**Lamont Engineers**
ENGINEERS • PLANNERS • FACILITY OPERATIONS
*Dedicated to Service...Committed to Excellence*

March 15, 2012

Marcia Ellis
Village Clerk/Treasurer
Village of Prospect
116 Upper State Street
Prospect, NY 13435

RE: Prospect/Barneveld/Remsen Joint Operations Study
Draft Intermunicipal Agreement & Draft Standard Operating Procedures

Dear Marcia:

Per our correspondence regarding the closeout of the Prospect/Barneveld/Remsen Joint Operations Study, included are the following attachments for your file:

1. Draft Standard Operating Procedure for the Village of Prospect Water System. To date we have completed as much of this document as possible given the information provided.

2. Draft Copy of the Shared Operator Intermunicipal Agreement (Including all appendices and the draft Standard Operating Procedures for each community).

3. Checklist of items/questions/comments that need to be addressed if and when the communities determined to move forward with this project in the future.

4. A disk containing digital copies of all documents associated with this project for future edits and distribution.

Should you have any questions regarding these documents please do not hesitate to contact me (518) 234-4028.

It has been a pleasure working with you and the committee and we hope you will consider us for any future projects your community plans to undertake.

Sincerely,

Jason R. Preisner
Assistant Project Engineer
Lamont Engineers, P.C.

☑ PO Box 610
Cobleskill, NY 12043

Tel: 518-234-4028
Fax: 518-234-4613

www.lamontengineers.com
lamont@lamontengineers.com

☐ PO Box 486
Roxbury, NY 12474

Tel: 607-326-3341
Fax: 607-326-3346

# ATTACHMENT NO. 1

# Standard Operating Procedure (SOP)
# Village of Prospect

| General System Information | | | |
|---|---|---|---|
| ***PWS Name*** | ***James E. Barrett Water District***<br>***Village of Prospect Water System*** | | **PWSID# NY3202403** |
| ***SOPs Prepared by*** | Village of Prospect | ***Date prepared*** | January 2012 |
| ***SOPs Updated by*** | | ***Date Updated*** | |
| ***Street address of system*** | P.O. Box 159 | ***Number of service connections*** | 144 |
| ***Village/Town*** | Prospect | ***Number of people served*** | 348 |
| ***Zip code*** | 13435 | ***Source type (GW, SW, GWUDI)*** | Groundwater |
| ***County*** | Oneida | ***Total source capacity (gpm)*** | |
| ***Comments*** | | | |

| System Notes |
|---|
| |
| |
| |
| |
| |
| |
| |
| |

# Standard Operating Procedure (SOP)
# Village of Prospect

## Contact Information

| | *Name* | *Primary Phone Number* | *Emergency Phone Number* | *Comment* |
|---|---|---|---|---|
| ***Owner*** | Village of Prospect | (315) 896-9875 | | clerk@villageofprospect.org |
| ***Operator in Charge*** | Alan Jones | (315) 794-8031 | | water_superintendent@villageofprospect.org |
| ***Assistant Operator*** | Ian Adam | (315) 896-6755 | | |
| ***Oneida County Health Dept Contact*** | Sean Clive | (315) 798-5064 | | sclive@ocgov.net |
| ***NYSDOH Duty Officer*** | | 1-866-881-2809 | | |
| ***Water Testing Lab*** | Life Science Laboratory Inc. | (315) 445-1105 | | lslcentral@lsl-inc.com |
| ***Chlorine Supplier*** | | | | |
| ***Equipment Vendor*** | | | | |
| ***Equipment Vendor*** | | | | |
| ***Equipment Vendor*** | | | | |
| ***Excavator*** | | | | |
| ***Electrician*** | | | | |
| ***Power Company*** | | | | |
| ***Propane Supplier*** | | | | |
| ***Engineer*** | | | | |
| ***NYRWA Circuit Rider*** | | | | |
| ***County Emergency Services*** | | | | |
| ***County Sheriff*** | | | | |
| ***State Police*** | | | | |
| ***Fire Emergency*** | | | | |
| ***NYSDEC 24/7 Spill Reporting Hotline*** | | (800) 457-7362 | | |

DRAFT

# Standard Operating Procedure (SOP)
# Village of Prospect

## Sources – Groundwater and GWUDI

| *Source Name and Location* | *Well type, spring, or other source* | *Well depth (ft)* | *Safe yield (gpm)* | *Pump rate (gpm)* | *Pump set depth (ft)* | *Pump Make, Model & HP* | *Source use (primary, auxiliary, emerg.)* |
|---|---|---|---|---|---|---|---|
| Well No. 1 | Well | | | | | | |
| Well No. 2 | Well | | | | | | |
| Well No. 3 | Well | | | | | | |

## System Pumps

| *Pump Name, Location* | *Pump Make, Model & HP* | *Pump Rate (gpm)* | *Comments (pump control method, etc.)* |
|---|---|---|---|
| Well Pump No. 1 | | | |
| Well Pump No. 2 | | | |
| Well Pump No. 3 | | | |

# Standard Operating Procedure (SOP)
# Village of Prospect

| Treatment - Liquid Chlorine (Sodium hypochlorite) | | | |
|---|---|---|---|
| ***Undiluted strength*** | 12.5% | ***Target chlorine residual at entry point to system (ppm)*** | 0.5 |
| ***Day tank capacity (gal)*** | | ***Chlorine to water mix ratio*** | |
| ***Day tank filling instructions*** | | ***Pump make and model*** | |
| | | ***Maximum pump rate (gpm or gph)*** | |
| | | ***Typical pump speed and stroke settings*** | |
| ***MSDS*** | MSDS sheet posted where chemical is stored. | | |
| ***Chemical supplier name and contact information*** | | | |
| ***Comments*** | | | |

# Standard Operating Procedure (SOP)
# Village of Prospect

## Storage

| *Storage Tank Name, Location* | *Pressure or Atmospheric* | *Storage (gal)* | *Comments (operating levels, cleaning methods, frequency, etc.)* |
|---|---|---|---|
| Storage Tank No. 1 (Aqua Store) | Atmospheric | 183,000 | Primary Tank, Glass lined |
| Storage Tank No. 2 (Steel Stand Pipe) | Atmospheric | 35,000 | Reserve Tank, Currently offline |

## Distribution System

| | |
|---|---|
| ***Type of Pipe*** | PVC |
| ***Distribution main size(s)*** | 6-inch & 8-inch |
| ***Service connection shut-off locations*** | |
| ***Comments*** | Distribution system mapping proposed in the near future. |

## Water Quality Sample Sites

| **Description** | **Location/Address/Resident Name** | Chlorine | Total Coliform | Disinfection Byproducts | Lead & Copper | Other |
|---|---|---|---|---|---|---|
| ***Raw Water*** | As Necessary | | | | | |
| ***Entry Point*** | | | | | | |
| " " | | | | | | |
| ***Distribution*** | | | | | | |
| | 1. Village Hall<br>2. Library<br>3. United States Post office<br>4. Methodist Church<br>5. Helmer Residence<br>6. Jones Residence | X | | | | |

# Standard Operating Procedure (SOP)
# Village of Prospect

| Back-Up Power | |
|---|---|
| ***Onsite Generator - make, model, elec capacity, fuel type, fuel storage*** | Portable backup generator onsite. |
| ***Offsite Generator - capacity, source, contact info, transportation*** | N/A |
| ***Power Transfer - transfer switch type, location, step by step procedures*** | |
| ***Exercise schedule and procedures*** | |

DRAFT

# Standard Operating Procedure (SOP)
# Tasks Calendar

| PWS Name: Village of Prospect Water System | |
|---|---|
| **Schedule for Daily Tasks:** | |
| **Task** | **Notes** |
| **Collect entry point free chlorine residual sample and record on monthly operation report** | The free chlorine residual should be at least **0.5** mg/l at the entry point to the system. |
| **Check chlorine day tank, record amount used, and refill as needed** | When the level in the chlorine day tank is down to ____ gals add **5** gals of **12.5%** chlorine and ____ gals of water. |
| **Inspect chlorine feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Record water plant meter readings & calculate total daily production** | Average day demand in summer is _____ gals per day (gpd) and in winter is _____ gpd. If demands are higher than this for more than three days, there may be a leak. |
| **Record pump run times and start cycles** | Pumps normally run _____ hours per day. |
| **Conduct a general security check** | Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism. |
| **Collect other chemical samples as needed** | The measured amount of _____ should be at least ____ mg/l at this sample location _____. |
| **Check and record water levels in storage tanks** | The storage tank normally operates between _____ - _____ feet of water. |
| **Weekly Duties** | |
| **Monthly Duties** | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

| PWS Name: Village of Prospect Water System | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Schedule of Tasks for the Year:** | | | | | | | | | | | | | |
| ° *Place an "x" in each month that the task is required or planned to be performed.* | | | | | | | | | | | | | |
| **Task** | **Frequency** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| **Submit previous month's operation report to DOH by the 10th** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Check distribution system chlorine residual** | Daily | X | X | X | X | X | X | X | X | X | X | X | X |
| **Collect Total Coliform Sample(s)** | Quarterly | | | | X | | | X | | | X | | |
| **Exercise emergency generator for 30 minutes under full load conditions and check all fluid and fuel levels** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect wellheads, controls, seals, vent and screen.** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect tank overflow, vent screens, and hatches** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect chemical feed pump(s), seals, tubing, injection points etc.** | Daily | | | | | | | | | | | | |
| **Review DOH sampling requirements and collect any that are due** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect all pump house water lines, gaskets and fittings for corrosion and leaks** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Prospect Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Clean and inspect chemical solution tanks** | Quarterly | | | | X | | | X | | | X | | |
| **Calibrate chemical feed pumps** | As Needed | | | | | | | | | | | | |
| **Flush dead end lines in distribution system** | Annual | | | | | | | | | | | | |
| **Flush distribution system using unidirectional flushing plan and exercise all valves** | Annual | | | | | | | | | | | | |
| **Prepare and distribute Annual Water Quality Report (AWQR) to Consumers** | Annual | | | | | | | | | | | | |
| **Submit AWQR to Health Dept and DEC, include certification that AWQR was delivered to consumers** | Annual | | | | | | | | | | | | |
| **Update emergency plan and emergency contact information, provide update info to Health Dept** | Annual | | | | | | | | | | | | |
| **Inspect storage tanks for defects, leaks, and sanitary deficiencies - clean and repair as needed** | Annual | | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

| PWS Name: Village of Prospect Water System | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Schedule of Tasks for the Year: | | | | | | | | | | | | | |
| ° *Place an "x" in each month that the task is required or planned to be performed.* | | | | | | | | | | | | | |
| **Task** | **Frequency** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| **Confirm all backflow prevention devices are tested by a certified tester** | Annual | X | | | | | | | | | | | |
| **Exercise all fire hydrants and check all fire hydrant valves** | Annual | | | | | | | | | | | | |
| **Clean, inspect and repair all safety equipment** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Perform building preventative maintenance** | As Needed | | | | | | | | | | | | |
| **Investigate customer complaints/threats. Record on Complaint Log Form.** | As Needed | | | | | | | | | | | | |
| **Winter Preparation** | | | | | | | | | | | | | |

