15' (NW)

FIGURE 5: Graphical Determination of Ground Water Gradient and Direction of Ground Water Flow



1470.36' − 1464.2' = 6.16'

1465.55' − 1464.2' = 1.35'

$\frac{1.35'}{6.16'} = 0.219 \times 924' = 202.5'$

$\text{Gradient} = \frac{1470.36' - 1465.55'}{759'} = 0.006$

Well Information

Well # 3			GPS Verified?*
Location: (latitude; longitude)	41 57 59.822	78 11 06.258	Y
Total Depth of Well: (feet)	132'		
Depth of Casing: (feet)	131'		
Casing – Diameter (inches)	8"		
Capacity: (permitted yield - gpd)	288,000		
Daily Use: (gpd)	130,000	288,000	
Surface Elevation: (feet)	1497		
Year Developed:			
Aquifer Name:			
Static Water Level (below top of casing - in feet):			

***GPS locations**

Well # 2			GPS Verified?*
Location: (latitude; longitude)	41 57 46.434	78 11 53.239	Y
Total Depth of Well: (feet)	135'		
Depth of Casing: (feet)			
Casing – Diameter (inches)	10"		
Capacity: (permitted yield - gallons per day)	216,000		
Daily Use: (gallons per day)	Standby	216,000	
Surface Elevation: (feet)	1490'		
Year Developed:			
Aquifer Name:			
Static Water Level (below top of casing - in feet):			

***GPS locations**

1) Accuracy of GPS verification: 3-5 meters

2) GPS location data was corrected using base station and differential correction method? Yes

FIGURE 1

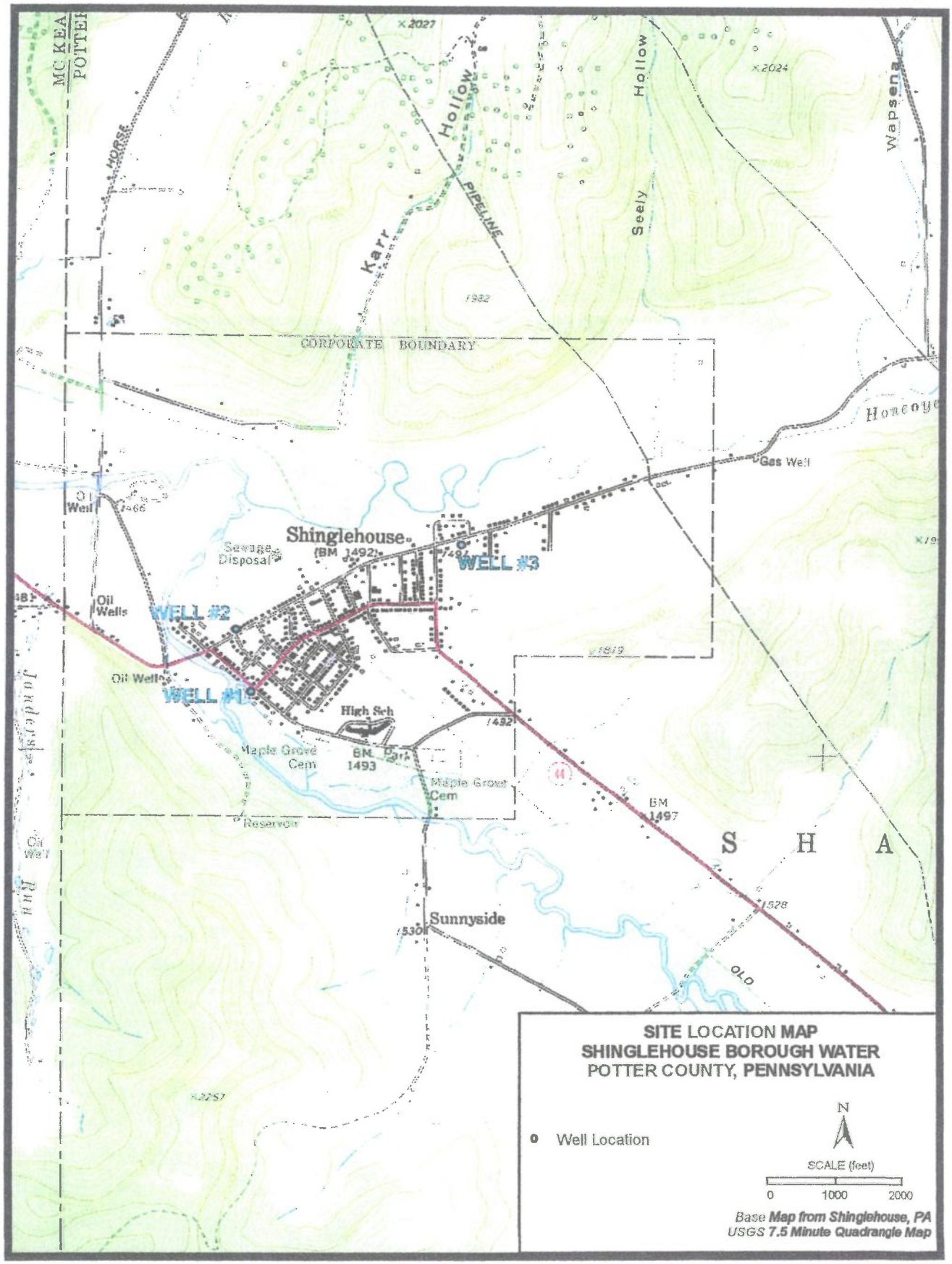

MC KEA
POTTER
HORSE
Hollow
PIPELINE
Karr
Hollow
Seely
Wapsena
CORPORATE BOUNDARY
Gas Well
Oil Well
Shinglehouse
(BM 1492)
Sewage Disposal
WELL #3
Oil Wells
WELL #2
Oil Wells
WELL #1
High Sch
Maple Grove Cem
BM 1493
Maple Grove Cem
Reservoir
BM 1497
S H A
Sunnyside
OLD
SITE LOCATION MAP
SHINGLEHOUSE BOROUGH WATER
POTTER COUNTY, PENNSYLVANIA
Well Location
N
SCALE (feet)
0
1000
2000
Base Map from Shinglehouse, PA
USGS 7.5 Minute Quadrangle Map

FIGURE 3

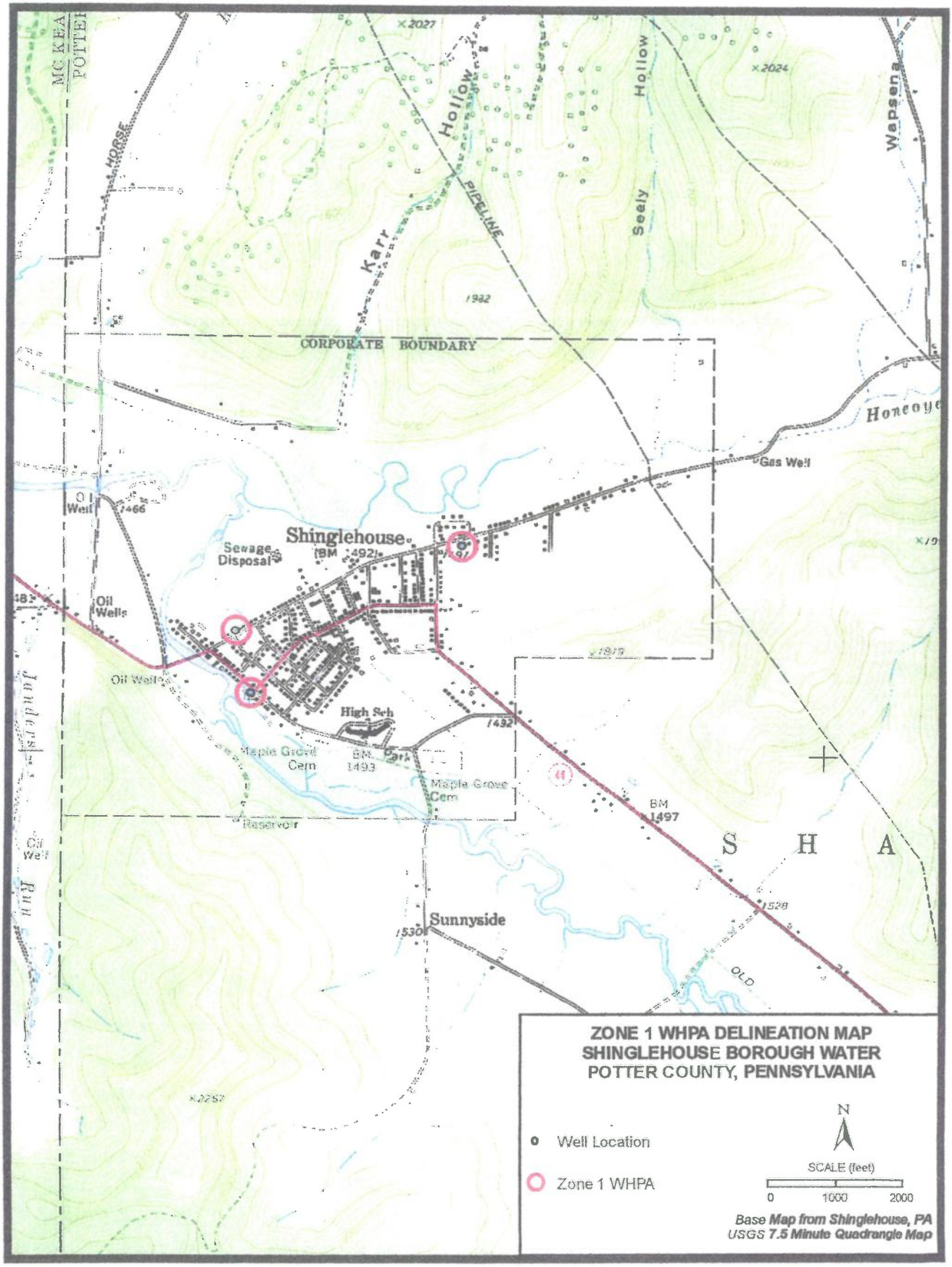
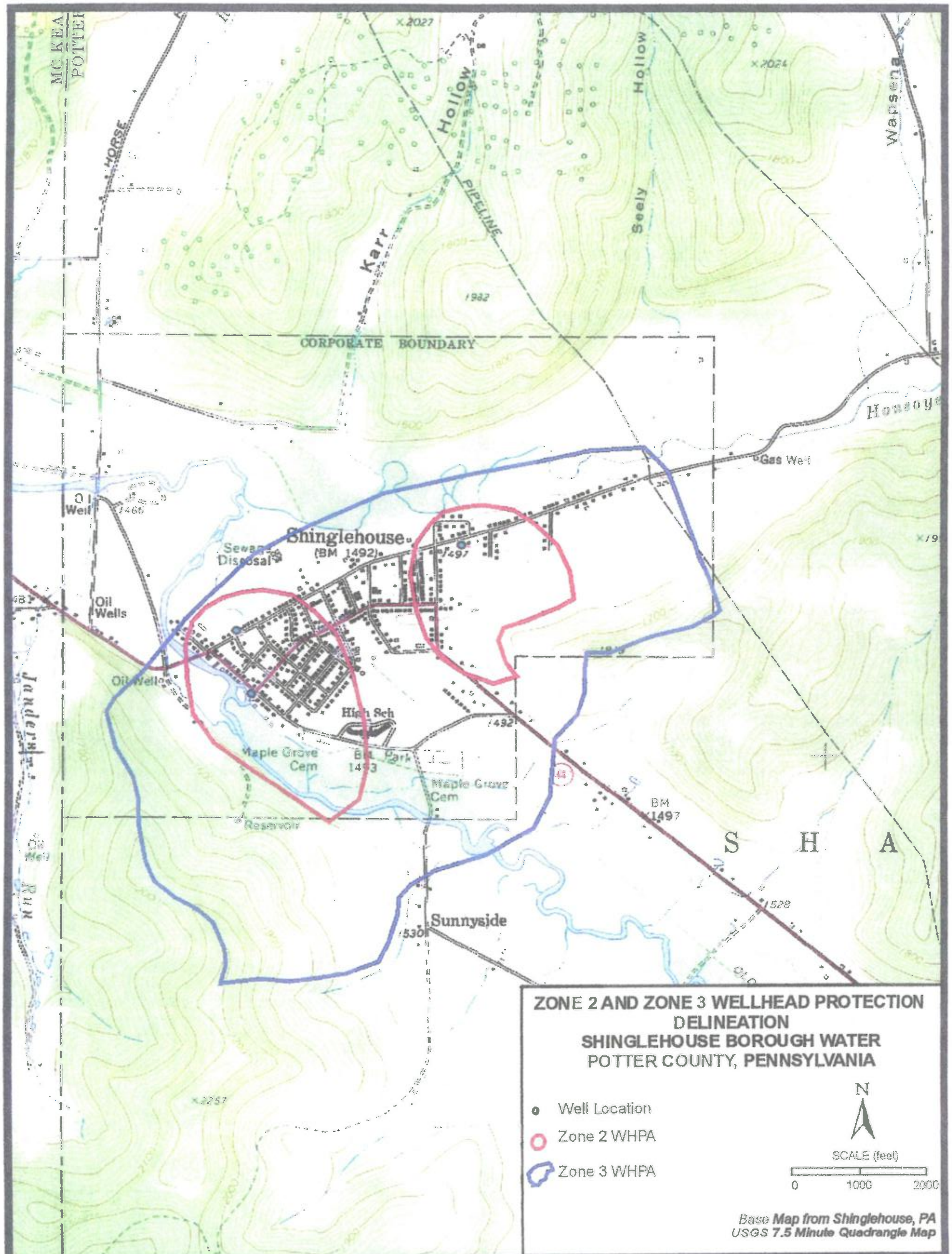

MC KEA
POTTER
HORSE
Hollow
PIPELINE
Karr
Seely
Hollow
Wapsena
CORPORATE BOUNDARY
Honeoye
Gas Well
Oil Well
Shinglehouse
Sewage Disposal
Oil Wells
Oil Wells
High Sch
Maple Grove Cem
BM 1493
Maple Grove Cem
Reservoir
BM 1497
S H A
Sunnyside
OLD
Judge Run
Oil Well
ZONE 1 WHPA DELINEATION MAP
SHINGLEHOUSE BOROUGH WATER
POTTER COUNTY, PENNSYLVANIA
Well Location
Zone 1 WHPA
N
SCALE (feet)
0
1000
2000
Base Map from Shinglehouse, PA
USGS 7.5 Minute Quadrangle Map

FIGURE 4


ZONE 2 AND ZONE 3 WELLHEAD PROTECTION
DELINEATION
SHINGLEHOUSE BOROUGH WATER
POTTER COUNTY, PENNSYLVANIA
Well Location
Zone 2 WHPA
Zone 3 WHPA
N
SCALE (feet)
0
1000
2000
Base Map from Shinglehouse, PA
USGS 7.5 Minute Quadrangle Map
MC KEAN
POTTER
CORPORATE BOUNDARY
Karr Hollow
Seely Hollow
PIPELINE
Wapsena
Shinglehouse
(BM 1492)
Sewage Disposal
Oil Wells
Oil Wells
Gas Well
High Sch
Maple Grove Cem
Park
Maple Grove Cem
Reservoir
Sunnyside
BM 1497
S H A
Honeoye

SHINGLEHOUSE VET SOCIAL CLUB	Active	R.D. SHINGLEHOUSE, PA 16748	SAFE DRINKING WATER - EPA Info	
TAYLOR 1 WELL	Active		OIL & GAS	
TIMBERLAND SPORTING GOODS REST	Active	RR 2 BOX 722 SHINGLEHOUSE, PA 16748-9802	SAFE DRINKING WATER - EPA Info	

Search
Subjects

Department of Environmental Protection

eF.A.C.T.S.