# ATTACHMENT NO. 2

# VILLAGES OF PROSPECT, BARNEVELD & REMSEN
# JOINT WATER SYSTEM OPERATIONS STUDY

## SHARED OPERATOR - DRAFT INTERMUNICIPAL AGREEMENT

TABLE OF CONTENTS


GENERAL TERMS AND CONDITIONS ..... 2

1. Incorporation of Recitals ..... 2

2. Governing Body ..... 2

3. Dispute Resolution ..... 2

3.1 Negotiation Period ..... 2

3.2 Resolution of Dispute ..... 2

4. Description of Village Water Supplies ..... 3

5. Scope of Services ..... 3

6. Immediate Supervisor/Contact at Each Facility ..... 3

7. Additional Obligation of the Parties ..... 4

8. Terms of Employment ..... 4

9. Employee Evaluation, Discipline and Replacement ..... 4

10. Retention of Subcontractors ..... 4

11. Duration and Basis for Termination of Intermunicipal Agreement ..... 4

12. Basis for Agreement Termination ..... 4

13. Billing/Payment Procedure ..... 5

14. Annual Reconciliation ..... 5

15. Insurance ..... 6

16. Indemnification ..... 6

17. Authorization ..... 6

18. Governing Law ..... 6

19. Notices ..... 6

20. Severability ..... 6

21. Amendments ..... 7

22. Non-assignment Clause ..... 7

23. Labor Law ..... 7

24. Compliance with Applicable Laws ..... 7

25. Captions or Headnotes ..... 7

26. Defense of Claims ..... 7

Appendix A ..... 8

Appendix B ..... 9

Appendix C ..... 10

Supplement to Appendix A, B and C ..... 11

Appendix D ..... 13

Appendix E ..... 14

Appendix F ..... 15

Supplement to Appendix D, E and F ..... 16

Appendix G ..... 17

# INTERMUNICIPAL AGREEMENT

**THIS AGREEMENT** (the "Agreement") dated the _____ day of _____, 20__, by and between the **VILLAGE OF PROSPECT** ("Prospect") an Incorporated Village duly organized and validly existing under the laws of the State of New York (the "State'), with offices located at 116 Upper State Street, Prospect, New York, and the **VILLAGE OF BARNEVELD** ("Barneveld") an Incorporated Village duly organized and validly existing under the laws of the State, with offices located at 8520 Old Poland Road, Barneveld, New York, and the **VILLAGE OF REMSEN** ("Remsen") an Incorporated Village duly organized and validly existing under the laws of the State, with offices located at 10606 Pine Street, Remsen, New York. Prospect, Barneveld and Remsen are hereinafter referred to jointly, as the "Parties".

## W I T N E S S E T H:

**WHEREAS**, pursuant to Article 8, Sections 1 and 2-a of the New York State Constitution, as effectuated by General Municipal Law §119-o, municipal corporations and districts of the State are empowered to enter into agreements for the performance among themselves or one for the other of their respective functions, powers and duties on a cooperative or contract basis; and

**WHEREAS**, with funds provided by the New York State Department of State Local Efficiency Grant Program the above-named villages contracted with Lamont Engineers to perform a study to determine the feasibility and cost benefit of consolidating the day-to-day operation of each community's water system into a shared service between the communities; and

**WHEREAS**, a Study Advisory Committee ("Committee") consisting of representatives from each village was formed to guide the study and to meet with Lamont Engineers on a regular basis; and

**WHEREAS**, Lamont Engineers has prepared the Phase I Report that identifies each village's needs and issues and explores a number of operating alternatives as well as the alternative to share operators; and

**WHEREAS**, based on the review of the options and alternatives presented in the Phase I Report, the Committee has determined that the best option in moving forward for their communities will be to develop an Intermunicipal Agreement ('IMA") in which the communities share the costs associated with hiring a full time Shared Operator ("Shared Operator") to oversee the three respective water systems.

**NOW THEREFORE**, in mutual consideration of the covenants and conditions contained herein and pursuant to Article 5-G of the General Municipal Law of the State of New York, the Parties agree as follows:

## GENERAL TERMS AND CONDITIONS

1. **Incorporation of Recitals.** The Recitals are incorporated into this Agreement as though fully set forth at length.

2. **Governing Body.** The Village of Prospect will be designated as the "employer" for all staff employed under this Agreement. As such, the Village of Prospect will perform the following:

   A. Administer payroll and maintain all records in connection with such payroll including but not limited to:
      a. Requiring completion and submission of Employee Tax forms
      b. Paying Employer Social Security and Medicaid
      c. Paying Payroll Taxes in a timely manner
      d. Contributing 3% to the NYS Retirement System
      e. Completing/Providing W-2 by legal deadline
      f. Tracking employee time/activities for each Village using completed Operator's Daily Log
      g. Obtaining/Maintaining Unemployment and Disability Insurance

   B. Administer IRS mileage reimbursement at the end of each month based upon mileage reported in Operator's Daily Log

   The Village of Prospect will be reimbursed for costs related to the employment of the Shared Operator(s) for incidental and incremental increased administrative costs in an amount to be agreed upon by the Parties.

3. **Dispute Resolution.**

3.1 **Negotiation Period.** In the event of a dispute between the parties to this Agreement, the parties shall attempt in good faith to resolve such dispute through negotiation for a period of thirty (30) days after written notice of such dispute is received by a party from another party (the "Negotiation Period").

3.2 **Resolution of Dispute.** If the dispute is not resolved during the Negotiation Period, any party to the dispute may invoke the binding resolution procedure set forth below. In order to invoke the Binding Resolution Procedure, a notice of ongoing dispute (the "Dispute Notice") must be served by a party on the other party within sixty (60) days following the expiration of the Negotiation Period. The Dispute Notice must identify with specificity the nature of the claim/dispute including a complete summary of the basis of the claim/dispute and the relief being requested. The Binding Resolution Procedure shall be sole resolution process and shall substitute for litigation (except disputes arising from third party claims under the Indemnification Provision (Section 15) ) to resolve a dispute under this Agreement by any party, including disputes related to wrongful termination

and nonpayment. Within thirty (30) days of receipt of the Dispute Notice, the parties shall select the County Attorney to act as the mediator (the "Mediator"); if the County Attorney refuses, the parties shall select an attorney to act as the Mediator who shall be independent of all parties and their respective outside counsel; shall be fair, objective, and cost effective; and shall have at least ten (10) years experience in general commercial litigation practice and/or alternative dispute resolution in New York State. The parties shall share the cost of the Mediator equally. Within sixty (60) days from the selection of the Mediator (the "Motion Period"), all parties shall submit to the Mediator and the other parties a full and complete statement of their case including, but not limited to, a memorandum of law, supporting affidavits, demonstrative evidence in support of their position and such other supporting documents as each party deems appropriate. Each party shall have thirty (30) days (the "Response Period") from the close of the Motion Period to submit a response to the other party and the Mediator. The Mediator shall have sixty (60) days from the close of the Response Period to issue a recommended written decision providing a reasoned elaboration for his/her decision and the supporting documentation. Within thirty (30) days from receipt of the recommended decision (the "Appeal Period"), either party shall submit its objections to the recommended decision in writing to the Mediator with a copy to the other party. Within thirty (30) days of the close of the Appeal Period, the Mediator shall issue a final decision (the "Final Decision") responding to the objections and identifying any changes to his recommended decision. The Final Decision issued by the Mediator shall become binding on all parties (the "Final Binding Decision"). The Final Binding Decision may be filed and enforced as a judgment by a party and is not subject to an appeal.

4. **Description of Village Water Supplies.**

   A. Village of Prospect: See Appendix A, attached hereto and incorporated herein.
   B. Village of Barneveld: See Appendix B, attached hereto and incorporated herein.
   C. Village of Remsen: See Appendix C, attached hereto and incorporated herein.

5. **Scope of Services.** With respect to the Shared Operator, the scope of services for each community is described in the Standard Operating Procedures below:

   A. Village of Prospect: See Appendix D, attached hereto and incorporated herein.
   B. Village of Barneveld: See Appendix E, attached hereto and incorporated herein.
   C. Village of Remsen: See Appendix F, attached hereto and incorporated herein.

6. **Immediate Supervisor/Contact at Each Facility.** Each Party will identify a "Contact Person" for purposes of consultation, emergency or other reporting to be made by the Shared Operator. Unless otherwise specified, the contact person for each community is the Mayor of that community.

7. **Additional Obligations of the Parties.**

A. The Parties will provide the Shared Operator with ease of access to each of the Parties' facilities. Specifically, during the winter season, the entrances to the Parties' facilities will be adequately plowed by each Party thereby allowing easy access by removal of snow from the driveways and entrances to the facilities as well as deicing of walkways leading to the facilities.

B. Shared Equipment: The Parties will compile a list of shared equipment and will determine what, if any, fees for such equipment will be applied. If fees are to be applied, the Parties are to reimburse each other for such use on a yearly basis per information derived from the Operator's Daily Log.

8. **Terms of Employment.** See Appendix G, attached hereto and incorporated herein.

9. **Employee Evaluation, Discipline and Replacement.** The Shared Operator will be required to adhere to the "Codes of Conduct" of each Party. In the instance of discipline, termination and/or replacement of the Shared Operator, the Mayors of each of the Parties will consult with each other to determine by consensus an agreeable solution. If an agreeable solution cannot be obtained by consensus, a determination will be made by a majority vote by the Mayors of each of the Parties. The applicable code of conduct for each community is attached hereto as Appendix H.

10. **Retention of Subcontractors.** Each Village employs its own subcontractors as outlined in the Scope of Services Appendices attached hereto for each Party.

11. **Duration and Basis for Termination of Intermunicipal Agreement.** This Agreement shall be for a term of one (1) year, commencing June 1, 2012, and expiring May 31, 2012. This Agreement will be automatically renewed each year following the first year of this Agreement unless any of the Parties submits a notice sixty (60) days prior to the end of the annual agreement term of its desire to terminate its participation in the Agreement.

12. **Basis for Agreement Termination.**

A. In accordance with the procedure of Section 9 hereunder, the Parties shall have the right to terminate the services of the Shared Operator at any time for any reason deemed to be in the Parties' interest, provided that sixty (60) calendar days written notice is delivered to the Shared Operator and all parties to this agreement. In such event, the Shared Operator shall be paid such part of the Fees as shall have been earned by the Shared Operator up to the date of termination.

B. It is the intent of this Agreement to secure the personal services of the Shared Operator. Failure of the Shared Operator for any reason to make such personal services available to the Parties to the extent necessary to perform the Services

required skillfully and promptly, shall be cause for termination of the Shared Operator's services.

13. **Billing/Payment Procedure.**

A. The Parties will make quarterly payments on June 1st, September 1st, December 1st and March 1st. to the Village of Prospect for deposit into a payroll account for the Shared Operator. See Appendix G for calculated billing rates for each Party. The Village of Prospect will generate quarterly invoices to the Parties in the form attached as Appendix I. Payment is to be made within ten calendar (10) days of receipt of the invoice to the Village of Prospect. The Village of Prospect will immediately deposit these payments and make the appropriate payment to the Shared Operator for the purposes of payroll expense and/or to reimburse the general fund for payments issued.

B. The Parties will make quarterly payments at the beginning of each quarter as set forth in the quarterly invoices to the Village of Prospect to pay the Shared Operator for any mileage reimbursement that is due. The Village of Prospect will generate a quarterly invoice for these charges and will provide the invoice to the Parties for payment. See Appendix I. Payment is to be made within ten calendar (10) days of receipt of the invoice to the Village of Prospect. The Village of Prospect will immediately deposit these payments and make the appropriate payment to the Shared Operator for the purposes of reimbursement of mileage expenses and/or to reimburse the general fund for payments issued.

C. The Parties will pay each other accordingly for equipment use at the beginning of each fiscal year (i.e., June through May) for the prior year as determined by the Operator's Daily Log and calculated by the Village of Prospect in its administrative capacity. The Village of Prospect will generate an annual invoice for these charges and will provide the invoice to the Parties for payment. See Appendix J. Payment is to be made within thirty calendar (30) days of receipt of the invoice to the appropriate Party.

14. **Annual Reconciliation.** The Operator's Daily Log will provide the Village of Prospect with the information to: track/tally the hours spent by the Shared Operator at each facility; and confirm that the required activities have been performed. The tally of total hours spent at each of the Villages' facilities will be compared to the figures in Section D of the "Terms of Employment" (Appendix G). Village percentages of actual hours worked at their respective facilities will be adjusted based upon the information provided in the Operator's Daily Log. The Parties will reimburse each other based upon the calculated adjustments by July 31st of the following year. The Village of Prospect will apply the revised Village percentages to determine the Parties' share for the upcoming year and will provide each Party with an invoice for the new quarterly amount due by each Party. The June 1st quarterly payment of each year will be in the amount that was billed during the

previous year and will be adjusted either positively or negatively in the second quarter payment on September 1st to reflect any adjustment to the percentage share of each Village.

15. **Insurance.** The Parties, through the Village of Prospect ("Employer") shall obtain and maintain during the life of this Agreement, Worker's Compensation, Disability Insurance and any other insurance policies required for the Village of Prospect's employees.

16. **Indemnification.** Each party shall indemnify, defend and hold harmless the other parties hereto and each of its officers, directors, employees and agents from any and all claims, damages and costs in connection with and arising out of Party's activities under this Agreement or the operation of their respective water system in general. In the event that any claim is made, suit is brought or other proceeding is instituted against a party and involves a claim for which indemnification is required hereunder, the party seeking indemnity (the "Indemnified Party") shall give the party from which indemnification is required (the "Indemnifying Party") notice of such claim within a reasonable time after becoming aware of the claim. The Indemnifying Party shall thereafter assume, control and pay the cost of the defense of such claim, suit or proceeding using legal counsel reasonably acceptable to the Indemnified Party. The Indemnifying Party shall not settle any such claim with the prior written consent of the Indemnified Party, which consent shall not be unreasonably withheld or delayed.

17. **Authorization.** The Parties hereto represent and warrant (a) that this Agreement has been presented to the Village Board of each of the Parties thereto; and (b) that each such Village Board has approved this Agreement by a majority vote of the entire voting strength of its Village Board.

18. **Governing Law.** This Agreement shall be deemed to be executed in the State of New York and shall be governed by and construed in accordance with the laws of the State of New York.

19. **Notices.** Any notice, approval, acceptance, bill, demand or statement hereunder from any of the Parties to the other(s) shall be in writing and shall be deemed to have been given when received by fax or delivered by hand, or by certified mail, return receipt requested, or by overnight or regular mail, addressed to the other party at the address shown at the beginning of the Agreement. Any of the Parties may at any time change their address by delivering or mailing as aforesaid to the other Parties a notice stating the changed address.

20. **Severability.** This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws, ordinances, rules and regulations, and is intended, and shall for all purposes be deemed to be, a single, integrated document setting forth all of the agreements and understandings of the Parties hereto, and superseding all prior negotiations, understanding and agreements of such Parties. If any term or provision of this Agreement or the applications thereof to any person or circumstances shall for any

reason and to any extent be held to be invalid or unenforceable, then such term or provision shall be ignored, and to the maximum extent possible, this Agreement shall continue in full force and effect, but without giving effect to such term or provision.

21. **Amendments.** No amendment to this Agreement shall be binding upon the Parties unless executed by all of the Parties, herein.

22. **Non-assignment Clause.** This Agreement or any part thereof may not be assigned by any of the Parties or their rights, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous Consent in writing of all of the Parties. Any attempts to assign this Agreement without the Parties' written Consent are null and void.

23. **Labor Law.** It is hereby agreed that all applicable provisions (if any) of the Labor Laws of the State of New York shall be carried out in the performance of this Contract.

24. **Compliance with Applicable Laws.** The Parties agree that all persons employed to perform the services of the Operator hereunder, including subcontractors, agents, officers and employees, shall comply with all applicable laws and all applicable requirements of governmental agencies and departments in the jurisdiction in which the services of the Operator are performed.

25. **Captions or Headnotes.** The captions or head notes on Articles or Sections of this Agreement are intended for convenience and for reference purposes only and in no way define, limit or describe the scope or intent thereof or in any way affect the Agreement.

26. **Defense of Claims.** In the event any claim is made or any action is brought in any way related to the Agreement herein, the Parties shall notify the other parties to this agreement in writing as soon as practical and each party should provide notice to their respective insurers.

**IN WITNESS WHEREOF**, the Parties have duly executed this Agreement as of the date first written above.

| Village of Prospect | Village of Barneveld | Village of Remsen |
|---|---|---|
| By:_____ | By:_____ | By:_____ |
| Mayor of Village of Prospect | Mayor of Village of Barneveld | Mayor of Village of Remsen |

## APPENDIX A

## VILLAGE OF PROSPECT
## DESCRIPTION OF WATER SUPPLY

The Village of Prospect water system (a.k.a. the James E. Barrett Water District) provides potable water to a population of approximately 330 (2000 Census) through 153 service connections. These connections are unmetered and predominantly serve residential customers. Data obtained from the Village's water production reports from January 2009 to December 2009 indicates that the current Average Daily Demand and Maximum Day Demand of the water system are 24,239 gallons per day (gpd) and 55,800 gpd, respectively.

The water source for the Village consists of three drilled groundwater wells located northeast of the Village. A well control building located at the well site houses the well controls, production meters and disinfection facilities. Well water is disinfected with sodium hypochlorite prior to distribution. The distribution system is comprised of 6" and 8" PVC water mains that were installed circa 1984. According to Village operations personnel, the distribution system is in good condition with leaks seldom occurring.

The Village has two (2) water storage tanks which maintain system pressures and provide finished water storage. The primary storage tank is a 183,000 gallon glass-lined steel tank located at the well field site. The other storage tank, currently utilized as a reserve tank, is a 35,000 gallon painted steel stand-pipe located just south of the well site.

Based on a Sanitary Survey conducted by the Oneida County Health Department in September 2008 and the Annual Drinking Water Quality Report for 2009, the water system is reported to be in general compliance with the applicable state drinking water operating, monitoring and reporting requirements and has addressed all recorded deficiencies.

## APPENDIX B

## VILLAGE OF BARNEVELD
## DESCRIPTION OF WATER SUPPLY

The Village of Barneveld water system provides potable water to a population of approximately 332 (2000 Census) through 170 service connections. All connections to the water system are metered and predominantly serve residential customers. Data obtained from the Village's water production reports from March 2009 to February 2010 indicates that the current Average Daily Demand and Maximum Day Demand of the water system are 47,287 gpd and 84,000 gpd, respectively.

The water source for the Village consists of a system of springs located along Church Street in the Town of Trenton near the Village of Prospect. An existing control building at the spring site houses the disinfection facilities, booster pumps, and collection well for the springs. Water flows by gravity from the spring site through a 2-mile long 4-inch diameter transite or asbestos-cement transmission main to a 150,000 gallon painted steel storage tank located off of Sand Road in the Town of Trenton. Distribution system pressures are maintained by the water level of the storage tank which is monitored by the system operator who currently inspects the storage tank every other day to determine when to operate the booster pump. The distribution system, constructed circa 1939, consists of over 8 miles of 4-inch, 6-inch and 8-inch cast iron and transite or asbestos-cement water mains. According to Village operations personnel, the distribution system experiences a fair number of annual leaks.