Environment, Facility, Application, Compliance Tracking System

welcome | news | background | search | resources | eMapPA

Sites Operating in Shinglehouse Boro

Active Only - Both Active and Inactive

Prev Screen | New Search | Help

18 sites, listed below.

Site Name	Status	Site Address	Program	Pollution Prevention Activites
53923 WILLIAM NORTON SUBDIV	Active	SR 4012 SHINGLEHOUSE BORO, PA		
53923 DAVID BUCHANAN SUBDIV	Active			
53923 ROBERT KARR SUBDIV	Active			
CARLOWS TAVERN	Active	PO BOX 69 SHINGLEHOUSE, PA 16748-0069	SAFE DRINKING WATER - EPA Info	
CHRISTOPHER L YOUNG DENTAL OFC	Active	ACADEMY ST SHINGLEHOUSE, PA 16748	RADIATION PROTECTION	
CONCRETE PLANT #2	Active	RR 2, BOX 572 SHINGLEHOUSE, PA 16748		
EDS SVC	Active	RT 44 & HONEOYE ST SHINGLEHOUSE, PA 16748	WATER POLLUTION CONTROL WASTE MGMT - EPA Info	
NEWTONS SVC	Active	26 ACADEMY ST SHINGLEHOUSE, PA 16748	WATER POLLUTION CONTROL	
RAM FOREST PROD	Active	HC 1 BOX 15A SHINGLEHOUSE, PA 16748-9739	AIR QUALITY WATER RESOURCES MGMT WATER POLLUTION CONTROL	
ROSSMANS FAMILY RESTAURANT	Active	RR 1 BOX 90 SHINGLEHOUSE, PA 16748-9704	SAFE DRINKING WATER - EPA Info	
ROULETTE TWP SEW SYS STP	Active	RR 1 BOX 1 ROULETTE, PA 16746-9701	WATER POLLUTION CONTROL	
SHINGLEHOUSE	Active			
SHINGLEHOUSE BORO	Active	WOLCOTT AVENUE SHINGLEHOUSE, PA 16748-0156	WATER POLLUTION CONTROL WATER RESOURCES MGMT	
SHINGLEHOUSE BORO DUMP	Active	KARR HOLLOW RD SHINGLEHOUSE, PA 16748	WASTE MGMT	
SHINGLEHOUSE BORO WATER SYS	Active	PO BOX 156 SHINGLEHOUSE, PA 16748-0156	SAFE DRINKING WATER - EPA Info WATER RESOURCES MGMT	

APPENDIX B

Pennsylvania eFacts System Facility Summary

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

100 HONEOYE ST, SHINGLEHOUSE PA 16748

Source: 1999 U.S. Census TIGER Files

Target Site (Latitude: 41.963588 Longitude: -78.192303) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Solid Waste Landfill (SWL) or Hazardous Waste .....

Railroads .....

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

Street Name	Dist/Dir	Street Name	Dist/Dir
1st St	0.05 SE		
2nd St	0.11 SE		
Academy St	0.01 NE		
Church St	0.19 SW		
Englar Ave	0.18 NE		
Hickory Cir	0.19 SE		
Honeoye St	0.11 NW		
Lincoln St	0.21 SW		
Lyon St	0.08 NE		
Manley Ave	0.12 SW		
Mill St	0.10 NE		
Palmer Ave	0.23 NE		
Pearl St	0.06 SW		
Pleasant St	0.06 SW		
Puritan Ave	0.01 NE		
Union St	0.15 SW		
Wolcott Ave	0.11 NW		

Environmental FirstSearch
Pennsylvania Databases and Sources

1. **STATE:** The Pennsylvania Priorities List (SPL) is a priority list of sites which have released or could potentially release hazardous substances into the environment. Under the Hazardous Sites Cleanup Act (HSCA) and CERCLA, the Pennsylvania Department of Environmental Protection is authorized to investigate, assess, and cleanup sites in the Commonwealth regardless of whether or not these sites qualify for cleanup under the Federal Superfund Act.

2. **LUST:** The Pennsylvania List of Confirmed Releases report identifies facilities in the Commonwealth with known releases from above ground or underground storage tanks. In this report, the Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management provides pertinent site details such as name and address of the facility, type of substance released, and remediation status.

3. **UST:** The Pennsylvania Department of Environmental Protection, Bureau of Water Quality Management, provides a listing of registered underground storage tanks, known as the Regulated Storage Tank Listing.

4. **SWL:** Solid waste facilities within the Commonwealth are regulated by the Pennsylvania Department of Environmental Protection, Bureau of Waste Management. The lists provided by the DEP and searched in this report include Solid Waste Transfer Stations, Inactive Solid Waste Facilities, and the Solid Waste Inventory Database.

Environmental FirstSearch
Federal Databases and Sources

1. **NPL:** ***National Priority List.*** The EPA's list of confirmed or proposed Superfund sites.

   Updated quarterly.

2. **CERCLIS:** ***Comprehensive Environmental Response Compensation and Liability Information System.*** The EPA's database of current and potential Superfund sites currently or previously under investigation.

   Updated quarterly.

3. **RCRIS:** ***Resource Conservation and Recovery Information System.*** The EPA's database of registered hazardous waste generators and treatment, storage and disposal facilities. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List).

   Updated quarterly.

4. **ERNS:** ***Emergency Response Notification System.*** The EPA's database of EPA emergency response actions.

   Updated quarterly.

5. **NPDES:** ***National Pollution Discharge Elimination System.*** The EPA's database of all permitted facilities receiving and discharging effluents to and from the environment.

   Updated semi-annually.

6. **FINDS:** ***The Facility Index System.*** The EPA's Index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility.

   Updated quarterly.

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

RCRA GENERATOR SITE

SEARCH ID: 7 **DIST/DIR:** NON GC **MAP ID:**

NAME: WAYNE PAVING & CONTRACTING
ADDRESS: RT 44 .3 MI SE OF RT 417
CERES PA 16748

CONTACT: TOM BARBER

REV: 3/11/02
ID1: PAR000000315
ID2:
STATUS: VGN
PHONE: 8146977191

SITE INFORMATION

CONTACT INFORMATION: TOM BARBER
QA SPDT
RD 2 BOX 572
SHINGLEHOUSE PA 16748

PHONE: 8146977191

UNIVERSE NAME:

VGN: GENERATES LESS THAN 100 KG/MONTH OF **HAZARDOUS** WASTE

SIC INFORMATION:

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

REGISTERED **UNDERGROUND** STORAGE TANKS

SEARCH ID: 17 **DIST/DIR:** NON GC **MAP ID:**

NAME: WAYNE GRAVEL PROD INC
ADDRESS: ROUTE 44
SHINGLEHOUSE PA 16748

CONTACT:

REV: 12-01-01
ID1: 42-91015
ID2: 18973
STATUS:
PHONE:

TANK DETAILS

TANK ID:	98467		
TANK NO.:	001	**TANK TYPE:**	AST
CAPACITY:	8000	**PRODUCT:**	DIESEL
INSTALLATION DATE:	19860401	**STATUS:**	CURRENTLY IN USE
TANK ID:	98468		
TANK NO.:	002	**TANK TYPE:**	AST
CAPACITY:	10000	**PRODUCT:**	DIESEL
INSTALLATION DATE:	19860401	**STATUS:**	CURRENTLY IN USE
TANK ID:	98469		
TANK NO.:	003	**TANK TYPE:**	AST
CAPACITY:	1000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19860401	**STATUS:**	CURRENTLY IN **USE**
TANK ID:	98470		
TANK NO.:	004	**TANK TYPE:**	AST
CAPACITY:	550	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19860401	**STATUS:**	CURRENTLY **IN** USE

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

CERCLIS SITE

SEARCH ID: 4 **DIST/DIR:** NON GC **MAP ID:**

NAME: SHINGLEHOUSE BORO DUMP
ADDRESS: UNOBTAINABLE
SHINGLEHOUSE PA 16748
CONTACT:

REV: 3/8/02
ID1: PAD981035983
ID2: 0301881
STATUS: NFRAP-N
PHONE:

DESCRIPTION:
MUNICIPAL WASTE LANDFILL.

ACTION/QUALITY	AGENCY/RPS	START/RAA	END
ARCHIVE SITE			12-01-1984
DISCOVERY	State, Fund Financed		12-01-1984
PRELIMINARY ASSESSMENT	State, Fund Financed	12-01-1984	12-01-1984
NFRAP (No Futher Remedial Action Planned			

REGISTERED **UNDERGROUND** STORAGE TANKS

SEARCH ID: 16 **DIST/DIR:** NON GC **MAP ID:**

NAME: UNI MART 04158
ADDRESS: OSWAYO **HONEOYE** ST
SHINGLEHOUSE PA 16748
CONTACT:

REV: 12-01-01
ID1: 53-70738
ID2: 8234
STATUS:
PHONE:

TANK DETAILS

TANK ID:	67403		
TANK NO.:	001	**TANK TYPE:**	UST
CAPACITY:	10000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19900601	**STATUS:**	CURRENTLY IN USE
TANK ID:	67404		
TANK NO.:	002	**TANK TYPE:**	UST
CAPACITY:	10000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19900601	**STATUS:**	CURRENTLY IN USE
TANK ID:	67405		
TANK NO.:	003	**TANK TYPE:**	UST

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 14 **DIST/DIR:** NON GC **MAP ID:**

NAME: RAM FOREST PRODS
ADDRESS: HONEOYE RD
SHINGLEHOUSE PA 16748
CONTACT:

REV:
ID1: 53-16441
ID2:
STATUS: UST
PHONE:

	Tanks	Installed	Capacity
CURRENT:	1	DEC 80	4000
REMOVED:	0		
PERMANENT:	0		
UNKNOWN:	0		
TEMP:	0		
CLOSED:	0		

PRODUCTS: DIESEL
TANK MATERIAL:
PIPE MATERIAL:

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 15 **DIST/DIR:** NON GC **MAP ID:**

NAME: SHARON TWP GARAGE
ADDRESS: 11 MILE RD
SHINGLEHOUSE PA 16748
CONTACT:

REV: 12-01-01
ID1: 53-31688
ID2: 10287
STATUS:
PHONE:

TANK DETAILS

TANK ID:	149011		
TANK NO.:	003	TANK TYPE:	UST
CAPACITY:	400	PRODUCT:	GASOLINE
INSTALLATION DATE:	19980929	STATUS:	CURRENTLY IN USE
TANK ID:	149012		
TANK NO.:	004	TANK TYPE:	UST
CAPACITY:	1600	PRODUCT:	DIESEL
INSTALLATION DATE:	19980929	STATUS:	CURRENTLY IN USE

Environmental FirstSearch
Site Detail Report

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

CERCLIS SITE

SEARCH ID: 3 **DIST/DIR:** NON GC **MAP ID:**

NAME: POWERHOUSE ROAD ASSESSMENT
ADDRESS: **POWERHOUSE** ROAD
SHINGLEHOUSE PA 16748
CONTACT:

REV: 3/8/02
ID1: **PAN000305635**
ID2: 0305635
STATUS: NOT PROPOSED
PHONE:

DETAILS NOT AVAILABLE

REGISTERED **UNDERGROUND** STORAGE TANKS

SEARCH ID: 13 **DIST/DIR:** NON GC **MAP ID:**

NAME: RAM FOREST PROD
ADDRESS: 1 MILE EAST ON RT 44 FROM CERES
SHINGLEHOUSE PA 16748
CONTACT:

REV: 12-01-01
ID1: 53-36074
ID2: 21041
STATUS:
PHONE:

TANK DETAILS

TANK ID: 130138
TANK NO.: 001
CAPACITY: 4000
INSTALLATION DATE: 19910501
TANK TYPE: AST
PRODUCT: DIESEL
STATUS: CURRENTLY IN USE

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 19 **DIST/DIR:** NON GC **MAP ID:**

NAME: NEWTON SERVICE
ADDRESS: ACADEMY STREET
SHINGLEHOUSE BORO PA 16748
CONTACT:

REV:
ID1: 0797-3507
ID2:
STATUS: YES
PHONE:

SUBSTANCE RELEASED: BTEX
CLEANUP COMPLETION DATE: 1/21/97
CLASS: F

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 12 **DIST/DIR:** NON GC **MAP ID:**

NAME: NEWTONS SVC
ADDRESS: 26 ACADEMY ST
SHINGLEHOUSE PA 16748
CONTACT:

REV: 12-01-01
ID1: 53-21832
ID2: 37313
STATUS:
PHONE:

TANK DETAILS

TANK ID:	140990		
TANK NO.:	005	**TANK TYPE:**	UST
CAPACITY:	11000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19960711	**STATUS:**	CURRENTLY IN USE
TANK ID:	140991		
TANK NO.:	006	**TANK TYPE:**	UST
CAPACITY:	4000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19960711	**STATUS:**	CURRENTLY IN USE
TANK ID:	140992		
TANK NO.:	007	**TANK TYPE:**	UST
CAPACITY:	3000	**PRODUCT:**	**DIESEL**
INSTALLATION DATE:	19960715	**STATUS:**	CURRENTLY IN USE
TANK ID:	140993		
TANK NO.:	008	**TANK TYPE:**	UST
CAPACITY:	2000	**PRODUCT:**	DIESEL
INSTALLATION DATE:	19960715	**STATUS:**	CURRENTLY IN USE
TANK ID:	140994		
TANK NO.:	009	**TANK TYPE:**	UST
CAPACITY:	1125	**PRODUCT:**	KEROSENE
INSTALLATION DATE:	19960715	**STATUS:**	CURRENTLY IN USE

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

LEAKING **UNDERGROUND** STORAGE TANKS

SEARCH ID: 18 **DIST/DIR:** NON GC **MAP ID:**

NAME: HINDLE S GENERAL STORE
ADDRESS: RTE. 44
MILLPORT PA 16748
CONTACT:

REV:
ID1: 0797-5406
ID2:
STATUS: NO
PHONE:

SUBSTANCE RELEASED: HEATING OIL (NO. 2)
CLEANUP COMPLETION DATE:
CLASS: F

REGISTERED **UNDERGROUND** STORAGE TANKS

SEARCH ID: 11 **DIST/DIR:** NON GC **MAP ID:**

NAME: HINDLES GENERAL STORE
ADDRESS: HC 1 BOX 94A
SHINGLEHOUSE PA 16748
CONTACT:

REV:
ID1: 53-15940
ID2:
STATUS: UST
PHONE:

	Tanks	Installed	Capacity
CURRENT:	1	NOV 84	550
REMOVED:	0		
PERMANENT:	0		
UNKNOWN:	0		
TEMP:	0		
CLOSED:	0		

PRODUCTS: GASOLINE
TANK MATERIAL:
PIPE MATERIAL:

LEAKING **UNDERGROUND** STORAGE TANKS

SEARCH ID: 19 **DIST/DIR:** NON GC **MAP ID:**

NAME: NEWTON SERVICE
ADDRESS: ACADEMY STREET
SHINGLEHOUSE BORO PA 16748
CONTACT:

REV:
ID1: 0797-3507
ID2:
STATUS: YES
PHONE:

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

RCRA GENERATOR **SITE**

SEARCH ID: 6 **DIST/DIR:** NON GC **MAP ID:**

NAME:	HEWITTS JOHN AUTO BODY	**REV:**	3/11/02
ADDRESS:	FAIRGROUNDS RD 100 FT W RT 44	**ID1:**	PAR000018606
	SHINGLEHOUSE PA 16748	**ID2:**	
		STATUS:	VGN
CONTACT:	JOHN HEWITT	**PHONE:**	8146982178

SITE INFORMATION

CONTACT INFORMATION: JOHN HEWITT
OWNER
RD 1 PO BOX 1235
SHINGLEHOUSE PA 16748

PHONE: 8146982178

UNIVERSE NAME:

VGN: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 10 **DIST/DIR:** NON GC **MAP ID:**

NAME: GAS FLD SPECIALISTS
ADDRESS: RR 1 BOX 1269
SHINGLEHOUSE PA 16748
CONTACT:

REV: 12-01-01
ID1: 53-71824
ID2: 8284
STATUS:
PHONE:

TANK DETAILS

TANK ID:	150708		
TANK NO.:	001	**TANK TYPE:**	UST
CAPACITY:	6000	**PRODUCT:**	DIESEL
INSTALLATION DATE:	19981214	**STATUS:**	CURRENTLY IN USE
TANK ID:	150709		
TANK NO.:	002	**TANK TYPE:**	UST
CAPACITY:	6000	**PRODUCT:**	**DIESEL**
INSTALLATION DATE:	19981214	**STATUS:**	CURRENTLY IN USE
TANK ID:	150710		
TANK NO.:	003	**TANK TYPE:**	UST
CAPACITY:	6000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	19981214	**STATUS:**	CURRENTLY IN USE

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 9 **DIST/DIR:** NON GC **MAP ID:**

NAME:	EDS QUAKER STATE	**REV:**	12-01-01
ADDRESS:	HONEOYE ST	**ID1:**	53-01392
	SHINGLEHOUSE PA 16748	**ID2:**	14955
		STATUS:	
CONTACT:		**PHONE:**	

TANK DETAILS

TANK ID:	80809		
TANK NO.:	001	**TANK TYPE:**	UST
CAPACITY:	2000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	00000000	**STATUS:**	TEMPORARILY OUT OF USE
TANK ID:	80810		
TANK NO.:	002	**TANK TYPE:**	UST
CAPACITY:	500	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	00000000	**STATUS:**	TEMPORARILY OUT OF USE
TANK ID:	80811		
TANK NO.:	003	**TANK TYPE:**	UST
CAPACITY:	500	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	00000000	**STATUS:**	TEMPORARILY OUT OF USE
TANK ID:	80812		
TANK NO.:	004	**TANK TYPE:**	UST
CAPACITY:	1000	**PRODUCT:**	GASOLINE
INSTALLATION DATE:	00000000	**STATUS:**	TEMPORARILY OUT OF USE

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

RCRA GENERATOR SITE

SEARCH ID: 5 **DIST/DIR:** NON GC **MAP ID:**

NAME:	DAVES BODY SHOP DAVID BLACK	**REV:**	3/11/02
ADDRESS:	SUNNYSIDE RD	**ID1:**	PAD094174349
	SHINGLEHOUSE PA 16748	**ID2:**	
		STATUS:	VGN
CONTACT:	BONNIE BLACK	**PHONE:**	8146977196

SITE INFORMATION

CONTACT INFORMATION: BONNIE BLACK
CO OWNER
RR 1 BOX 746
SHINGLEHOUSE PA 16748

PHONE: 8146977196

CONTACT INFORMATION: DAVID BLACK
OWNER
RD #1
SHINGLEHOUSE PA 16748

PHONE: 8146977196

UNIVERSE NAME:

VGN: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

7532 - SERVICES - TOP AND BODY REPAIR AND PAINT SHOPS

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

CERCLIS SITE

SEARCH ID: 2 **DIST/DIR:** NON GC **MAP ID:**

NAME: ALLEGRO OIL & GAS
ADDRESS: PRINCE LEASE AND RUBY LEASE
SHARON TOWNSHIP PA 16748
CONTACT: VINCENT E ZENONE

REV: 3/8/02
ID1: PAD987388014
ID2: 0304742
STATUS: NFRAP-N
PHONE: 2158143267

DESCRIPTION:
AN UNDETERMINED AMOUNT OF CRUDE OIL WAS RELEASED INTO SPRING-FED TRIBUTARIES TO WAPSENA HOLLOW.

ACTION/QUALITY	AGENCY/RPS	START/RAA	END
ARCHIVE SITE			04-16-1993
DISCOVERY	EPA Fund-Financed		08-13-1992
PRELIMINARY ASSESSMENT NFRAP (No Futher Remedial Action Planned	EPA Fund-Financed		04-16-1993

REGISTERED UNDERGROUND STORAGE TANKS

SEARCH ID: 8 **DIST/DIR:** NON GC **MAP ID:**

NAME: CERES TOWNSHIP
ADDRESS: KINGS RUN RD
SHINGLEHOUSE PA 16748
CONTACT:

REV: 06-30-99
ID1: 42-02003
ID2: 9098
STATUS:
PHONE:

TANK DETAILS

TANK ID: 001
CAPACITY: 550
INSTALLATION DATE: 19830601
TANK TYPE: UST
PRODUCT: GASOLINE

Environmental FirstSearch
Site Detail Report

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

RCRA GENERATOR **SITE**

SEARCH ID: 1 **DIST/DIR:** 0.36 SW **MAP ID:** 1

NAME:	UNIMART CORP	**REV:**	3/11/02
ADDRESS:	OSWAYO & HONEOYE STS	**ID1:**	PAR000027250
	SHINGLEHOUSE PA 16748	**ID2:**	
		STATUS:	SGN
CONTACT:	GARY LEARN	**PHONE:**	8884949090

SITE INFORMATION

CONTACT INFORMATION: GARY LEARN
MAINT
477 E BEAVER AVE
STATE COLLEGE PA 16801

PHONE: 8884949090

UNIVERSE NAME:

SGN: GENERATES 100 - 1000 KG/MONTH OF HAZARDOUS WASTE

SIC INFORMATION:

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

TOTAL: 19 **GEOCODED:** 1 **NON GEOCODED:** 18 **SELECTED:** 0

ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
2	CERCLIS	ALLEGRO OIL & GAS PAD987388014/NFRAP-N	PRINCE LEASE AND RUBY LEASE SHARON TOWNSHI PA 16748	NON GC	
8	UST	CERES TOWNSHIP 42-02003	KINGS RUN RD SHINGLEHOUSE PA 16748	NON GC	
5	RCRAGN	DAVES BODY SHOP DAVID BLACK PAD094174349/VGN	SUNNYSIDE RD SHINGLEHOUSE PA 16748	NON GC	
9	UST	EDS QUAKER STATE 53-01392	HONEOYE ST SHINGLEHOUSE PA 16748	NON GC	
10	UST	GAS FLD SPECIALISTS 53-71824	RR 1 BOX 1269 SHINGLEHOUSE PA 16748	NON GC	
6	RCRAGN	HEWITTS JOHN AUTO BODY PAR000018606/VGN	FAIRGROUNDS RD 100 FT W RT 44 SHINGLEHOUSE PA 16748	NON GC	
18	LUST	HINDLE S GENERAL STORE 0797-5406/NO	RTE. 44 HEBRON TWP. PA 16748	NON GC	
11	UST	HINDLES GENERAL STORE 53-15940/UST	HC 1 BOX 94A SHINGLEHOUSE PA 16748	NON GC	
19	LUST	NEWTON SERVICE 0797-3507/YES	ACADEMY STREET SHINGLEHOUSE B PA 16748	NON GC	
12	UST	NEWTONS SVC 53-21832	26 ACADEMY ST SHINGLEHOUSE PA 16748	NON GC	
3	CERCLIS	POWERHOUSE ROAD ASSESSMENT PAN000305635/NOT PROPOSED	POWERHOUSE ROAD SHINGLEHOUSE PA 16748	NON GC	
13	UST	RAM FOREST PROD 53-36074	1 MILE EAST ON RT 44 FROM CERE SHINGLEHOUSE PA 16748	NON GC	
14	UST	RAM FOREST PRODS 53-16441/UST	HONEOYE RD SHINGLEHOUSE PA 16748	NON GC	
15	UST	SHARON TWP GARAGE 53-31688	11 MILE RD SHINGLEHOUSE PA 16748	NON GC	
4	CERCLIS	SHINGLEHOUSE BORO DUMP PAD981035983/NFRAP-N	UNOBTAINABLE SHINGLEHOUSE PA 16748	NON GC	
16	UST	UNI MART 04158 53-70738	OSWAYO HONEOYE ST SHINGLEHOUSE PA 16748	NON GC	
17	UST	WAYNE GRAVEL PROD INC 42-91015	ROUTE 44 SHINGLEHOUSE PA 16748	NON GC	
7	RCRAGN	WAYNE PAVING & CONTRACTING PAR000000315/VGN	RT 44 .3 MI SE OF RT 417 CERES PA 16748	NON GC	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

JOB: 01-096BM
SHINGLEHOUSE WHPA

TOTAL: 19 **GEOCODED:** 1 **NON GEOCODED:** 18 **SELECTED:** 0

ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Map ID
1	RCRAGN	UNIMART CORP PAR000027250/SGN	OSWAYO & HONEOYE STS SHINGLEHOUSE PA 16748	0.36 SW	1

Environmental FirstSearch
Site Information Report

Request Date: 05-28-02
Requestor Name: Bill Miller
Standard: ASTM

Search Type: COORD
Job Number: 01-096BM

Target Address: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

Demographics

Sites: 19 **Non-Geocoded:** 18 **Population:** NA
Radon: 1.8 - 227.2 PCI/L

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	-78.192303	-78:11:32	**Easting:**	732675.723
Latitude:	41.963588	41:57:49	**Northing:**	4649333.582
			Zone:	17

Comment

Comment: SHINGLEHOUSE WHPA

Additional Requests/Services

Adjacent ZIP Codes: **0.00 Mile(s)**

ZIP Code	City Name	ST	Dist/Dir	Sel

Services:

	Requested?	Date
Sanborns	N	
Aerial Photographs	N	
Topo Maps (hardcopy)	N	
City Directories	N	
Title Search	N	
Municipal Reports	N	
Online Topo Map	N	

Environmental FirstSearch

Search Summary Report

Target Site: 100 HONEOYE ST
SHINGLEHOUSE PA 16748

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2 >	ZIP	TOTALS
NPL	Y	03-08-02	1.00	0	0	0	0	0	0	0
CERCLIS	Y	03-08-02	1.00	0	0	0	0	0	3	3
RCRA TSD	Y	03-11-02	1.00	0	0	0	0	0	0	0
RCRA COR	Y	03-11-02	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	03-11-02	1.00	0	0	0	1	0	3	4
RCRA NLR	N	03-11-02	0.25	-	-	-	-	-	-	-
ERNS	Y	12-31-00	1.00	0	0	0	0	0	0	0
NPDES	N	01-14-02	0.25	-	-	-	-	-	-	-
FINDS	N	07-08-01	0.25	-	-	-	-	-	-	-
TRIS	N	07-16-98	0.25	-	-	-	-	-	-	-
State Sites	Y	08-22-01	1.00	0	0	0	0	0	0	0
Spills-1990	N	NA	0.25	-	-	-	-	-	-	-
Spills-1980	N	NA	0.25	-	-	-	-	-	-	-
SWL	Y	02-05-01	1.00	0	0	0	0	0	0	0
Permits	N	NA	0.25	-	-	-	-	-	-	-
Other	N	NA	0.25	-	-	-	-	-	-	-
REG UST/AST	Y	12-01-01	1.00	0	0	0	0	0	10	10
Leaking UST	Y	11-01-01	1.00	0	0	0	0	0	2	2
State Wells	N	06-01-98	0.50	-	-	-	-	-	-	-
Aquifers	N	NA	0.50	-	-	-	-	-	-	-
ACEC	N	NA	0.50	-	-	-	-	-	-	-
Wetlands	N	11-20-00	0.50	-	-	-	-	-	-	-
Floodplains	N	NA	0.50	-	-	-	-	-	-	-
Receptors	Y	01-01-95	0.50	0	0	0	0	-	0	0
Nuclear Permits	N	04-30-99	0.50	-	-	-	-	-	-	-
Historic/Landmark	N	03-08-01	0.50	-	-	-	-	-	-	-
Federal Land Use	N	06-17-98	0.50	-	-	-	-	-	-	-
Federal Wells	N	NA	0.50	-	-	-	-	-	-	-
Releases(Air/Water)	N	01-06-00	0.25	-	-	-	-	-	-	-
- TOTALS -				0	0	0	1	0	18	19

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to InfoMap Technologies, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in InfoMap Technologies' databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although InfoMap Technologies uses its best efforts to research the actual location of each site, InfoMap Technologies does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of InfoMap Technologies' services proceeding are signifying an understanding of InfoMap Technologies' searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

InfoMap
Technologies Incorporated

Environmental FirstSearch™ Report

TARGET PROPERTY:

100 HONEOYE ST

SHINGLEHOUSE PA 16748

Job Number: 01-096BM

PREPARED FOR:

Moody and Associates

11548 Cotton Road

Meadville, PA 16335

05-28-02

Tel: (610) 430-7530 *Fax: (610) 430-7535*

The need to manage stormwater is created by increased land development - residential, commercial, and industrial - since impervious surfaces prevent rain from soaking into the soil and allow pollutants to accumulate. Stormwater management, which has only been a subject of concern for the past ten to fifteen years, focuses on controlling the volume and peak discharge rate which increase dramatically when impervious surfaces cover an area. Concern also needs to be given to potential impacts on surface and ground water.