The Village of Barneveld's spring water source was determined to be Groundwater Under the Direct Influence of Surface Water (GWUDI) by the Oneida County Health Department requiring additional treatment to meet current NYSDOH Surface Water Treatment Standards. The Village is in the process of constructing a new water filtration building and storage tank at the existing spring site to address its water quality issues. The new filtration building will be equipped with cartridge filters. The new 33,000 gallon glass-lined water storage tank will provide contact time for disinfection via sodium hypochlorite injection prior to the tank. The new storage tank will also control the water level of the existing storage tank, thereby eliminating the need for Operations staff to manually monitor storage tank levels.

Based on the Annual Drinking Water Quality Report for 2009, the water system is reported to be in general compliance with the applicable state drinking water operating, monitoring and reporting requirements with the exception of a few minor infractions that were promptly addressed. The Village is addressing its spring water source GWUDI designation, which is scheduled to be fully operational in 2011.

## APPENDIX C

## VILLAGE OF REMSEN
## DESCRIPTION OF WATER SUPPLY

The Village of Remsen water system provides potable water to a population of approximately 531 (2000 Census) through 200 service connections. The service connections in the system are metered and predominantly consist of residential connections. Data obtained from the Village's water production reports from October 2009 to June 2010 indicates that the current Average Daily Demand and Maximum Day Demand of the water system are 52,256 gpd and 84,200 gpd, respectively.

The water source for the Village consists of two drilled groundwater wells located northeast of the Village in the Town of Remsen. A recently constructed water treatment building that provides pH adjustment, aeration, filtration, and disinfection by means of sodium hypochlorite injection is located at the same site as the wells. This facility began operation in October 2009 and was constructed with financial assistance from the Drinking Water State Revolving Fund administered through the New York State Environmental Facilities Corporation. The distribution system consists of 8-inch and 4-inch cast iron mains and a 6-inch cast iron main that extends outside the Village along Prospect Road that served as the transmission main for the Village's former well source. These mains were installed circa 1934 with small sections of 8-inch ductile iron and PVC mains recently installed. According to Village operations personnel, the distribution system is in good condition with leaks seldom occurring.

In 2007 the Village constructed a new 300,000 gallon glass-lined steel water storage tank which is located on the opposite side of the Village from the water treatment facility and well field, in the Town of Trenton. This tank maintains system pressures and provides finished water storage for the Village. There are two (2) abandoned steel water storage tanks at the same location that are being decommissioned.

Based on the Annual Drinking Water Quality Report for 2009, the water system is reported to be in general compliance with the applicable State drinking water operating, monitoring and reporting requirements and has addressed all recorded deficiencies. The Village has recently begun testing for Trihalomethanes (THMs), the byproducts of chlorine disinfection.

## SUPPLEMENT TO APPENDIX A, B and C
## DESCRIPTION OF WATER SUPPLIES

| | Village of Prospect | Village of Barneveld | Village of Remsen |
|---|---|---|---|
| **POPULATION** | 330 | 332 | 531 |
| **SERVICE CONNECTIONS** | 153 | 170 | 200 |
| **USERS** | Primarily Residential with some commercial/non-residential | Primarily Residential with one (1) Agricultural user | Primarily Residential |
| **WATER SOURCE** | 3 drilled groundwater wells | Springs (Groundwater Under Direct Influence of Surface Water "GWUDI") | 2 drilled groundwater wells |
| **AVERAGE DAILY DEMAND** | 24,239 gpd | 47,287 gpd | 52,256 gpd |
| **MAXIMUM DAY DEMAND** | 55,000 gpd | 84,000 | 84,200 |
| **METERED** | No | Yes | Yes |
| **TREATMENT** | Disinfection with Sodium Hypochlorite prior to distribution. | Cartridge Filtration & disinfection with Sodium Hypochlorite prior to distribution | Aeration, pH Adjustment, Filtration (multi-media vessels) and disinfection with Sodium Hypochlorite prior to distribution. |
| **DISTRIBUTION SYSTEM** | Circa 1984: 6" & 8" PVC water mains | Circa 1939: 2-mile long 4" transite from Spring; 8 miles of 4", 6" & 8" cast iron and transite mains | Circa 1934: 8" & 4" cast iron mains; 6" cast iron extends outside village for former well source; small sections of 8" ductile iron and PVC mains recently installed. |
| **WATER STORAGE TANKS** | Primary: 183,000 gallon glass-lined steel tank Reserve: 35,000 gallon painted steel stand-pipe | New 33,000 gal. glass-lined water storage tank; 150,000 gal painted steel | 300,000 gal. glass-lined steel |
| **COMPLIANCE WITH NYS DRINKING WATER OPERATING, MONITORING & REPORTING REQUIREMENTS** | In general compliance. All recorded deficiencies have been addressed. | In general compliance. The few minor infractions have been promptly addressed. | In general compliance. All recorded deficiencies have been addressed. Recently began testing for Trihalomethanes. |

| | | | |
|---|---|---|---|
| **FUTURE CONSIDERATIONS AND KEY VULNERABILITIES** | - Installation of water meters would more accurately bill and monitor annual water consumption. | - Treatment works are new so no upgrades anticipated in near future.<br><br>- Will have to address aging, predominantly cast-iron distribution system replacement. Old 4" transite and cast iron transmission main for spring source to water storage tank has required the greatest frequency of repairs. May be required to address transite due to asbestos content.<br><br>- Should anticipate having to address greater frequency of water main breaks due to age of distribution system.<br><br>- Should develop water meter calibration or replacement initiative to accurately bill and monitor water use. | - Treatment works are new so no upgrades anticipated in the near future.<br><br>- Will have to address aging predominantly cast-iron distribution system.<br><br>- Should anticipate greater frequency of water main breaks due to age of distribution system.<br><br>- Should consider water meter calibration or replacement initiative to accurately bill and monitor water use. |

# APPENDIX D

## VILLAGE OF PROSPECT
## STANDARD OPERATING PROCEDURES

# Standard Operating Procedure (SOP)
# Village of Prospect

| General System Information | | | |
|---|---|---|---|
| ***PWS Name*** | ***James E. Barrett Water District***<br>***Village of Prospect Water System*** | | **PWSID# NY3202403** |
| ***SOPs Prepared by*** | Village of Prospect | ***Date prepared*** | January 2012 |
| ***SOPs Updated by*** | | ***Date Updated*** | |
| ***Street address of system*** | P.O. Box 159 | ***Number of service connections*** | 144 |
| ***Village/Town*** | Prospect | ***Number of people served*** | 348 |
| ***Zip code*** | 13435 | ***Source type (GW, SW, GWUDI)*** | Groundwater |
| ***County*** | Oneida | ***Total source capacity (gpm)*** | |
| ***Comments*** | | | |

| System Notes |
|---|
| |
| |
| |
| |
| |
| |
| |
| |

# Standard Operating Procedure (SOP)
# Village of Prospect

## Contact Information

| | Name | Primary Phone Number | Emergency Phone Number | Comment |
|---|---|---|---|---|
| *Owner* | Village of Prospect | (315) 896-9875 | | clerk@villageofprospect.org |
| *Operator in Charge* | Alan Jones | (315) 794-8031 | | water_superintendent@villageofprospect.org |
| *Assistant Operator* | Ian Adam | (315) 896-6755 | | |
| *Oneida County Health Dept Contact* | Sean Clive | (315) 798-5064 | | sclive@ocgov.net |
| *NYSDOH Duty Officer* | | 1-866-881-2809 | | |
| *Water Testing Lab* | Life Science Laboratory Inc. | (315) 445-1105 | | lslcentral@lsl-inc.com |
| *Chlorine Supplier* | | | | |
| *Equipment Vendor* | | | | |
| *Equipment Vendor* | | | | |
| *Equipment Vendor* | | | | |
| *Excavator* | | | | |
| *Electrician* | | | | |
| *Power Company* | | | | |
| *Propane Supplier* | | | | |
| *Engineer* | | | | |
| *NYRWA Circuit Rider* | | | | |
| *County Emergency Services* | | | | |
| *County Sheriff* | | | | |
| *State Police* | | | | |
| *Fire Emergency* | | | | |
| *NYSDEC 24/7 Spill Reporting Hotline* | | (800) 457-7362 | | |

DRAFT

# Standard Operating Procedure (SOP)
# Village of Prospect

| Sources – Groundwater and GWUDI | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Source Name and Location* | *Well type, spring, or other source* | *Well depth (ft)* | *Safe yield (gpm)* | *Pump rate (gpm)* | *Pump set depth (ft)* | *Pump Make, Model & HP* | *Source use (primary, auxiliary, emerg.)* |
| Well No. 1 | Well | | | | | | |
| Well No. 2 | Well | | | | | | |
| Well No. 3 | Well | | | | | | |

| System Pumps | | | |
|---|---|---|---|
| *Pump Name, Location* | *Pump Make, Model & HP* | *Pump Rate (gpm)* | *Comments (pump control method, etc.)* |
| Well Pump No. 1 | | | |
| Well Pump No. 2 | | | |
| Well Pump No. 3 | | | |

DRAFT

# Standard Operating Procedure (SOP)
# Village of Prospect

| Treatment - Liquid Chlorine (Sodium hypochlorite) | | | |
|---|---|---|---|
| ***Undiluted strength*** | 12.5% | ***Target chlorine residual at entry point to system (ppm)*** | 0.5 |
| ***Day tank capacity (gal)*** | | ***Chlorine to water mix ratio*** | |
| ***Day tank filling instructions*** | | ***Pump make and model*** | |
| | | ***Maximum pump rate (gpm or gph)*** | |
| | | ***Typical pump speed and stroke settings*** | |
| ***MSDS*** | MSDS sheet posted where chemical is stored. | | |
| ***Chemical supplier name and contact information*** | | | |
| ***Comments*** | | | |

DRAFT

# Standard Operating Procedure (SOP)
# Village of Prospect

## Storage

| *Storage Tank Name, Location* | *Pressure or Atmospheric* | *Storage (gal)* | *Comments (operating levels, cleaning methods, frequency, etc.)* |
|---|---|---|---|
| Storage Tank No. 1 (Aqua Store) | Atmospheric | 183,000 | Primary Tank, Glass lined |
| Storage Tank No. 2 (Steel Stand Pipe) | Atmospheric | 35,000 | Reserve Tank, Currently offline |

## Distribution System

| | |
|---|---|
| *Type of Pipe* | PVC |
| *Distribution main size(s)* | 6-inch & 8-inch |
| *Service connection shut-off locations* | |
| *Comments* | Distribution system mapping proposed in the near future. |

## Water Quality Sample Sites

| Description | Location/Address/Resident Name | Chlorine | Total Coliform | Disinfection Byproducts | Lead & Copper | Other |
|---|---|---|---|---|---|---|
| *Raw Water* | As Necessary | | | | | |
| *Entry Point* | | | | | | |
| " " | | | | | | |
| *Distribution* | | | | | | |
| | 1. Village Hall<br>2. Library<br>3. United States Post office<br>4. Methodist Church<br>5. Helmer Residence<br>6. Jones Residence | X | | | | |

DRAFT

# Standard Operating Procedure (SOP)
# Village of Prospect

| Back-Up Power | |
|---|---|
| ***Onsite Generator - make, model, elec capacity, fuel type, fuel storage*** | Portable backup generator onsite. |
| ***Offsite Generator - capacity, source, contact info, transportation*** | N/A |
| ***Power Transfer - transfer switch type, location, step by step procedures*** | |
| ***Exercise schedule and procedures*** | |

DRAFT

# Standard Operating Procedure (SOP)
# Tasks Calendar

| PWS Name: Village of Prospect Water System | |
|---|---|
| **Schedule for Daily Tasks:** | |
| **Task** | **Notes** |
| **Collect entry point free chlorine residual sample and record on monthly operation report** | The free chlorine residual should be at least **0.5** mg/l at the entry point to the system. |
| **Check chlorine day tank, record amount used, and refill as needed** | When the level in the chlorine day tank is down to ____ gals add **5** gals of **12.5%** chlorine and ____ gals of water. |
| **Inspect chlorine feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Record water plant meter readings & calculate total daily production** | Average day demand in summer is ____ gals per day (gpd) and in winter is ____ gpd. If demands are higher than this for more than three days, there may be a leak. |
| **Record pump run times and start cycles** | Pumps normally run ____ hours per day. |
| **Conduct a general security check** | Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism. |
| **Collect other chemical samples as needed** | The measured amount of ____ should be at least ____ mg/l at this sample location ____. |
| **Check and record water levels in storage tanks** | The storage tank normally operates between ____ - ____ feet of water. |
| **Weekly Duties** | |
| **Monthly Duties** | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Prospect Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Submit previous month's operation report to DOH by the 10th** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Check distribution system chlorine residual** | Daily | X | X | X | X | X | X | X | X | X | X | X | X |
| **Collect Total Coliform Sample(s)** | Quarterly | | | | X | | | X | | | X | | |
| **Exercise emergency generator for 30 minutes under full load conditions and check all fluid and fuel levels** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect wellheads, controls, seals, vent and screen.** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect tank overflow, vent screens, and hatches** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect chemical feed pump(s), seals, tubing, injection points etc.** | Daily | | | | | | | | | | | | |
| **Review DOH sampling requirements and collect any that are due** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect all pump house water lines, gaskets and fittings for corrosion and leaks** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Prospect Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Clean and inspect chemical solution tanks** | Quarterly | | | | X | | | X | | | X | | |
| **Calibrate chemical feed pumps** | As Needed | | | | | | | | | | | | |
| **Flush dead end lines in distribution system** | Annual | | | | | | | | | | | | |
| **Flush distribution system using unidirectional flushing plan and exercise all valves** | Annual | | | | | | | | | | | | |
| **Prepare and distribute Annual Water Quality Report (AWQR) to Consumers** | Annual | | | | | | | | | | | | |
| **Submit AWQR to Health Dept and DEC, include certification that AWQR was delivered to consumers** | Annual | | | | | | | | | | | | |
| **Update emergency plan and emergency contact information, provide update info to Health Dept** | Annual | | | | | | | | | | | | |
| **Inspect storage tanks for defects, leaks, and sanitary deficiencies - clean and repair as needed** | Annual | | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Prospect Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Confirm all backflow prevention devices are tested by a certified tester** | Annual | X | | | | | | | | | | | |
| **Exercise all fire hydrants and check all fire hydrant valves** | Annual | | | | | | | | | | | | |
| **Clean, inspect and repair all safety equipment** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Perform building preventative maintenance** | As Needed | | | | | | | | | | | | |
| **Investigate customer complaints/threats. Record on Complaint Log Form.** | As Needed | | | | | | | | | | | | |
| **Winter Preparation** | | | | | | | | | | | | | |

# APPENDIX E

## VILLAGE OF BARNEVELD
## STANDARD OPERATING PROCEDURES

# Standard Operating Procedure (SOP)
# Village of Barneveld

| General System Information | | | |
|---|---|---|---|
| ***PWS Name*** | Village of Barneveld | | **PWSID# NY 3202410** |
| ***SOPs Prepared by*** | Ian Adam | ***Date prepared*** | 5/16/2011 |
| ***SOPs Updated by*** | | ***Date Updated*** | 12/14/2011 |
| ***Street address of system*** | 9010 Church St.<br>Remsen (Prospect) NY | ***Number of service connections*** | 171 |
| ***Town*** | Trenton | ***Number of people served*** | 600 |
| ***Zip code*** | | ***Source type (GW, SW, GWUDI)*** | GWUDI |
| ***County*** | Oneida | ***Total source capacity (gpm)*** | |
| ***Comments*** | Mailing address: PO Box 346, Barneveld NY 13304 | | |

| System Notes |
|---|
| |
| |
| |
| |
| |
| |
| |
| |

# Standard Operating Procedure (SOP)
# Village of Barneveld

| Contact Information | | | | |
|---|---|---|---|---|
| | ***Name*** | ***Primary Phone Number*** | ***Emergency Phone Number*** | ***Comments*** |
| ***Owner*** | George Morey, Mayor | Cell 335-6545 | | |
| ***Operator in Charge*** | Ian Adam | Cell 292-8155 | Home 896-6755 | |
| ***Assistant Operator*** | | | | |
| ***Oneida County Health Dept.*** | Sean Clive<br>Eric Lemieux | 798-5064<br>798-5064 | Cell 790-0351<br>Cell 790-8485 | |
| ***NYS DOH Duty Officer*** | | 1-866-881-2809 | | |
| ***Water Testing Lab*** | Life Science Lab | 445-1105 | Pick up - Paul 382-7861 | |
| ***Water Testing Lab*** | MVWA Lab | 792-0316 | | |
| ***Chlorine Supplier*** | Slack Chemical | 493-0430 | | Order with Remsen call Gene 651-5656 |
| ***Equipment Vendor*** | Filter Equipment | 732 938-7440 | | Order: cjgroh@filter-equipment.com |
| ***Equipment Vendor*** | Gartner Equipment<br>Keith Fazekas | 476-8321 | | |
| ***Equipment Vendor*** | Ramsco | 797-0707 | | |
| ***Plumber*** | Dave Dousharm | Cell 534-1074 | | |
| ***Excavator*** | Dave Schallenberg | Cell 723-0256 | | |
| ***Electrician*** | | | | |
| ***Power Company*** | National Grid | 798-5120 | 1-800-892-2345 | |
| ***Propane Supplier*** | Amerigas | 831-2121 | | |
| ***Water Hauler*** | Eggan Excavating | 1-800-527-6040 | | |
| ***Engineer*** | Anthony Glover | 829-3757 | | |
| ***Building Contractor*** | Henderson Bros.<br>Keith Henderson | 668-6160 | | |
| ***NYRWA*** | Doug Smorol | Cell<br>1-518-929-1006 | Home 821-6208 | NYRWA<br>1-888-697-8725 |
| ***County Emergency Services*** | Kevin Revere | 765-2522 | | |
| ***County Sheriff*** | | 911 | 736-0141 | |
| ***State Police*** | Remsen Barracks | 911 | 831-4112 | |
| ***Fire Emergency*** | | 911 | | |
| ***NYSDEC 24/7 Spill Reporting Hotline*** | | | (800) 457-7362 | |

# Standard Operating Procedure (SOP)
# Village of Barneveld

| Sources – Groundwater (Springs) | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Source Name and Location* | *Well type, spring, or other source* | *Well depth (ft)* | *Safe yield (gpm)* | *Pump rate (gpm)* | *Pump set depth (ft)* | *Pump Make, Model & HP* | *Source use (primary, auxiliary, emerg.)* |
| Spring #1 | Spring | 9 | | | | Gravity into well #4 | auxiliary |
| Spring #2 | Spring | 10 | | | | Gravity into well #4 | auxiliary |
| Spring #3 | Spring | 8 | | | | Gravity into well #4 | auxiliary |
| Collection Well #4 | ---------- | 16 | | 2 @ 75 gpm | | Grundfos Model MS4000 5hp | primary |

| System Pumps | | | |
|---|---|---|---|
| *Pump Name, Location* | *Pump Make, Model & HP* | *Pump Rate (gpm)* | *Comments (pump control method, etc.)* |
| 2 collection well pumps<br><br>Well #4 | Grundfos Model MS4000 5 hp | 75 gpm each | Pumps start alternately<br>Lead pump starts @ 25' Storage tank level<br>Lag pump starts @ 24' storage tank level |
| 3 spring sample pumps<br><br>Springs #1, #2, #3 | | | Sump type - manual<br>Operation as needed |
| 2 chlorine injecting pumps<br><br>(see next page also) | LMI Model AA941-D50HI | 0.42 gph | First pump is manually set to start as lead. Second pump is for redundancy. Need to be alternated frequently or primed |