The Borough anticipates very little growth in the next ten years. Each year, the committee will meet to review the Source Water Protection Plan and will address any changes in growth, residential, commercial, and industrial at those yearly meetings. If any changes occur, the plan will be amended.

Transportation Routes

Over 1,000 highway spills are reported in Pennsylvania each year. Chemicals, from accidental spills, are often diluted with water, potentially washing the chemicals into the soil or nearby surface water and increasing the potential for contamination. Oil spills can create plumes that travel with ground water flow for long distances. Additionally, de-icing compounds used on transportation routes can contaminate water.

The Source Water Protection Steering Committee will be erecting signs on Rt. #44 with guidance from Moody and Associates, PRWA, Potter County Planning and the PA Department of Transportation. There is heavy truck traffic on Route 44 and the wells are in close proximity to the road. Signs will be erected after the Source Water Protection Plan has been approved by the Department of Environmental Protection and the site is approved by the Pennsylvania Department of Transportation.

Non-Point Sources

Non-point sources are described as dispersed contamination from many sources such as soil erosion, on-lot septic systems, stormwater discharges, agricultural activities, and pollution associated with resource extraction and silviculture. The most significant contamination associated with non-point sources is nitrates associated with the use of manure, fertilizer, and pesticides, which drain into streams and infiltrate into ground water. Household hazardous and commercial/industrial waste (e.g., ammonia, chlorides, paint, paint thinners, waste oil, antifreeze, solvents, etc.), which are sometimes discharged into on-lot septic systems, are also sources of non-point pollution. The potential risk from non-point sources is low for the Shinglehouse WHPA.

Commercial

Many commercial operations use toxic and hazardous materials in their processes. Examples include:

* auto repair shops, gas stations
* road maintenance depots, de-icing operations
* boat yards, railroad tracks and yards, airports
* construction areas
* dry cleaners, laundromats
* medical institutions, research laboratories, photography establishments, printers

The storage, use, and disposal of chemicals required by these operations can pose a potential threat to water since even small amounts of the hazardous materials can contaminate large amounts of surface or ground water. Storing quantities of the materials can also create a serious problem if they are not contained and stored properly. Leaks and spills from storage tanks and pipes can contaminate water, rendering the water unfit for consumption.

The Steering Committee identified eight commercial establishments during the inventory of the WHPA. Included in the inventory is a gasoline station. It is anticipated that the area surrounding Well #2 has a low potential for commercial growth. Primarily, the handling of engine fluids (oil, antifreeze, etc.), restaurant waste (oil), at these facilities are the highest concern.

Shinglehouse Borough will meet with the commercial establishment owners and give them information about the recharge areas of the wells. They will ask for their help in reporting any potential contamination sources used in their establishments and also in reporting any spills to the Emergency Management Coordinator and the Shinglehouse Water System personnel.

Waste Management

Disposal of wastes must be handled carefully to prevent contamination of water. Older landfills in particular can significantly threaten ground water. Leachate is produced from precipitation or other moisture seeping through waste to the base of the landfill, taking with it soluble materials. In unlined landfills, substances in the leachate can percolate through the soil and contaminate aquifers below the landfill. Hazardous waste management is an even more difficult problem since the materials to be handled pose a greater threat. In lined landfills, reliance is placed on the liner not failing after a number of years. Thought must be given to future preventative measures and contingency plans in case of failure.

Residential

Residential contamination threats to surface or ground water, if taken on a case-by-case basis, are normally less than other land use contamination. Most citizens are unaware of the effects of **numerous** potential contaminants stored, used, and disposed of from residential homes.

The potential contaminants include:

* **household** chemicals
* automotive products
* paints/solvents
* **fuel** storage systems
* **on-site** septic/sand **mound** systems
* lawn/garden **chemicals**
* **abandoned** wells

In **the** case of Shinglehouse Borough, the source **is located within 50 feet** of **the nearest** residence. **There** is **a** low potential for more development in the area around the source. This area is primarily served by public **sewerage.**

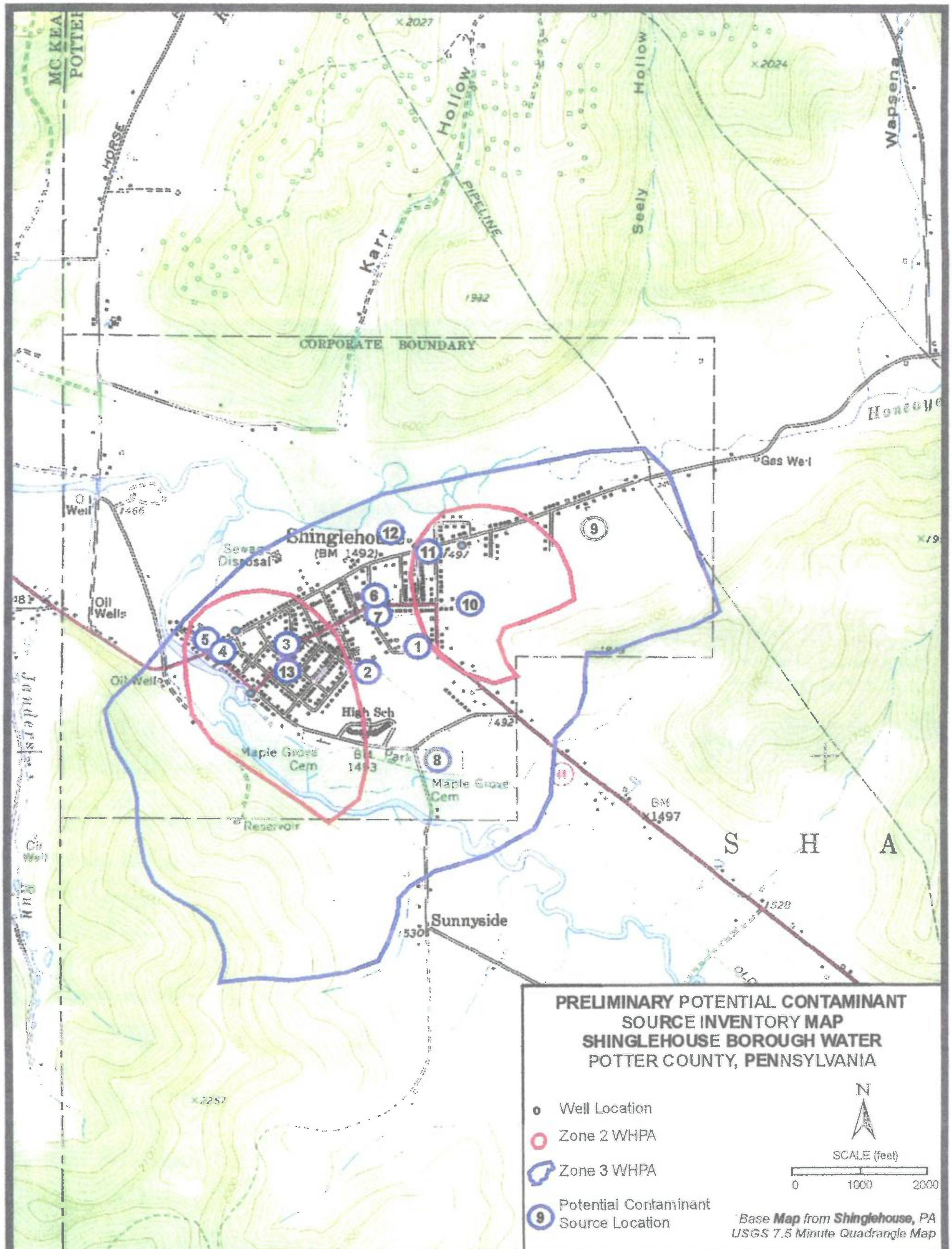
The education component of our project will include education of both **the citizens** of the area and a groundwater program at local schools. We will be purchasing and collecting information brochures, videos and books to present **to** the schools so that they will have tools to use in the classroom and information to hand out to the student, who in turn will take them home. The Committee will be working with the School District to establish a yearly groundwater program in **at** least one of the grade level which will continue after the initial work is completed. A Wellhead Protection brochure will be developed and printed. This brochure will be **sent** to all residents in the area. The brochure will document the **reason** for doing wellhead protection, show the delineated recharge area, and talk about what residents can do to protect the groundwater. It will address household hazardous wastes including oil recycling materials. The Committee will also be contacting the local paper and inviting them to attend the Committee meetings.

Agricultural

Improperly applied chemicals such as pesticides, fungicides and fertilizers can leach through the soil into the ground water or runoff into streams and can present a contamination threat to drinking water supplies. When stored in containers, there is the potential of leaks from the storage area into the ground. There are several agricultural areas within the WHPA. As a whole, the risk to this supply from agricultural sources is considered to be moderate.

Shinglehouse Borough **will meet** with **the** Penn **State** Extension **and** Soil Conservation **Offices** to **obtain their** help **in** educating **the** agricultural community about **the** recharge area **for the** Shinglehouse Borough wells.

FIGURE 6


PRELIMINARY POTENTIAL CONTAMINANT
SOURCE INVENTORY MAP
SHINGLEHOUSE BOROUGH WATER
POTTER COUNTY, PENNSYLVANIA
Well Location
Zone 2 WHPA
Zone 3 WHPA
Potential Contaminant Source Location
N
SCALE (feet)
0
1000
2000
Base Map from Shinglehouse, PA
USGS 7.5 Minute Quadrangle Map
MC KEAN
POTTER
CORPORATE BOUNDARY
Karr Hollow
PIPELINE
Seely Hollow
Wapsena
HORSE
Gas Well
Oil Wells
High Sch
Maple Grove Cem
Reservoir
Sunnyside
S H A
1
2
3
4
5
6
7
8
9
10
11
12
13

PRELIMINARY POTENTIAL CONTAMINANT SOURCE INVENTORY

*Map ID	Facility Name	Owner	Type of Contaminant	Volume of Contamin ant	Relative Risk (High, Medium, Low)	Education Method
1	Former Glass Plant	Shinglehouse Borough	Unknown	Unknown	Low	
2	Scrap Metal Yard	Bill Holland	Unknown (Former Sit Mill)	Unknown	Low	
3	Newton's Citgo	Unknown	Gasoline, Kerosene, Diesel USTs	15,000 gal Gasoline, 1125 gal Kerosene, 5000 gal Diesel	Medium	
4	Unimart	Unknown	Gasoline, USTs	20,000 gal	Medium	
5	Ed's Quaker State	Ed McCleft	Gasoline (former service station – still an auto repair shop)	Unknown	Low	
6	NAPA Auto Parts Store	John Hewitt	Retail motor oils, antifreeze, etc.	Unknown	Low	
7	Former Auto Repair Shop	Dave Blank	Unknown (Building razed, now an empty lot)	Unknown	Low	
8	Maple Grove Cemetery	Maple Grove Cemetery Association	Arsenic	Unknown	Low	
9	Agriculture	Dude Perkins	Unknown	Unknown	Low	
10	Donovan Saw Mill	George Donovan	Unknown	Unknown	Low	
11	Coudersport Beverage	Coudersport Beverage	Formerly Kitches Service Station	Unknown	Low	
12	Agriculture	Scott (Leased by Mark Pinney)	Unknown	Unknown	Low	
13	Howard's Funeral Home	Virgil Howard	Unknown	Unknown	Low	

PRELIMINARY POTENTIAL CONTAMINANT SOURCE INVENTORY

A preliminary potential contaminant source inventory was compiled for the areas within and near the delineated wellhead protection areas of the Shinglehouse Borough Water System Wells #1, #2 and #3. Initially, a computerized search of state and federal regulatory databases was conducted for the area of the SBWS wells. This search was conducted by InfoMap Technologies, Inc. The InfoMap regulatory database search report is shown in APPENDIX A. In addition, the Pennsylvania Department of Environmental Protection on-line eFacts system was reviewed for any facilities within Roulette Township. The summary of facilities obtained from the eFacts system is shown in APPENDIX B. The final preliminary potential contaminant source inventory was prepared after a walking and driving survey of the delineation areas by Moodys and members of the Shinglehouse Wellhead Protection Committee. The facilities located during the preliminary potential contaminant source inventory are listed in the table below. The facility locations are shown in FIGURE 7.

CONTAMINANT SOURCE INVENTORY AND DISCUSSION

Disclaimer

The information contained in this "Plan" is limited to that available from public records and the water supplier. Other "potential contamination sites" or threats to the water supply may exist in the Source Water Protection area that are not identified in this "Plan". Identification of a site as a "potential contamination site" should not be interpreted that this site has or will cause contamination of the water supply.

Land use activities can pose a wide range of pollution threats to the source of the water supplies of Shinglehouse Borough. A computerized database search was completed in November, 2002, by William Miller of Moody and Associates. A field study was completed by representatives of the Shinglehouse Borough Source Water Protection Steering Committee, Judy Muehl, PRWA and Potter County Planning. Potential contamination sources in the Source Water Protection area were identified and the location of sites were field verified from the database search. Background information on the identified sites was obtained by a file review at the Mansfield PA DEP office in July 2002. The following sections discuss those sources.