# Standard Operating Procedure (SOP)
# Village of Barneveld

| Treatment - Liquid Chlorine (Sodium Hypochlorite) | | | |
|---|---|---|---|
| ***Undiluted strength (5%, 12.5%, etc.)*** | 12.5% | ***Target chlorine residual at entry point to system (ppm)*** | 0.2 - 0.6 |
| ***Day tank capacity (gal)*** | 50 | ***Chlorine to water mix ratio*** | 1:6 |
| ***Day tank filling instructions*** | Agitate daily (stir)<br><br>Check level daily - When down to 10 gallons left, put in 5 gallons chlorine & 30 gallons water | ***Pump make and model*** | LMI<br>AAA941-D50HI |
| | | ***Maximum pump rate (gpm or gph)*** | 0.42 gph<br>150 psi rating |
| | | ***Typical pump speed and stroke settings*** | Target 60.1 - 70.1 stroke |
| ***MSDS*** | MSDS sheet posted where chemical is stored. | | |
| ***Chemical supplier name and contact information*** | Slack Chemical Co.<br>PO Box 30<br>Carthage NY 13619-0030 (315) 493-0430 | | |
| ***Comments*** | Call Gene, Remsen Operator, 651-5656 (Cell) to find out when they are ordering and to get our order dropped at Remsen with their order. | | |

# Standard Operating Procedure (SOP)
# Village of Barneveld

## Storage

| *Storage Tank Name, Location* | *Pressure or Atmospheric* | *Storage (gal)* | *Comments (operating levels, cleaning methods, frequency, etc.)* |
|---|---|---|---|
| Main Storage tank off Redmond Rd | | 150,000 | |
| Secondary Storage tank Church St. | | 31,000 | Only run one pump. Never both at the same time. Pump on @ 24 ft., off @ 27 ft. Serves at chlorine contact tank. |

## Distribution System

| | |
|---|---|
| *Type of Pipe* | Transite - 90% Ductile Iron - 10% |
| *Distribution main size(s)* | 8", 6", 4" |
| *Service connection shut-off locations* | |
| *Comments* | Distribution system mapping proposed in the near future. |

## Sample Sites

| Description | Location/Address/Resident Name | Chlorine | Total Coliform | Disinfection Byproducts | Lead & Copper | Other |
|---|---|---|---|---|---|---|
| *Raw Water* | As required by NYSDOH | | | | | |
| *Entry Point* | Clearwell sample - continuous | x | | | | x |
| " " | Other = turbidity | | | | | |
| *Distribution* | 1. Sweet Basil<br>2. Turner Lumber<br>3. Trenton Municipal Center<br>4. Barneveld Post Office<br>5. Adam Residence<br>6. Landman Residence | x | | | | |

# Standard Operating Procedure (SOP)
# Village of Barneveld

| Back-Up Power | |
|---|---|
| ***Onsite Generator - make, model, elec capacity, fuel type, fuel storage*** | Portable back up generator onsite |
| ***Offsite Generator - capacity, source, contact info, transportation*** | N/A |
| ***Power Transfer - transfer switch type, location, step by step procedures*** | N/A |
| ***Exercise schedule and procedures*** | N/A |

# Standard Operating Procedure (SOP)
# Village of Barneveld

| Treatment – Cartridge Filtration | | | |
|---|---|---|---|
| ***Treatment description*** | Dual cartridge<br>2 sets in parallel | ***Design flow rate (gpm)*** | 150 gpm max.<br><br>105 gpm (optimum) |
| ***Describe maintenance, parts replacement and backwash procedures*** | ➢ Filters are 1 micron (primary) and 1 micron - absolute (secondary) respectively.<br><br>➢ Filters should be changed @ 30 psi pressure drop. Changing primary filter should extend the life of the secondary. | | |
| ***Service name and contact information*** | Equipment - Gartner Equipment (315) 476-8321<br><br>Filters – Filter Equipment (732) 938-7440 | | |
| ***Comments*** | ➢ Both sets of filters online at all times.<br><br>➢ **Never run both pumps at the same time.** | | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

| PWS Name: Village of Barneveld Water System | |
|---|---|
| **Schedule for Daily Tasks:** | |
| **Task** | **Notes** |
| **Read entry point free chlorine residual from CL-17 and record on monthly operation report** | The free chlorine residual should be at least 0.2 mg/l at the entry point to the system. |
| **Check chlorine day tank, record amount used, and refill as needed** | When the level in the chlorine day tank is down to 10 gals add 5 gals of 12.5% chlorine and 30 gals of water. |
| **Inspect chlorine feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Record water plant meter readings & calculate total daily production** | Average day demand in summer is _____ gals per day (gpd) and in winter is 60,000 gpd. If demands are higher than this for more than three days, there may be a leak. |
| **Record pump run times and start cycles** | Pumps normally run 12 hours per day. |
| **Conduct a general security check** | Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism. |
| **Check and record water levels in storage tanks** | The storage tank normally operates between 4 - 27 feet of water. |
| **Check other treatment processes such as cartridge filters or softeners** | ➢ Cartridge filters need to be changed when the head loss is greater than 30 psi.<br>➢ Observe & note filter pressure differentials. Recharge softener with salt as needed.<br>➢ Softener should only need to recharge 2 - 3 times a year. |
| **Turbidity sampling** | ➢ Daily sampling. Filtered (grab) vs. tank (continuous).<br>➢ Record samples from wall unit & portable unit. |
| **Dehumidifer** | ➢ Check daily and empty water as needed. |
| **Weekly duties** | ➢ Change Recorder Chart and file in drawer. Check levels of Chlorine Analyzer (CL-17) reagents.<br>➢ Operate sample pumps from each separate spring. |
| **Monthly duties** | ➢ Change Chlorine Analyzer (CL-17) reagents.<br>➢ Check propane level in tank. |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Barneveld Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Submit previous month's operation report to DOH by the 10th | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Check distribution system chlorine residual per sampling plan | Daily | | | | | | | | | | | | |
| Collect Total Coliform Sample(s) | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Exercise emergency generator for 30 minutes under full load conditions and check all fluid and fuel levels | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Inspect wellheads, controls, seals, vent and screen. | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Inspect tank overflow, vent screens, and hatches | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Inspect chemical feed pump(s), seals, tubing, injection points etc. | Daily | | | | | | | | | | | | |
| Inspect all pump house water lines, gaskets and fittings for corrosion and leaks | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Clean and inspect chemical solution tanks | Quarterly | X | | | X | | | X | | | X | | |
| Calibrate chemical feed pumps | As Needed | | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Barneveld Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Review DOH sampling requirements and collect any that are due | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| Flush dead end lines in distribution system | Annual | | | | | | | | | X | | | |
| Flush distribution system using unidirectional flushing plan and exercise all valves | Annual | | | | | | | | | X | | | |
| Prepare and distribute Annual Water Quality Report (AWQR) to Consumers | Annual | | | | X | | | | | | | | |
| Submit AWQR to OCHD & NYS DOH, include certification that AWQR was delivered to consumers | Annual | | | | | X | | | | | | | |
| Update emergency plan and emergency contact information, provide update info to Health Dept | As Needed | | | | | | | | | | | | |
| Inspect storage tanks for defects, leaks, and sanitary deficiencies - clean and repair as needed | Annual | | | | | | X | | | | | | |
| Confirm all backflow prevention devices are tested by a certified tester | Annual | X | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Tasks Calendar

**PWS Name: Village of Barneveld Water System**

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Exercise all fire hydrants and check all fire hydrant valves** | Annual | | | | | | | | | X | | | |
| **Clean, inspect and repair all safety equipment** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Perform building preventative maintenance** | As Needed | | | | | | | | | | | | |
| **Investigate customer complaints/threats. Record on Complaint Log Form. Take reports of suspicious activity & record on Telephone Threat Identification Checklist.** | As Needed | | | | | | | | | | | | |
| **Winter preparation: Insulate 3 blow off valves. Shut off Evergreen Cemetery water supply.** | | | | | | | | | | | X | | |

**Lamont Engineers**
ENGINEERS • PLANNERS • FACILITY OPERATIONS
*Dedicated to Service...Committed to Excellence*

March 15, 2012

Marcia Ellis
Village Clerk/Treasurer
Village of Prospect
116 Upper State Street
Prospect, NY 13435

RE: Prospect/Barneveld/Remsen Joint Operations Study
Draft Intermunicipal Agreement & Draft Standard Operating Procedures

Dear Marcia:

Per our correspondence regarding the closeout of the Prospect/Barneveld/Remsen Joint Operations Study, included are the following attachments for your file:

1. Draft Standard Operating Procedure for the Village of Prospect Water System. To date we have completed as much of this document as possible given the information provided.

2. Draft Copy of the Shared Operator Intermunicipal Agreement (Including all appendices and the draft Standard Operating Procedures for each community).

3. Checklist of items/questions/comments that need to be addressed if and when the communities determined to move forward with this project in the future.

4. A disk containing digital copies of all documents associated with this project for future edits and distribution.

Should you have any questions or comments regarding these documents please do not hesitate to contact me (518) 234-4028.

It has been a pleasure working with you and the committee and we hope you will consider us for any future projects your community plans to undertake.

Sincerely,

Jason R. Preisner
Assistant Project Engineer
Lamont Engineers, P.C.

☑ PO Box 610
Cobleskill, NY 12043

Tel: 518-234-4028
Fax: 518-234-4613

www.lamontengineers.com
lamont@lamontengineers.com

☐ PO Box 486
Roxbury, NY 12474

Tel: 607-326-3341
Fax: 607-326-3346

# APPENDIX F

## VILLAGE OF REMSEN
## STANDARD OPERATING PROCEDURES

DRAFT

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| General System Information | | | |
|---|---|---|---|
| ***PWS Name*** | Village of Remsen Water System | | **PWSID# NY3202404** |
| ***SOPs Prepared by*** | Lamont Engineers P.C. | ***Date prepared*** | February 2012 |
| ***SOPs Updated by*** | | ***Date Updated*** | |
| ***Street address of system*** | 10606 Pine St. | ***Number of service connections*** | 200 |
| ***Village/Town*** | Village of Remsen | ***Number of people served*** | 531 |
| ***Zip code*** | 13438 | ***Source type (GW, SW, GWUDI)*** | GWUDI |
| ***County*** | Oneida | ***Total source capacity (gpm)*** | 500 gpm. |
| ***Comments*** | | | |

| System Notes |
|---|
| |
| |
| |
| |
| |
| |
| |
| |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Contact Information | | | | |
|---|---|---|---|---|
| | ***Name*** | ***Primary Phone Number*** | ***Emergency Phone Numbers*** | ***Comments*** |
| ***Owner*** | Village of Remsen | (315) 831-5554 | | villageofremsen@frontier.com |
| ***Operator in Charge*** | Eugene Doerr | (315) 831-4248 | | |
| ***Assistant Operator*** | Steve Freeman | (315) 831-4248 | | |
| ***Oneida County Health Dept.*** | Sean Clive | (315) 798-5064 | (315) 790-0351 | sclive@ocgov.net |
| ***NYSDOH Duty Officer*** | Sean Clive | 1–866–881-2809 | | |
| ***Health Dept After Hours*** | | | | |
| ***Water Testing Lab*** | | | | |
| ***Water Testing Lab*** | | | | |
| ***Chemical Supplier*** | Slack Chemical Co., Inc | (315) 493-3931 | | |
| ***Equipment Vendor*** | | | | |
| ***Equipment Vendor*** | | | | |
| ***Equipment Vendor*** | | | | |
| ***Plumber*** | | | | |
| ***Excavator*** | | | | |
| ***Electrician*** | | | | |
| ***Power Company*** | | | | |
| ***Propane Supplier*** | | | | |
| ***Engineer*** | | | | |
| ***County Emergency Services*** | | | | |
| ***County Sheriff*** | | | | |
| ***State Police*** | | | | |
| ***Fire Emergency*** | | | | |
| ***NYRWA Circuit Rider*** | | | | |
| ***NYSDEC 24/7 Spill Reporting Hotline*** | | (800) 457-7362 | | |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Water Source – Groundwater Wells | | | | | | |
|---|---|---|---|---|---|---|
| ***Source Name and Location*** | ***Well type, spring, or other source*** | ***Well depth (ft)*** | ***Safe yield (gpm)*** | ***Pump rate (gpm)*** | ***Pump set depth (ft)*** | ***Source use (primary, auxiliary, emerg.)*** |
| Well RG #2 | Well | 230 | 250 | 130 | | Auxiliary |
| Well RG #3 | Well | 256 | 250 | 130 | | Primary |

| Groundwater Well Pumps – (Pump Raw Water into Aeration Unit then into the Clearwell) | | | |
|---|---|---|---|
| ***Pump Name, Location*** | ***Pump Make, Model & HP*** | ***Pump Rate (gpm)*** | ***Comments (pump control method, etc.)*** |
| RG #2 Well Pump | Grundfos Model 150-S50-2 (5 HP) | 125 | Operated via level controls in clearwell and by operator input. |
| RG #3 Well Pump | Grundfos Model 150-S50-2 (5 HP) | 125 | Operated via level controls in clearwell and by operator input. |

| Treatment – Aeration System (First Stage of Treatment) | | | |
|---|---|---|---|
| ***Treatment description*** | Aeration Unit is designed to remove radon, dissolved sulfides, and to provide pre-oxidation of soluble iron. | ***Design flow rate (gpm)*** | 150 |
| ***Description of Process*** | ➢ Groundwater is pumped via the well pump(s) at a rate of 125 gpm at 85' of TDH into the aeration system. The flow out of the aeration system is also 125 gpm<br>➢ The Aeration Unit operates in a continuous flow mode. A 10 hp blower provides air to PVC discharge headers in the aeration tank. The Aeration Unit is constructed with multiple stages to optimize performance.<br>➢ Sulfuric Acid, injected at a rate of 30 to 40 mg/l, is added to the first stage of the Aeration Unit (ahead of Aeration Unit) to reduce alkalinity and lower pH to 6.7 SU to reduce the solubility of hydrogen sulfide to promote air stripping. Subsequent aeration will strip radon and carbon dioxide. Approximately 85% of the hydrogen sulfide and radon will be removed. Carbon dioxide removal raises the pH to approximately 7.0 SU without chemical addition. The aeration system will oxidize the iron from the groundwater wells into soluble iron oxide which will be removed by filters downstream of the Aeration Unit. | | |
| ***Make/Model/Serial*** | <u>Aeration Blower</u>:<br>➢ Lowry - Model DB 63 Vessel w/ VB-075 10 HP blower.<br><u>Sulfuric Acid Feed System</u>:<br>➢ LMI Acid Pump Rated at 38 GPD @150 PSI (1/4 HP)<br>➢ Duplex Chemical Feed Pumps Mounted on stainless steel stand, with drum suction wand, low profile containment deck.<br>➢ Sulfuric Acid System is designed feed undiluted sulfuric acid from 30 gallon drums. | | |

| Clearwell (Receives flows from Aeration System) | |
|---|---|
| ***Description*** | ➢ Clearwell provides water storage prior to primary filtration.<br>➢ The water storage level within clearwell determines the on/off function of the groundwater well pumps and aeration system.<br>➢ Clearwell is sized to provide a useful storage capacity of 4,500 gallons that provides 20 minutes of drawdown before well pumps are started.<br>➢ Clearwell Well Pumps convey water from the clearwell through the filtration system. |

| Clearwell Well Pumps – (Pumps Water from Clearwell thru Filters) | | | |
|---|---|---|---|
| ***Pump Name, Location*** | ***Pump Make, Model & HP*** | ***Pump Rate (gpm)*** | ***Comments (pump control method, etc.)*** |
| RG #2 Clearwell Well Pump | Grundfos Model 100-H10-5 (10 HP) | 150 | Operated via level controls in clearwell and by operator input. |
| RG #3 Clearwell Well Pump | Grundfos Model 100-H10-5 (10 HP) | 150 | Operated via level controls in clearwell and by operator input. |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Treatment – Sodium Hypochlorite (Chlorine) | | | |
|---|---|---|---|
| ***Undiluted strength (5%, 12.5%, etc.)*** | 12% | ***Target chlorine residual at entry point to system (ppm)*** | |
| ***Day tank capacity (gal)*** | 275 | ***Chlorine to water mix ratio*** | |
| ***Day tank filling instructions*** | | ***Pump make and model*** | LMI Chemical Feed Pump |
| | | ***Maximum pump rate (gpm or gph)*** | 4 GPH @ 100 PSI (1/4 HP) |
| | | ***Typical pump speed and stroke settings*** | |
| ***MSDS*** | MSDS sheet posted where chemical is stored. | | |
| ***Comments*** | ➢ Sodium Hypochlorite is injected upstream of filters to oxidize iron and hydrogen sulfide that is not removed during air stripping process.<br>➢ Sodium Hypochlorite is stored in two (2) 275 gallon Polyethylene Chemical Storage tanks. | | |

| Treatment – Primary Filtration (Sand & Anthracite Filters) | | | |
|---|---|---|---|
| ***Treatment description*** | Filter media removes precipitated ferric hydroxide (iron), elemental sulfur, manganese dioxide, turbidity and color. | ***Design flow rate (gpm)*** | 150 |
| ***Description of Process*** | ➢ Pressure filter system consists of a parallel filtration system with three (3) 4-foot diameter pressure filters each having a nominal rated capacity of 75 gpm at 6 gpm/sf. Each filter contains a 12-inch graded gravel support layer, 18-inch filter sand layer, and a 18-inch anthracite layer.<br>➢ The three filters enable the largest well at the Well Source to operate at its rated capacity of 120 gpm at 6 gpm/sf with one filter unit out of service. Each of the three filters has a nominal capacity of 75 gpm at a loading rate of 6 gpm/sf.<br>➢ The third filter provides the redundant capacity needed to ensure that the wells can continue to operate while one filter is out of service.<br>➢ The filters are designed to operate in a continuous mode. In this mode, sodium hypochlorite feed is continuous, and backwashing is required only when the pressure drop through the filters exceeds the recommended levels of 5 to 9 psi. The pressure drop through the filter units at the design flow rate is negligible.<br>➢ Each filter can process approximately 300,000 gallons between backwash cycles. Backwash cycle requires 190 gpm at 60 psi from the distribution system for a 10 minute backwash period per filter. Every fourth backwash cycle includes an air-water wash with a 60 gpm backwash and 25 cfm air scour. Each backwash cycle is followed by a two (2) minute bed settle and then a three (3) minute 75 gpm (at 60 psi) rinse to waste. The total water required for the standard backwash is approximately 2,425 gallons for each filter. A flow meter on the backwash line records total backwash flows. | | |

| Treatment – Primary Filtration (Sand & Anthracite Filters) - Continued | |
|---|---|
| ***Make/Model/Serial*** | Sand & Anthracite Filters:<br><br>➢ Hungerford & Terry - 48-inch outside diameter x 60-inch straight shell filter tanks.<br><br>Media:<br><br>➢ 12-inch thick graded gravel<br>➢ 18-inch thick filter sand<br>➢ 18-inch thick Ferrofilt (anthracite)<br><br>Filter Air Blower:<br><br>➢ Positive Displacement Blower<br>B711 393SP Roots Model RAI<br>Blower Rated at 25 cfm t 8 psi, 3 HP |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Treatment - Liquid Chlorine (Sodium Hypochlorite) | | | |
|---|---|---|---|
| ***Undiluted strength (5%, 12.5%, etc.)*** | 12.5% | ***Target chlorine residual at entry point to system (ppm)*** | |
| ***Day tank capacity (gal)*** | | ***Chlorine to water mix ratio*** | |
| ***Day tank filling instructions*** | | ***Pump make and model*** | |
| | | ***Maximum pump rate (gpm or gph)*** | |
| | | ***Typical pump speed and stroke settings*** | |
| ***MSDS*** | MSDS sheet posted where chemical is stored. | | |
| ***Comments*** | | | |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Storage Tank Name, Location | Storage (gal) | Comments (operating levels, cleaning methods, frequency, etc.) |
|---|---|---|
| Primary Storage Tank (Star Hill Road) | 300,000 | ➢ Overflow Elevation: 1368<br>➢ Glass Lined Tank Installed Circa 2007 |
| Secondary Storage Tank (Decommission in Progress) | 300,000 | ➢ Overflow Elevation: 1379 |

## Distribution System

| | |
|---|---|
| ***Type of Pipe*** | |
| ***Distribution main size(s)*** | |
| ***Service connection shut-off locations*** | |
| ***Comments*** | Distribution system mapping proposed in the near future. |