WHP AREA MANAGEMENT AND COMMITMENT

The Shinglehouse Borough Source Water Protection Steering Committee recommends the following table of management tools for consideration by the Shinglehouse Borough Council and the Potter County Planning Commission where applicable in the Source Water Protection area. The list is prioritized in the order of importance to the Planning Team.

Discussion Number	Potential Risk	Management Approach	Implementation Date	Estimated Cost	Funding Source	Responsible Organization
#1	HH Haz Waste/ Oil use, disposal /pesticides	Education	Continuing throughout program	$2,100	Grant Unkind-Borough	Borough
#2	Road spills	Water Supply Protection signs	1 – 2 years	$1,600	Grant	Borough
#3	Spill Response	Revise Emergency Mgt. Plan	10/30/02	$ 200	In kind-Borough	Borough
#4	Survey/ Meeting with businesses	Education	9/01/03	$ 400	In kind-Borough	Borough
#5	Zoning/ Sub-Division Ordinance		Not known	$ 500	In kind-Borough (input)	County

Management Discussion

1) Education/Outreach - Residential

The Committee will work with the Potter County Planning Commission in developing an educational brochure to educate the public on household hazardous wastes, automobile products such as oil, and pesticides. Each customer of the water company will be mailed a copy of the brochure along with their quarterly water bill. The Committee has purchased a groundwater flow model that will be used at community events as well as to develop a school program. PRWA has trained both the Utility personnel and the school teachers on the use and care of the model. Educational materials for both the Borough and school will be collected and distributed.

2) Water Supply Area Signs

The Water Supply Area sign, available to communities with a DEP-approved local WHP program, notifies the traveling public that they will be traveling through a water supply area, the number of miles they will be traveling through this area, and the spill response number to call if there is a hazardous spill or accident. Signs will be located along Route 44 as indicated on the attached delineation map. The cost per sign is approximately $400 and will be paid for by the Borough through the Source Water Protection Grant. The Borough will erect the sign at the PA Department of Transportation approved location after the Source Water Protection Plan is approved by DEP. The Borough's time in erecting the signs will be donated as an in-kind service.

3) Zoning/Subdivision & Land Development Ordinance Revisions

The County will be incorporating the delineation of the Shinglehouse wells into a County Subdivision Ordinance. The communities of Potter County come under the County land use control.

4) Revisions to system Emergency Operations Plan

Shinglehouse Borough has reviewed and updated their Community Water Supply Emergency Response Plan on an annual basis. This will include adding provisions for the Source Water Protection Plan. The initial recommended changes to the Plan will be done by the Source Water Protection Steering Committee under the supervision of Shinglehouse Fire Department and the Superintendent of Public Works. The work on the Emergency Operations Plan is an in kind contribution from the Borough.

5) Survey of Businesses

The Borough will survey the commercial businesses within the Borough for hazardous material use and storage. This information will be used to evaluate applicability of the Emergency Operations Plan. This information will also be used to educate the businesses on safe use and storage of these hazardous materials. This survey and meeting will be an in kind contribution from the Borough.

Emergency Response Plan

Shinglehouse Borough

Revised: March 2007

Quick Reference Guide to Water System Emergency Response Plan Form

Section 1 – Organization Table

The following persons will be in charge of the water system during an emergency. If the first person is not available proceed down the list.

Order	Name	Position	Contact Numbers (include area code)			Radio Frequency (MHz)	
1	Mark R. Meacham	Supt. of Public Works	Office:	Home:	Fax:		
			(814) 697-6912	(814) 697-7753	N/A		
			Cellular:	Pager:	E-mail:		
			N/A	N/A	N/A		
2	Shawn J. Metcalf	Water Operator	Office:	Home:	Fax:		
			(814) 697-6912	(814) 697-7805	N/A		
			Cellular:	Pager:	E-mail:		
			(814) 203-0150	N/A	N/A		
3			Office:	Home:	Fax:		
			Cellular:	Pager:	E-mail:		
4			Office:	Home:	Fax:		
			Cellular:	Pager:	E-mail:		

Section 2 – Communication Procedures and Contact Information

Communication Procedure: Depending on the emergency, contact the groups listed below in the order provided. The contact information and specific procedures are located in the tables on the following pages. Section 3 contains primary and alternative means of communication.

Part A: Emergency Reference Table

Emergency Situation	Contacts																		
	System Supervisor	Sensitive Customers	DEP*	Local Emergency Management	Media	Power Co.	Equipment Manufacturer	Chemical Supplier	Fire Dept.	Other Gov't. Agencies**	Laboratory								
Disinfection System Failure	Mark R. Meacham	Refer to Page 2-2	Joe Yilek	John Hetrick	Refer to Page 2-3		LRM (215) 721-4840				Microbac Laboratories								
Contamination of Supply	Mark R. Meacham	Refer to Page 2-2	Joe Yilek	John Hetrick	Refer to Page 2-3						Microbac Laboratories								
Distribution System Line Break	Mark R. Meacham	Refer to Page 2-2							Doug Estes										
Waterborne Disease Outbreak	Mark R. Meacham	Refer to Page 2-2	Joe Yilek	John Hetrick	Refer to Page 2-3						Microbac Laboratories								
Power Outages	Mark R. Meacham	Refer to Page 2-2				Penelec													
Loss of One or More Sources of Supply	Mark R. Meacham		Joe Yilek	John Hetrick	Refer to Page 2-3				Doug Estes										
Prolonged Water Outage	Mark R. Meacham		Joe Yilek	John Hetrick	Refer to Page 2-3				Doug Estes										
Drought Conditions	Mark R. Meacham		Joe Yilek	John Hetrick	Refer to Page 2-3				Doug Estes										

* If an MCL, MRDL, or treatment technique is exceeded or if circumstances exist that may adversely affect the quality or quantity of the drinking water, a water supplier must report the situation to DEP within 1 hour.

**These may include the Public Utility Commission, Department of Health, Department of Energy, Department of Public Welfare, and PA Department of Agriculture.

Part B: Emergency Reference Table Contacts and Phone Numbers

Water System Spokesperson: Deb Resig

Tier 1 Templates Location: Borough Barn Office, Deb Resig's Office, O & M Plan

Additional Media Announcement Templates: Tier 2 Templates, Located in Borough Barn Office In O & M Plan

Customers: Prioritized Sensitive Sub-Populations to Notify (Tier 1 Public Notification)					
Procedure:	In the Event of an emergency requiring Tier 1 public notice, call the individuals below to alert them of the situation and then follow-up With notification using the Tier 1 template via fax or email.				
Contact	**Contact Individual**	**Phone and Alternate Phone**	**Pager Number**	**Fax to Send Tier 1 Public Notice**	**Email to send Tier 1 Public Notice**
Oswayo Valley High School	Bob Wicker	(814) 697-6132 (814) 697-7175		(814) 697-6375	
Oswayo Valley Elementary School	Bob Wicker	(814) 697-7161 (814) 697-7175		(814) 697-7799	
Oswayo Apartments		(814) 697-6960			
Honeoye Haven	Janice Woodkirk	(814) 697-6637 (814) 697-7130 (814) 274-7031			

Note: Tier 1 public notification is required for violations or situations that can have serious adverse health effects as a result of short-term exposure. Tier 1 public notification must be issued to your customers as soon as possible but no later than 24 hours after learning of the violation or situation.

Customers: Industrial and Commercial Users			
Contact	**Contact Individual**	**Phone**	**Alt. Phone**
IGA	Tim or Natalie Harvey	(814) 697-7145	(814) 698-2556
Newton's Citgo	Clyde Newton	(814) 697-6767	(814) 697-6036
Uni-Mart		(814) 697-7440	

Government Agencies				
Contact	**Contact Individual**	**Phone and Alternate Phone**	**Pager Number**	**Specific Procedures/Instructions**
DEP Sanitarian	Joseph Yilek	(570) 662-0830 (570) 327-3636		
Local Emergency Management	John Hetrick	(814) 274-8900 (814) 274-8184		• Keep **EMA** updated **throughout the** situation. • If phone is down communicate with **EMA** using:
Public Works Dept.	Mark R. Meacham	(814) 697-6912 (814) 697-7753		
Police	Chief Bradley Buchholz	(814) 697-6206 (814) 260-9583		
Fire		911		
Fire Department Chief	Doug Estes	(814) 697-6619		

Media				
Contact	**Contact Individual**	**Phone and Alternate Phone**	**Pager Number**	**Specific Procedures/ Instructions**
Radio Station: **95.7 WPIG** Olean, NY	Gary Nease	Fax #: (716) 372-0164		By **Fax** Only, After **Hours** (1300 hrs.) **Prioritize by Heading with "Emergency"**
Radio Station: **WCID** Bath, NY (Local Translator-Friendship, NY)	Terry Easly	(607) 776-1063 Mon- Fri (607) 542-3707, After Hours and Weekends		Call Directly
Radio Station: **WFRM** Coudersport, PA	Gerry Miller	(814) 274-8600 Fax #: (814) 274-0760		By FAX only
Radio Station: **WJQZ FM** Wellsville, NY	N/A	(585) 593-6070 Fax #: (585) 593-6212		By Fax Only, **Prioritize by Heading with "Public Service Announcement"**
Television Station: **Time Warner**	Time Warner Cable Public Bulletin **Board**	(800) 955-0750 Fax #: (607) 770-7534		By Fax Only **Prioritize by Heading with "Public Service Announcement**
Television Station: **WIVB Buffalo**, NY	WIVB Channel 4 Newsroom	Direct (716) 876-7333 *(Alternate)*(716) 879-4980 Fax #: (716) 874-8173		Direct Contact to Newsroom Preferred

Section 3 – Means Of Communication

Note: *This Section establishes emergency lines of communication. All Phone numbers are in Sections 1 and 2 of this plan.*

1. Lines of Communication

A. The types of communication available at this system during an emergency include:

- ☒ Landline Telephone
- ☐ Cellular Phone
- ☒ Radio System (Primary Frequency or Channel: 155.08500 Alternate:_____)
- ☐ Email or chat
- ☐ Facsimile Machine
- ☒ Pager
- ☐ Other:

B. Specific Communications Instructions:

C. Types of Communication for Public Notification:

Note: Public Notification templates and delivery requirements are located in the Operation and Maintenance (O & M) Manual in Section 6.

- ☒ Announcements through media: See Section 2 Media Contacts
- ☐ Announcements through Website:
- ☐ Mobile Loudspeaker:

☒

Hand Delivery	Designated Delivery Person(s):	
	Mark Meacham	
	Shawn Metcalf	
	Any Available Councilman	

☒

Public Posting	Predetermined Posting Locations	
	Newton's Citgo, Manley St.	O.V. Memorial Library, Academy St.
	Uni-mart, Corner of Oswayo & Honeoye St.	Sprout's Drug Store, Academy St.
	IGA, North Mill St.	Shinglehouse Laundromat, Academy St.

2. Emergency Communications Equipment

A. Landline Telephones:

Number of Telephones:	6
Location(s) Of Telephones:	3 - Borough barn, 1- Waste Water Treatment Plant, 1- Deb Resig's Office, 1- Borough Police Office

B. Cellular Phones:

Number Of Cell Phones:	0
Location(s) Of Cell Phones:	
Location(s) Of Batteries for Cell Phones:	

C. CB Radios:

Number Of Radios:	1 base; 2 truck; 1 police car; 3 portable 7
Location(s) of Radios	Base- office, 318 W. Honeoye St. Trucks- Boro Barn, 221 S. Mill St. Police Car- 137 N. Oswayo St. 1 Portable-137 N. Oswayo St. 2 Portables- Boro Barn, 221 S. Mill St.
Location(s) of Batteries for Radios:	

D. Facsimile Machines:

Number Of Fax Machines:	1
Location(s) of Fax Machines:	318 W. Honeoye St.

E. Pagers:

Number of Pagers:	1
Location(s) of Pagers:	Boro Barn-221 S. Mill St.

F. Other Communications Equipment Available:

Section 4 – Summary Description of the System

The following should provide enough information about the system for use during an emergency. For more Detailed information, refer to the operation and maintenance manual.

1. Location of Pertinent Information

Item	Location A	Location B
Distribution System Map	Boro Barn 221 S. Mill St.	
Other Pertinent Maps	Boro Barn 221 S. Mill St.	
Daily Operation Logs	Boro Barn 221 S. Mill St	Well House #3 316 E. Honeoye St.
Permits	Boro Barn 221 S. Mill St	
Technical Manuals	Boro Barn 221 S. Mill St	Well House #3 *(Lab Equipment)* 316 E. Honeoye St.
O&M Plan	Boro Barn 221 S. Mill St	
Start-up/Shut-Down Procedures	Boro Barn *(O&M Plan)* 221 S. Mill St	
Inventory List of Distribution Parts	Boro Barn *(O&M Plan)* 221 S. Mill St	
Inventory List of Spare Parts	N/A	
Public Notification Templates	Boro Barn *(O&M Plan)* 221 S. Mill St	Deb Resig's Office 318 W Honeoye St.
Mutual Aid Agreements	N/A	

2. Source Information

A. Well Information

Not Applicable ☐

Well ID	Location
1. Well # 1 *(Booster Pump Only)*	102 S. Oswayo Street
2. Well # 2	428 W. Honeoye Street
3. Well # 3	316 E. Honeoye Street
4.	
5.	

B. Surface Water Source

Not Applicable ☒

Location of Primary Intake:

Location of Alternate Intake:

C. Source Pump Information

Source ID	Pump Type	Manufacturer	H.P.	Capacity (gpm)	Phase, Voltage
Well # 3	Submersible	Goulds	20	200	3 ph- 460/480
Well # 2	Submersible	Goulds	30	300	3 ph- 230/460
Well House # 1	Centrifugal (Booster)	Peerless	2	80	3 ph- 240

3. Treatment Information

Location of Chemical MSDS: In the Borough Barn Filing Cabinet

A. Disinfection

Chemical(s) Used: Sodium Hypochlorite

Type of Chemical Feed: Liquid

Location of Disinfection System: Well # 3, Well #2

Location of Chem. Storage: Well House # 3; 316 E Honeoye St.

(Note: See the Emergency Reference Table in Section 2 for Chemical Supplier Information)

B. Other Treatment

Chemical Used: Sodium Hydroxide 50% (Caustic Soda)

Type of Chemical Feed: Liquid

Location of Chemical Feed System: Well #3, Well #2

Location of Chemical Storage: Well House # 3; 316 E. Honeoye St.

(Note: See the Emergency Reference Table in Section 2 for Chemical Supplier Information)

C. Other Pertinent Information

4. Description of Surrounding Area

Description of Potential Sources of Contamination in the Area (Approximate 3 mile radius)

See Table in Section 5 of the Source Water Protection Plan. Detailed delineation of source recharge areas are included in the wellhead protection plan available at Deb Resig's Office and the Borough Barn Office.

5. Finished Water Storage

Storage Facility 1:

Location: High Street

Type: Concrete **Capacity:** 300,000 gallon

Storage Facility 2:

Location:

Type: Capacity:

Storage Facility 3:

Location:

Type: Capacity:

6. System Demand

Average **Demand:** .160 MGD **Peak:** .220 MGD

Capacity: .288 MGD

7. Other Pertinent System Information

Other information about the system that could be useful during an emergency:

Section 5 Assessment of Available Resources

Note: *Communication equipment is listed in Section 3.*

Mutual Aid Agreement(s) — None Available ☑

A. Agreement 1

Agreement with: _____

Agreement includes: ☐ Personnel ☐ Equipment ☐ Materials ☐ Other_____

Note: Contacts for equipment and materials are listed in the subsequent sections.

B. Agreement 2

Agreement includes: ☐Personnel ☐ Equipment ☐ Materials ☐ Other_____

Note: Contacts for equipment and materials are listed in the subsequent sections.

2. Emergency Water Supply Equipment (For more information see the drought contingency plan)

A. Bulk Water Supply Truck — None Available ☑

Contact for truck:_____

Location(s) that Truck(s) will be setup during an emergency:

C. Other Emergency Equipment

Item	Location and Contact

D. Parts Available for Emergency Interconnections

Item	Location and Contact

2. Power Supply Equipment

A. Power Sources

Primary Power Source:	Penelec
Alternate Power Sources:	Generator
Location of Fuel:	Borough Barn

B. Generators

None Available ☐

Make/Model	Phase/ Voltage/ Amps	Contact Individual	Phone No.	Location of Storage	Location of Use
Wacker G-50	3 ph 120/240/480 50 KVA	Mark Meacham	(814) 697-6912	Borough Barn	Well # 3, Wastewater Treatment Plant

3. Inventory of Repair Equipment

Location of Inventory: Borough Barn

If an inventory is not available, fill in the table below.

Item	Location
4" C 900 pipe	Borough Pipe Shed
6" C 900 Pipe	Borough Pipe Shed
8" C 900 Pipe	Borough Pipe Shed
Dresser Couplings (various diameters)	Borough Barn

Recommended: Two repair Clamps for each size of your pipe.

4. Vehicles and Construction Equipment

A. Pickup Trucks, Vans, and other Vehicles

None Available ☑

Make and Model	4 x 4?		Owner	Phone Number	Location of Vehicle and Keys
	Yes	No			

B. Dump Trucks

None Available ☐

Make And Model	Capacity (Tons)	Owner	Phone Number	Location of Vehicle and Keys
1995 Ford F-350	1 Ton	Shinglehouse Borough	(814) 697-6912	Borough Barn
1999 Ford F-350	1 Ton	Shinglehouse Borough	814) 697-6912	Borough Barn

C. Construction Equipment

None Available ☐

Item (include make/model)	Owner	Phone Number	Location of Item
John Deere Backhoe (300D)	Shinglehouse Borough	(814) 697-6912	Borough Barn
Bobcat Skid steer (773)	Shinglehouse Borough	(814) 697-6912	Borough Barn

5. Spare Equipment for the Water Source

A. Spare Pump(s) None Available ☐

Pump Type	Manufacturer	H.P.	Capacity (gpm)	Phase, Voltage
Submersible	Franklin Electric	20	200	3 ph, 230v

B. Location of Inventory of Spare Parts for Pump(s) and Well(s) None Available ☑

*If an inventory is not available, fill in the table under (C.) on the **next** page.*

C. List of Spare Parts for Pump(s) and Well(s)

Part	Location

6. Spare Parts for the Distribution System

A. Location of Inventory of Spare Parts and Valves for Distribution None Available ☑

7. Spare Parts for Treatment

A. Spare Chemical Feed Pump(s)

None Available ☐

Manufacturer	Model	Location of Spare
Prominent	GALA0708NPE96OUD012000	Borough Barn
LMI	A 151-192S	Borough Barn

List Spare Parts for Feed Pump	Location
1001061 (Prominent)—Vent Valve	Well House # 3
1001069 (Prominent)—Discharge Valve	Well House # 3
1001435 (Prominent)—Suction Valve	Well House # 3
7924582 (Prominent)—Injection Valve	Well House # 3

B. Reserve Chemicals

Location of reserve supply of chemicals

Reserve Supply of chemicals are stored in the #3 Well House Chemical Storage Room.

8. Miscellaneous Equipment for the System

A. Additional Equipment Not Listed Above

None Available ☐

Equipment	Location
3/8" Injection Pump Tubing	Well House #2 and # 3

Section 6 – Emergency Measures

1. List of Probable Emergencies

1. Violation of MCL for total coliforms when fecal coliforms or *E. coli* are present
2. Violation of MCL for nitrate or nitrite
3. Violation of MRDL for chlorine dioxide
4. Violation of a treatment technique for pathogenic bacteria, viruses and protozoan cysts
5. Disinfection System Failure
6. Chemical Contamination of Supply
7. Distribution System Line Break
8. Waterborne Disease Outbreak
9. Power Outage
10. Loss of One or More Sources of Supply
11. Prolonged Water Outage
12. Drought Conditions
13. Terrorist Attack
14.
15.
16.
17.
18.

2. Description of Emergency Measures

Emergency: Violation of MCL For total Coliforms or *E. coli* are present

Corrective Action:

Report any information to DEP **within 1 Hour** of Discovery.
Issue Tier1 Public Notification no later than 24 hours after discovery.

- Tier 1 templates and delivery instructions can be found in the O&M Plan Section 6 or on computer disk in the Borough **Barn** Office.
- Notify the sensitive populations (as listed in Section 2) as quickly as possible
- Follow Tier 1 Instructions as directed.

Emergency: Violation of the MCL for Nitrate or Nitrite

Corrective Action:

Report **any** information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- Tier 1 templates and delivery instructions can be found in the O&M Plan, Section 6 or on computer disk in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as listed in Section 2) as quickly **as** possible.
- Follow Tier 1 Instructions as directed.

Emergency: Violation of the MRDL for Chlorine Dioxide

Corrective Action:

Report any information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- Tier 1 templates and delivery instructions can be found in the O&M Plan, Section 6 or on computer disk in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as listed in Section 2) as quickly as possible.
- Follow Tier 1 Instructions as directed.

Currently Chlorine Dioxide is Not Used in our Water System

Emergency: Violation of a treatment technique for pathogenic bacteria, viruses and protozoan cysts.

Corrective Action:

Report any information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- Tier 1 templates and delivery instructions can be found in the **O&M** Plan, Section 6 or on computer **disk** in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as listed in Section 2) as quickly as possible.
- Follow Tier 1 Instructions as directed.

Emergency: Disinfection System Failure

Corrective Action:

Report any information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- Operator will immediately attempt to determine the cause of the failure and make repairs. If the Chemical **feed** pump **cannot** be repaired immediately, the operator will disconnect **the** pump and **install** the back-up pump. If the disinfection equipment **cannot** be restored within four hours, Tier 1 Procedures will be put in place issuing a "Boil Water Advisory"
- Tier 1 templates and delivery instructions can be found in the **O&M** Plan, Section 6 or on computer **disk** in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as listed in Section 2) as quickly as possible.
- Follow Tier 1 Instructions as directed.

Emergency: Chemical Contamination of Supply

Corrective Action:

Report any information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- If Source of Contamination is within Zone 1 of the delineated wellhead protection area, shut off main supply valve **at** source. Operator will insure coordination with DEP and Emergency Management to determine if contaminants have entered the distribution system. The source will remain off line until such time as the contaminant has been removed or the plume has passed out of the recharge area. If contamination **occurs** in either Zone 2 or Zone 3 wellhead protection **areas,** the **source** will be monitored for contamination on a schedule approved by DEP. If the contaminate is detected in the source, the source will be immediately taken off line. Operator will coordinate with DEP to insure **all** appropriate public notice requirements are met.
- Tier 1 templates and delivery instructions can be found in the O&M Plan, Section 6 or on computer disk in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as listed in Section 2) as quickly as possible.
- Follow Tier 1 Instructions as directed.

Emergency: Distribution System Line Break

Corrective Action:

Locate Valve(s) required to shut down water leak as soon as possible. Notify public in area of shut down as soon as shut down is completed. Make required repairs, allow **water** back into the repaired area, and flush hydrant(s) within immediate area to flush out any debris, also allowing chlorine residuals to disinfect the line. Check Cl_2 residuals during the flushing process to insure proper disinfection. Return system back to service. Alert customers within vicinity to flush out household lines as well.

Emergency: Waterborne Disease Outbreak

Corrective Action:

Report any information to DEP **within 1 hour** of discovery.
Issue Tier 1 Public Notification **no later than 24 hours** after discovery.

- Tier 1 templates and delivery instructions can be found in the O&M Plan, Section 6 or on computer disk in the Borough Barn Office.
- Notify the Sensitive **Subpopulations** (as **listed** in Section 2) as quickly as possible.
- Follow Tier 1 Instructions as directed.

Emergency: Power Outage

Corrective Action:

Call Power Company to alert them of the outage @ (888) 544-4877. Monitor the **water** levels in the reservoir. Issue Conservation notices, Contact the fire Department. If Power Outage lasts for a long period of time and the reservoir supply is becoming depleted hook the generator to Well #3 and start operation to supply the public with water.

Emergency: Loss of one or more Sources of Supply

Corrective Action:

Monitor water levels in the reservoir, repair pump. If repairs cannot be made before stored water supply is depleted, place the backup well on line. If both wells are down **and** Stored water supplies are getting low contact DEP and the Emergency Management office for further assistance.

Emergency: Prolonged Water Outage

Corrective Action:

If possible use back up well. Contact DEP and Potter County Emergency Management to coordinate purchase and delivery of potable water from outside of the system. Operator will coordinate with fire and police personnel to insure customers are notified of procedures to obtain potable water.

Emergency: Drought Conditions

Corrective Action:

Monitor **water** levels in wells. Post community restrictions, if drought conditions are **severe**. Use restrictions from voluntary to mandatory are based on **water** levels in Well # 3. Contact CEMA.

Location of Drought Contingency Plan:

Deb Resig's Office, 318 West Honeoye St.

Summary of Drought Contingency Plan:

Stage 1:

Trigger Point	Demand Measures	Supply Measures
Well Level	Voluntary restrictions on nonessential water use	System wide leakage and loss reduction survey

Stage 2

Trigger Point	Demand Measures	Supply Measures
Well Level	Notify State Water Plan Division (717) 787-5008 Implement Mandatory Restrictions on Nonessential water Use If Stage 3 appears imminent, Submit water Rationing Plan to the Pennsylvania Emergency Management Agency	Activate Backup well

Stage 3

Trigger Point	Demand Measures	Supply Measures
Well Level and Backup well Level	Implement Water Rationing Plan after approval by the Pennsylvania Emergency Management Agency	Utilize Emergency Sources and Equipment

Emergency: Terrorist Attack

Corrective Action:

Any Suspected terrorist attack on the water system will be treated in the same manner as a source contamination Zone 1 incident.

NEW SOURCES

NEW WATER SOURCES

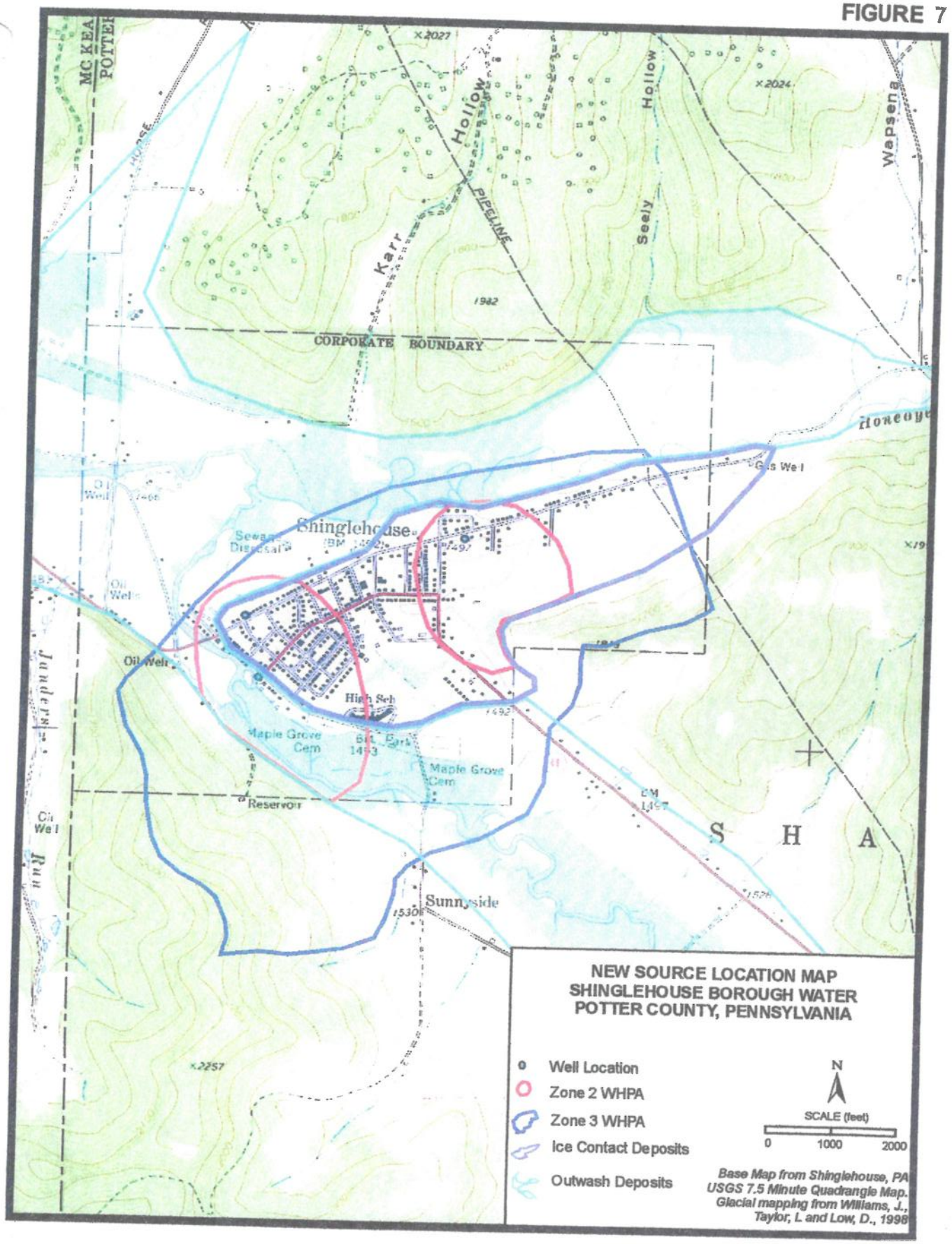
New ground water sources should be carefully sited after considering the present WHPA boundaries and land use. Any new source ground water supply well should be located outside of the present WHPA delineations such that the WHPA delineation for the new well does not encompass the majority of the same area covered by the present WHPAs. This would decrease the likelihood of both supplies becoming contaminated from the same source. In addition, present land use and potential contaminate sources should be considered when siting a new ground water well.

Within the area served by the Shinglehouse Borough Water System, ground water supply wells, with an adequate yield, could be installed in the sand and gravel aquifer associated with either the Oswayo Creek or the Honeoye Creek. A review of the mapping contained in the Water Resource Report referenced earlier in this report, shows that the areas upstream in the Honeoye Creek valley and both upstream and downstream in the Oswayo Creek valley could potentially yield adequate ground water to a public water supply well. Since some variations in aquifer characteristics and ground water quality are expected, the installation of test wells to assess the quality and quantity of ground water in any particular location is recommended. The areas of potential test well development are shown in FIGURE 8. Zone 1 radius delineations for any new wells would be expected to range from 150 to 200 feet, depending on well yield.

The assumptions used to generate the WHPAs of the Shinglehouse Borough Water System Wells #1, #2 and #3 were conservative in nature. The analytical model used to perform the delineations is limited in that one value is specified for the parameters describing the aquifer and pumping conditions. In any actual aquifer system, the transmissivity, porosity and the ground water flow direction and gradient will vary based on the normal lateral and vertical variability of the aquifer materials. In addition, seasonal variations in precipitation and pumping rates will affect the ground water

gradient. The absolute wellhead protection area will change due to this variability. By utilizing conservative estimates of the values used in the delineation, the resulting wellhead protection area is larger than necessary for the conditions present over a relatively short period of time. However, this larger delineation is more likely to contain the absolute protection areas necessary under naturally variable conditions.

FIGURE 7


MC KEA
POTTER
Karr Hollow
PIPELINE
Seely Hollow
Wepsena
CORPORATE BOUNDARY
Honeoye
Gas Well
Oil Well
Shinglehouse
Sewage Disposal
Oil Well
Oil Well
Junders Run
High Sch
Maple Grove Cem
Ball Park
Maple Grove Cem
Reservoir
Oil Well
Sunnyside
S H A
NEW SOURCE LOCATION MAP
SHINGLEHOUSE BOROUGH WATER
POTTER COUNTY, PENNSYLVANIA
Well Location
Zone 2 WHPA
Zone 3 WHPA
Ice Contact Deposits
Outwash Deposits
N
SCALE (feet)
0
1000
2000
Base Map from Shinglehouse, PA USGS 7.5 Minute Quadrangle Map.
Glacial mapping from Williams, J., Taylor, L. and Low, D., 1998

APPENDIX A

From PA DEP *Revised February2000*

MINIMUM ELEMENTS FOR LOCAL WHP PROGRAMS
(Ground-Water Sources)

This section describes the minimum elements necessary for a local source water protection program for ground-water sources (also known as a wellhead protection (WHP) program) to receive DEP approval. Local WHP program plans will be reviewed and approved by regional Water Supply Management staff. If necessary, coordination with other programs could be accomplished in a manner similar to that for permit coordination. Essentially, the plan should not only detail the provisions of the local program including a schedule for implementation, but should also demonstrate the commitment needed to support the on-going efforts necessary for a successful local WHP program. Therefore, the plan should not only describe how sources will be protected but also document the resources necessary to implement the plan, thus linking implementation and management to finances.

Each plan should have a table of contents, an introduction that includes the goal or purpose of the plan along with a general description of the area (demographics, topography, local/regional hydrogeologic setting, source characteristics, etc.), concise narrative descriptions for each of the following sections plus any other relevant supporting information. Each plan must have a WHP area delineation map using an appropriate base map with a scale ranging from 1:400 to 1:24,000 that accurately and legibly depicts source locations, WHP area boundaries and potential contaminant sources (preferably a USGS 7.5' quad or GIS-generated map with adequate cultural features/landmarks). The map must also have a bar scale and north arrow.

A local WHP plan must contain the following minimum elements in order to be considered for DEP approval:

1. Steering Committee & Public Participation

This section of the plan will document the formation and meetings of the local WHP steering committee along with provisions for public involvement. The committee chairperson, the chairperson's telephone number, members, a description of roles and responsibilities of the committee and dates/locations of meetings must be listed. Ideally, meeting locations should vary if possible and a tour/inspection of the wellfield/well sites should be conducted. The narrative must also demonstrate that adequate opportunities for public participation were in place at the beginning of and throughout the project (copies of public notices such as flyers, newspaper notices, etc.). This section should also document all public education activities and describe how the final plan will be accessible to the public (on file at municipal government office or public water system office, libraries, etc.).

2. WHP Area Delineation

This narrative must completely describe the methodology used, justification for methodology, and who performed the delineation. For delineations in carbonate and fractured bedrock aquifers that utilize the ½ mile radius as the default WHPA, the justification must demonstrate that it is adequately protective. Rigorous delineation methods must be performed by or under the supervision of a Registered Professional Geologist. This section must also include a description of the local hydrogeologic setting and a formulation of a *conceptual* ground-water flow model. Relevant hydrogeologic data with sources/references, supporting calculations and any other information necessary for the reviewer to reproduce the steps involved in delineating the WHP area must be provided. The level of delineation will be commensurate with the type of management option to be utilized.

3. Contaminant Source Inventory

A description of the methods used to conduct an inventory of existing and potential sources of contamination must be provided in this narrative. Documentation of field verification of computerized database searches and actual inspection of the WHP area must be provided. Contaminant source locations must be plotted on the accompanying WHP area map(s) and keyed into a table listing the facility name, owner, type of contaminant and a relative prioritization of risk (low, moderate, high) from the source. (DEP can assist with assessing relative risk if requested). This section must also include documentation that these sources are targeted for or were provided specific education regarding potential risks to the water supply.

4. WHP Area Management and Commitment

This section will provide a description of current land use and describe the management method(s) appropriate for the delineated WHP area. What is the cost to do the activities and where will resources come from? Commitment may be demonstrated by:

a.) In-kind services
b.) Dedicated funding (water rate)
c.) Tax/fee dedicated to WHP
d.) General revenue
e.) Other acceptable means

A table listing management options for each identified threat along with a schedule for implementation must also be provided.

5. Contingency Planning

This section will contain a Revised Emergency Response Plan that includes realization of potential threats through spills and any other unintended releases and describes coordination with water supplier, municipalities and local emergency management agency to address contingencies commensurate with risks for each identified threat. Provisions for alternate water supply must be described such as arrangements for bulk hauling or sources of interconnection.

6. New Sources

This section addresses adequate planning for new wells including careful consideration of potential sites, existing land use, predicted Zone I area, how to obtain access and rights to areas if necessary and how the areas will be protected.

Those water systems capable of satisfactorily addressing each of the above elements will be considered approved under §109.713 and would be issued an approval letter. Additionally, an annual report/update will be required that describes changes in WHP area boundaries, land use, potential threats and contingency planning. Specific requirements may also be contained in DEP's approval letter. For those systems that do not initially address the minimum elements adequately, a review letter will be issued pointing out what needs to be strengthened in order to receive approval.

APPENDIX B

PA DEP Regional Contact Information

DEP Regional Offices:

Southeast Region Lee Park, Suite 6010 555 N. Lane **Conshohocken,** PA 19428 610-832-6059 ***Counties*** *Bucks, Chester, Delaware, Montgomery and Philadelphia.*	**Southwest Region** 400 Waterfront Drive Pittsburgh, PA 15222 412-442-4217 ***Counties:*** *Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland.*	**North central Region** 208 West 3rd Street, Suite 101 Williamsport, PA 17701 570-327-3675 ***Counties:*** *Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union.*
Northeast Region 2 Public Square Wilkes-Barre, PA 18711 570-826-2511 ***Counties:*** *Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne & Wyoming.*	**South central Region** 909 Elmerton Avenue Harrisburg, PA 17110 717-705-4708 ***Counties:*** *Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York.*	**Northwest Region** 230 Chestnut Street Meadville, PA 16335-3481 814-332-6899 ***Counties:*** Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren.

APPENDIX C

Glossary of acronyms and abbreviations

EPA - Environmental Protection Agency
ERP - Emergency Response Plan
FEMA - Federal Emergency Management Agency
GIS - Geographic Information System
GPD - Gallons Per Day
GPS (GPU) - Global Positioning System or Unit
PDA - Pennsylvania Department of Agriculture
PA DEP - Pennsylvania Department of Environmental Protection
PA DCNR - Pennsylvania Department of Conservation and Natural Resources
PA DOT - Pennsylvania Department of Transportation
PAGS - Pennsylvania Geologic Survey (PA Topographic and Geological Survey)
PFAS - Pennsylvania Facility Analysis System
PG - Professional Geologist
PRWA - Pennsylvania Rural Water Association
SDWA - Safe Drinking Water Act
SOC - Synthetic Organic Compounds
SWAP - Source Water Assessment and Protection
SWAPP – Source Water Assessment and Protection Program
WHP – Source Water Protection
WHPA – Source Water Protection Area
USGS - United States Geologic Survey
VOC - Volatile Organic Compounds
WHP - Wellhead Protection
WHPA - Wellhead Protection Area
WSP – Watershed Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ENVIRONMENTAL STEWARDSHIP AND WATERSHED PROTECTION GRANT APPLICATION

2001

Pennsylvania is... Growing Greener

This form is to be used to apply to the Department of Environmental Protection for a grant to support restoration and protection of watersheds and environmental stewardship in the Commonwealth. Projects will be supported by state funds through Pennsylvania Growing Greener and/or federal funds. See Instructions, and additional conditions on reverse.

PROJECT AND APPLICANT INFORMATION

1. Project Title (please be concise): Shinglehouse Borough

2. Major River Basin(s) Covering Project Location: X☐ Ohio/Great Lakes ☐ Susquehanna/Chesapeake Bay ☐ Delaware
   Watershed: Oswayo Creek Township: Shinglehouse Borough
   County: Potter
   (Include an 8½" x 11" copy of a USGS 1:24000 scale topographic map with project boundaries indicated.)
   Latitude 041 57 58 Longitude 078 11 22

3. Applicant Organization: Shinglehouse Borough
   Address: P.O. Box 156 Shinglehouse, PA 16748
   Address for UPS deliveries (no P.O. Boxes): 40 Honeoye Street
   Contact Person: Deborah Resig
   Phone: (814) 697-6711 Fax: (814)697-6711 E-Mail:
   Type of organization:
   ☐ Watershed Group ☐ Conservation District ☐ Non-profit ☐ School X☐ Government
   ☐ Community Water System (PWSID # 6530013)
   Applicant's Federal Employer Identification Number (FEIN) or Tax Number: 24-6000657
   Does the applicant have 501(c)(3) status? Yes X☐ No ☐

4. If your group is a watershed association that is not incorporated, you must find a *sponsor* to administer the grant on your behalf. If your group is a nonprofit group that is not a watershed association and does not have 501(c)(3) status, you must also find a *sponsor* to administer the grant on your behalf. The sponsor accepting responsibility for the grant must be a local government entity, county conservation district, educational institution, incorporated watershed association or incorporated non-profit 501(c)(3).
   Sponsor's Name (Organization):
   Sponsor's Contact Person:
   Address: Phone: ( )
   Fax: ( )
   Sponsor's Federal Employer Identification Number (FEIN) or Tax Number:
   Does the sponsor have 501(c)(3) status? Yes ☐ No ☐

5. Application Type: *Watershed Protection* (check only one)
   A. ☐ Organization of a watershed group;
   B. Watershed assessments and development of watershed restoration or protection plans:
      1. ☐ abandoned mine drainage only
      2. ☐ multiple nonpoint sources
   C. ☐ Implementation of watershed restoration or protection projects;
   D. ☐ Demonstration project;
   E. ☐ Education project/outreach;

   Source Water Protection F. X☐ Wellhead protection (ground-water source for public water system);
   G. ☐ Watershed protection (surface-water source for public water system)

   Does your project involve mine reclamation or remediation of abandoned mine drainage pollution? Yes ☐ No X☐
   Are facilities or infrastructure projects to be funded under this application? Yes ☐ No X☐
   If yes, is your project consistent with a county, municipal or multi-municipal comprehensive plan or zoning ordinance? Yes ☐ No ☐

6. **Did you discuss your application with a DEP regional or mining watershed coordinator? Yes X☐ No ☐**

7. Project Duration (months): 60

8. Will your project implement recommendations of an existing watershed or river conservation plan, or source water protection plan?
   Yes ☐ No X☐
   If yes, identify the plan and responsible organization:

9. Will your project directly or indirectly preclude access to or use of any forested land for the practice of sustainable forestry and commercial production of timber or other forest products? Yes ☐ No X☐

10. Please attach a detailed project description. A suggested outline is included in the instructions.

11. Budget Summary – from Budget Worksheet (Also attach Budget Worksheet.):

Category	Grant Request	+	Match	=	Project Cost
Sponsor Salaries/Benefits		+		=	
Travel		+		=	
Equipment and Supplies		+		=	
Administration (max 2%)		+		=	
Contractual		+		=	
Construction		+		=	
Other		+		=	
Total for each column:					

Will competitive bidding be used? Yes X☐ No ☐ If yes, for which budget items? Contractual

Are you willing to accept federal funding for this project? Yes X☐ No ☐

GRANT PROGRAM CONDITIONS

- Your application will be evaluated based on the data provided. Completeness and accuracy are important.
- Contact the DEP regional or mining watershed coordinator to discuss the application before submittal.
- All applications must contain a letter of acknowledgment from the County Conservation District where the project is located and letters of commitment from participating partners. Enclose other letters of support as appropriate. Include all supporting correspondence with the application.
- Successful grant recipients will be required to:
  - Execute a contract with DEP in order to receive the grant.
  - Comply with appropriate Commonwealth and/or federal requirements, including obtaining necessary permits, in the implementation of the grant.
  - Submit additional information as requested for execution of the contract.
  - Attend training in procedures for Commonwealth fiscal management.
  - Prepare and submit quarterly progress and final performance reports.
- Written consent of property owners must grant DEP access to project sites.
- Match calculations cannot include other DEP funding sources or DEP in-kind services.

CERTIFICATION AND SIGNATURE OF APPLICANT (REQUIRED) AND SPONSOR (IF APPLICABLE)

Applicant: I certify that the information in this application is true and correct to the best of my knowledge.

Submitted By: Shingiehouse Borough _____ _____
Applicant Organization — Date

Deborah Resig — Deborah C. Resig — Secretary
Printed Name — Signature — Title

Sponsor: I certify that the information in this application is true and correct to the best of my knowledge. I certify that I am willing to accept responsibility for a grant on behalf of the applicant.

Submitted By: _____ _____
Sponsor Organization — Date

_____ _____ _____
Printed Name — Signature — Title

GRANT APPLICATION SUBMITTAL INSTRUCTIONS

Four copies of the completed Grant Application must be postmarked (if mailed), or received (if hand delivered) by 4:30 p.m. on March 9, 2001 at the following address: DEP Grants Center, 15th Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8776, Harrisburg, PA 17105-8776. Telephone: 717-705-5400 or 1-877-PAGREEN

NO PERMANENT BINDING – STAPLES ONLY

NO FAXES. LATE SUBMISSIONS WILL NOT BE CONSIDERED.

For electronic submission, visit DEP's website at www.dep.state.pa.us/growgreen/

March 7, 2001

From: Shinglehouse Borough
40 Honeoye Street
Shinglehouse, PA 16748
Contact Person: Deborah Resig, Secretary
Telephone # 814 697 6711
PWS ID: 6530013
Federal Tax ID #: 24-6000657

PROJECT AREA WATER SYSTEM & SOURCES:

The Borough of Shinglehouse has owns the water system.. Shinglehouse Borough is located in the northwest corner of Potter County. It is the third largest Borough in the county.

History

The water system dates back to 1904. Improvements and extensions have been made so that the entire community is now served by the system.

Description of Water Supply

Shinglehouse Borough Water System obtains its water from two well sources. Well #3 is the primary source and has a safe yield of 288,000 GPD. Disinfection is done with liquid chlorine. Caustic soda is also added to control pH for corrosion control. Well #2 is poorer quality and therefore is only used during periods of high demand. Well #2 has a safe yield of 316,000 GPD and is treated with a greensand filter for iron and manganese removal. Disinfection is by liquid chlorine. There is a 140,000 gal finished water storage tank which floats on the distribution system. (you can add the average and peak flow figures from your report) Both sources are considered ground water under DEP's SWIP protocol.

The Shinglehouse water system serves the Borough of Shinglehouse, Potter County, Pennsylvania with drinking water from groundwater sources. The groundwater sources are located within the Borough limits of Shinglehouse Borough. The Borough of Shinglehouse is located on State Route 44 approximately 20 miles northwest of Coudersport, PA and approximately 2 miles from the New York State line. The area surrounding the source is primarily residential with some agricultural use to the south. The topography of the area surrounding the source is rolling. The regional hydrogeologic setting includes sandstones, shales, siltstones, and localized coal. (see attached proposal)

It is anticipated that the area around the source may undergo moderate growth of land because of the growth of industry in the Coudersport area. Most land use will probably be residential. As of the last census, the population of the Borough was 1243. Most residents of the Borough are employed outside the Borough. The Borough is primarily residential with a few small businesses.

Purpose of Plan Development

The Shinglehouse Borough Council recognizes the possibility of potential threats to its water supply. In an effort to address the potential problems which could affect the source, the officials of Shinglehouse, with guidance from the Pennsylvania Rural Water Association, Potter County, and PA DEP are establishing the Shinglehouse Borough Source Water Protection Steering Committee to make recommendations to Shinglehouse Borough Council, and Potter County Planning Commission on protecting the groundwater resources providing drinking water to the residents of Shinglehouse.

Source Water Protection plans are necessary for the protection of the system's source from contaminants that are difficult and costly to treat through normal means. The plan clearly identifies actual and potential sources of contamination to the source. Secondly, it allows communities to effectively educate the public on the importance of their drinking water source. Third, the plan serves as the first step for long-term sustainable planning for the future of the community. Finally, it provides a comprehensive action plan in case of an emergency. The Shinglehouse Borough residents are fortunate to have an adequate and safe water supply at this time. As all the sources are located within the Borough limits, education of the residents of Shinglehouse is of utmost importance.

GOALS & BENEFITS TO SYSTEM:

The Shinglehouse Borough Source Water Protection committee will be formed and hold monthly meetings. The Borough Officials will complete the steps to form a committee to consider management options. The committee will identify the goals and benefits of completing a comprehensive wellhead protection plan.

BENEFITS

1) Public Education will increase public involvement in protecting the Shinglehouse Borough water resources.
2) A rigorous delineation of the wells will identify the area that needs protected and will provide credible documentation for the Authority to take steps to protect the area.
3) A good Emergency Contingency Plan will let us plan ahead for possible contamination and will increase the local fire department and emergency management agency awareness of the location of our water resources.

GOALS

1) A rigorous delineation of contributing areas for all of the wells.
2) Water supply protection signs which will indicate motorist and truckers are entering a sensitive area of recharge for a public drinking water supply.
3) Public awareness of source water plan and protection program through local news and community group presentations.
4) Community involvement and partnership with local schools to sustain the program.
5) Development of an effective emergency response plan.

TIME SCHEDULE:

Forming a Committee:
Shinglehouse has a Wellhead Protection Committee.
Delineation:
A one-half mile radius has been completed.
Refined/rigorous delineation to be completed by October 31, 2001.
Inventory: An on-site inventory plus an enhanced computer search inventory to be completed by November 30, 2001.
Management Plan:
Revised Plan Emergency Contingency Plan to be completed by July 1, 2002.
Education Program:
Ongoing throughout grant period and after grant period is over.
Erection of Water Supply Protection Signs by January 2003.
(contingent on the approval of the Plan by DEP)

PREVIOUS WORK COMPLETED:

WHP Committee: The Source Water Protection Committee is being formed and will meet in April 2001.
Delineation: A one half mile radius default has been completed by DEP.

LIST OF TASKS NECESSARY TO DEVELOP WHP PLAN:

The Shinglehouse Source Water Protection Committee needs to complete the following tasks in developing an effective WHP Program for the community:

Have a refined/rigorous delineation completed on the wells.
Complete an inventory of potential contamination sources.
Develop an effective management plan based on the refined delineation.
Revised the Emergency Contingency Plan.
Develop a public education program:
develop a community informational brochure
work with local schools on a program for the students
obtain State approval for the WHP Plan so that Water Supply signs can be purchased

QUALIFICATIONS OF PERSONNEL:

See attached resumes.

EDUCATIONAL OUTREACH ASPECTS OF PROGRAM:

Brochure:
The Shinglehouse Borough Source Water Protection Committee will develop and have printed an education brochure

explaining the WHP Program, identifying the delineated recharge area of the wells, and listing what the residents can do to help protect the Groundwater in the area.

Public meeting:

A public meeting will be held upon the completion of the program. Meeting will be held by January 2003.

School program:

The Committee will meet with local school officials to set up an educational program on source water protection with one grade level. They will provide the school with educational materials for the program which will be held each year.

PUBLIC PARTICIPATION

The Shinglehouse Borough Source Water Protection Steering Committee will consist of Shinglehouse Borough employees, officials, representative from the local Fire Department, residents and business owners. The PA Rural Water Association is providing technical assistance. Additional groups represented will include, PA DEP, Potter County Planning Department, and the Conservation District.

Steering Committee

The Shinglehouse Water Protection Committee is just beng formed. We will notify PA DEP when all members have been appointed.

Consultant:

Moody & Associates (see proposal)

Technical Assistance:

Judy Muehl, Pennsylvania Rural Water Association
John McLaughlin – DEP North Central Office
Mike Kear, Potter County Planning

Steering Committee Meeting Date:

Shinglehouse officials will notify the Regional DEP office of the first committee meeting and ask for their attendance.

Annual Meeting:

This Source Water Protection Steering Committee or its successor will meet and review this Plan and Program implementation on an annual basis. The annual meeting of the Source Water Protection Committee will be held the beginning of April of each year. A brief annual report will be submitted to the PA DEP describing any changes to the Plan. The PA DEP will provide the format for this annual report.

Shinglehouse Borough

TASKS TO BE COMPLETED:

TASK: Refined/rigorous **Delineation** (Contracted Services)
COMPLETION DATE: 1 – 6 **months after** signing of **the Grant** Award Agreement
RESPONSIBILITY: Moody **&** Associates

The **first part** of our groundwater protection **efforts will be** a rigorous **delineation** of **the** recharge areas of both **wells.** This work will be completed by Moody & **Associates** who **will** complete **the** following as **per the attached** proposal:

On-site **visits and** meeting presentations:

On-site visit for inventory and presentation of findings.
Public Meeting

Development of a comprehensive water resource management plan which includes the delineation of the recharge area for **both** wells and their respective area of hydraulic influence.

(See the attached proposal for the scope of work.)

TASK: Inventory
COMPLETION **DATE:** 1 – 6 months from signing of **the Grant** Award Agreement
RESPONSIBILITY: Moody **& Associates/** Committee/ **PRWA** Groundwater Technician

The Committee will complete **a site** survey of potential contamination sources with **the** Consultant and **PRWA** Groundwater Technician. Moody & Associates will complete an **enhanced computer search** to determine **other** sources of contamination. **Details** of **the contamination** source **computer** inventory can be **found in** the proposal **attached.**

TASK: Completion of Source Water Protection Template
COMPLETION DATE: 1 – 9 months from signing of the Grant Award Agreement
RESPONSIBILITY: **Committee/PRWA** Groundwater Technician

The **Wellhead** Protection Plan is being developed with **the** help of PRWA. Shinglehouse will be using **the DEP** approved template for **Wellhead** Protection **which** meets **the** elements required by DEP **for** approval. **The Technician** will **be** following **the** template to ensure the development of a plan **that** can be approved by DEP. **The** Technician **will** work with **the** committee **and** hydrogeologist to complete **the enhanced** inventory of potential **contamination** sources, develop an **effective** plan for **the** wells, and develop a pro-active **sustainable education program will result** in **the** completion of a plan **that** will be **submitted** to **DEP** for approval by June of **2003.**

TASK: Education Implementation
COMPLETION DATE: Continuing after the grant period has ended.
RESPONSIBILITY: **Committee/PRWA** Groundwater Technician

The education component of our project will include education of both **the** citizens of **the** area **and** a groundwater **program** at local schools. We will be purchasing and collecting information brochures, videos **and** books to present to the schools so that they will have tools to use in **the** classroom and information to hand out to the student, who in turn will take **them** home. The Committee will be working with the School District to establish a yearly groundwater program in at **least** one of **the** grade level which will continue after the initial work is completed. A Wellhead Protection brochure will be developed and printed. This brochure will be sent to **all** residents in the area. The brochure will document the reason for doing **wellhead** protection, show the delineated recharge area, and talk about what residents can do to protect the groundwater. The Committee will also be contacting the local paper and inviting them to attend the Committee meetings.

TASK: Emergency Management Plan
COMPLETION DATE: 1 – 9 months from signing of Grant Award Agreement
RESPONSIBILITY: Committee/ PRWA Groundwater Technician

The Emergency Contingency/Response Plan will be completed with the assistance of the Northcentral DEP office and the County Emergency Management Office. The plan will be review on a yearly basis at the yearly Source Water Protection Committee meeting. The plan will also address future water sources.

TASK: Water Supply Protection Signs
COMPLETION DATE: 1 – 2 years from signing of Grant Award Agreement
RESPONSIBILITY: WHP Committee/Borough Officials

As the wells have not yet been delineated, it is hard to determine what impact the road activities have on the wells. After the delineation is completed the committee will determine where the signs should be placed. There is heavy truck traffic on Route 44 and the wells are in close proximity to the road. Signs will be erected after the Wellhead Protection Plan has been approved by the Department of Environmental Protection and the site is approved by the Pennsylvania Department of Transportation.

Revised budget: Shinglehouse Borough

BUDGET

	SYSTEM CONTRIBUTION	GRANT
SALARIES & BENEFITS:		
Shawn Metcalf, Operator 40 hours @ $15.00 per hour education/work with sign project	$ 600.00	
Mark Meechum, Operator 40 hours @ $15.00 per hour (education/work with erection of signs)	$ 600.00	
Deborah Resig, 45 hrs @ $12.00 per hour	$ 540.00	
Total Salaries & Benefits	$ 1,740.00	
TRAVEL:		
Educational Program Presentations/ Workshops & Seminars on WHP	$ 200.00	
EQUIPMENT & SUPPLIES:		
4 Water Supply Secondary Road Signs		$ 1,600.00
Brochure – printing & distribution		$ 300.00
Office supplies: paper/postage/miscellaneous		$ 300.00
Groundwater Simulator		$ 500.00
Total Equipment & Supplies		$ 2,700.00
ADMINISTRATION:		
Volunteer Committee: 6 Committee Members 40 hours each @ $7.00 per hour (estimated – will probably be more)	$ 1,680.00	
Administrative Technical Assistance Potter County Planning 20 Hours @ $20.00 per hour	$ 400.00	
CONTRACTUAL:		
Moody & Associates (see attached proposals)		$12,820.00
TOTALS:	$ 4,020.00	$15,520.00
TOTAL COST OF PROJECT:		$19,540.00