## Water Quality Sample Sites

| Description | Location/Address/Resident Name | Chlorine | Total Coliform | Disinfection Byproducts | Lead & Copper | Other |
|---|---|---|---|---|---|---|
| ***Raw Water*** | As required by NYSDOH | | | | | |
| ***Entry Point*** | | | | | | |
| " " | | | | | | |
| ***Distribution*** | 1.<br>2.<br>3.<br>4.<br>5.<br>6. | | | | | |

# Standard Operating Procedure (SOP)
# Village of Remsen Water System

| Back-Up Power | |
|---|---|
| ***Onsite Generator - make, model, elec capacity, fuel type, fuel storage*** | |
| ***Offsite Generator - capacity, source, contact info, transportation*** | |
| ***Power Transfer - transfer switch type, location, step by step procedures*** | |
| ***Exercise schedule and procedures*** | |

# Standard Operating Procedure (SOP)
# Operator Tasks Calendar

| PWS Name: Village of Remsen Water System | |
|---|---|
| **Schedule for Daily Tasks:** | |
| **Task** | **Notes** |
| **Collect entry point free chlorine residual sample and record on monthly operation report** | The free chlorine residual should be at least ____ mg/l at the entry point to the system. |
| **Check chlorine day tank, record amount used, and refill as needed** | When the level in the chlorine day tank is down to ____ gals add ____ gals of ____% chlorine and ____ gals of water. |
| **Inspect chlorine feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Record water plant meter readings & calculate total daily production** | Average day demand in summer is ____ gals per day (gpd) and in winter is ____ gpd. If demands are higher than this for more than three days, there may be a leak. |
| **Record pump run times and start cycles** | Pumps normally run ____ hours per day. |
| **Conduct a general security check** | Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism. |
| **Collect other chemical samples as needed** | The measured amount of ____ should be at least ____ mg/l at this sample location ____. |
| | The measured amount of ____ should be at least ____ mg/l at this sample location ____. |
| | The measured pH should be within range ____ at this sample location ____ |
| **Check other chemical day tank, record amount used, and refill as needed** | When the level in the ____ day tank is down to ____ gals add ____ gals chemical and ____ gals of water. |
| **Inspect other chemical feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Check and record water levels in storage tanks** | The storage tank normally operates between ____ - ____ feet of water. |
| **Check other treatment processes such as cartridge filters or softeners** | Cartridge filters need to be changed when the head loss is greater than ____ psi. Recharge softener with salt as needed. |
| **Weekly Duties** | |
| **Monthly Duties** | |

# Standard Operating Procedure (SOP)
# Operator Tasks Calendar

**PWS Name:** Village of Remsen Water System

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Submit previous month's operation report to DOH by the 10th** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Check distribution system chlorine residual** | Daily | | | | | | | | | | | | |
| **Collect Total Coliform Sample(s)** | Monthly | X | X | X | X | X | X | X | X | x | X | X | X |
| **Exercise emergency generator for 30 minutes under full load conditions and check all fluid and fuel levels** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect wellheads, controls, seals, vent and screen.** | Monthly | X | X | x | X | X | X | x | x | X | X | X | X |
| **Inspect tank overflow, vent screens, and hatches** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Inspect chemical feed pump(s), seals, tubing, injection points etc.** | Daily | | | | | | | | | | | | |
| **Inspect all pump house water lines, gaskets and fittings for corrosion and leaks** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Clean and inspect chemical solution tanks** | Quarterly | X | | | X | | | X | | | X | | |
| **Calibrate chemical feed pumps** | As Needed | | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Operator Tasks Calendar

**PWS Name:** Village of Remsen Water System

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Review the attached DOH supplied sampling requirements chart, and collect any that are due** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Flush dead end lines in distribution system** | Annual | | | | | | | | | | | | |
| **Flush distribution system using unidirectional flushing plan and exercise all valves** | Annual | | | | | | | | | | | | |
| **Prepare and distribute Annual Water Quality Report (AWQR) to Consumers** | Annual | | | | | | | | | | | | |
| **Submit AWQR to Health Dept and DEC, include certification that AWQR was delivered to consumers** | Annual | | | | | | | | | | | | |
| **Update emergency plan and emergency contact information, provide update info to Health Dept** | Annual | | | | | | | | | | | | |
| **Inspect storage tanks for defects, leaks, and sanitary deficiencies - clean and repair as needed** | Annual | | | | | | | | | | | | |

# Standard Operating Procedure (SOP)
# Operator Tasks Calendar

**PWS Name:** Village of Remsen Water System

**Schedule of Tasks for the Year:**

° *Place an "x" in each month that the task is required or planned to be performed, then enter the date or a "✓" when task is completed.*

| Task | Frequency | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Confirm all backflow prevention devices are tested by a certified tester** | Annual | | | | | | | | | | | | |
| **Exercise all fire hydrants and check all fire hydrant valves** | Annual | | | | | | | | | | | | |
| **Clean, inspect and repair all safety equipment** | Monthly | X | X | X | X | X | X | X | X | X | X | X | X |
| **Perform building preventative maintenance** | As Needed | X | X | X | X | X | X | X | X | X | X | X | X |
| **Investigate customer Complaints/System Threats. Record on log form.** | As Needed | | | | | | | | | | | | |
| **Winter Preparation** | | | | | | | | | | | | | |

## SUPPLEMENT TO APPENDIX D, E and F

## OPERATOR SCOPE OF SERVICES

**Services to be provided by Operator:**

- Primary Full-time Operator: NYSDOH Grade IIB.
- Daily water quality monitoring/testing (Per Attached Standard Operating Procedures & NYSDOH Requirements).
- Record keeping/Daily Logs (Per Attached Standard Operating Procedures & NYSDOH Requirements).
- Coordination of the purchase of bulk chemicals and water system supplies (Upon Approval by each respective community).
- General equipment maintenance (Per Attached Standard Operating Procedures).
- General coordination with local and state Health Department as necessary for each water system.
- Participation in local and state Health Department Inspections.

**Services to be provided by Operator Contingent upon Approval of Respective Community**:

- Individual Meter Readings for billing purposes.
- Miscellaneous Distribution System tasks including but not limited to locating and diagnosing leaks, meter replacement, routine flushing of water mains.
- Coordination of local contractors and vendors for services/materials in the event of water system deficiencies (e.g. water main breaks, chemical feed equipment failure) beyond the capabilities of the Operator.

**Services to be provided by Owner:**

- Backup Operator: NYSDOH Grade C
- Snow plowing
- Maintenance of grounds

## APPENDIX G

## TERMS OF EMPLOYMENT

A. Number of Employees: 1

B. Base Salary: $42,240.00

C. Benefits: 8% Employer Social Security/Medicaid: $ 3,379.20
3% NYS Retirement: $ 1,267.20
Reimbursement for Professional Development Expenses * $ 1,000.00

TOTAL: $47,886.40

*Costs of Operator Professional Development to be directly reimbursed up to $1000.00.

D. Billing Rate to each Village:

| Party | Percentage of Total Costs | Quarterly Share of Costs* | Annual Share of Costs* |
|---|---|---|---|
| Prospect | 23.1% | $2,765.44 | $11,061.76 |
| Barneveld | 25.5% | $3,052.76 | $12,211.03 |
| Remsen | 51.4% | $6,153.40 | $24,613.61 |

*Does not include mileage reimbursements. Mileage reimbursements to be determined by applying each Party's "Percentage of Total Costs" to total mileage reimbursement obtained from Operator's Daily Log.

E. Minimum Qualifications: Class IIB Operator
Valid Driver's License
Reliable Vehicle Suitable for All Weather with required NYS Automobile Insurance

F. At Will Employment: There will be no other written contract for employment. All Employee requirements will be addressed in the body of this Agreement as well as Appendix G entitled "Terms of Employment" and Appendix D, F and E entitled "Scope of Services".

G. Vacation/Holiday/Sick Time: One week paid vacation. Scheduling of the vacation week must be arranged for thirty (30) days in advance in

consultation with each of the Parties' "Immediate Supervisor" or contact person.

H. Overtime: Not Anticipated. However, in the event of an emergency in which the Operator is required to exceed 40 hours of services in one (1) week, the Operator will be compensated at an hourly rate of time and a half for those hours in excess of the 40 hour per week limit required under the Law.

I. Travel: To be reimbursed one (1) time per month and to consist of the total daily mileage reimbursement only, for travel between the Parties' water system facilities, for travel associated with water sample delivery to the laboratory, miscellaneous trips for sampling and acquisition, and for travel to locations when emergency situations require the employee's consultation and inspection. The employee will be reimbursed for travel for pre-approved professional development activities.

J. Shared Equipment: Same as exists now. A cell phone will be provided under a separate agreement.

K. Operator's Daily Log Operator will complete daily log for each Village that will:

a. identify all tasks performed at each facility
b. record time in/out at each facility
c. record mileage traveled between facilities
d. record of billable miles (e.g. lab travel,etc)

Daily log forms will be submitted to the Village of Prospect at the beginning of each month for the previous month. The Village of Prospect will review the daily log sheets for the previous month in order to:

a. confirm that required tasks are being performed
b. update record of time spent at each facility
c. to calculate mileage reimbursement to the Operator

# ATTACHMENT NO. 3

# Prospect/Barneveld/Remsen
# Joint Water System Operations Study

Checklist of items to be addressed if Intermunicipal Agreement is reconsidered:

1) Confirm that each Villages fiscal year is June 1st thru May 31st.

2) Appendix H of the draft IMA pertains to the "Codes of Conduct" for the shared operator. Do each of the communities have their own codes of conduct for employees? Each code of conduct can be included in the IMA if required. A "Codes of Conduct" section needs to be drafted and approved by each Village if none exist.

3) Backup Operator – According to our correspondence with DOH (See Attached) and page 13 of the Phase I report, the only water system that is required to have a backup/assistant operator is the Village of Remsen. Therefore Prospect and Barneveld do not necessarily have to share the cost of the backup operator. In moving forward with the IMA a backup operator can be handled a few different ways:

   A. Remsen could acquire their own separate backup/assistant operator which would allow exclusion of a backup operator from the IMA.

   B. An employee of one of the communities could assume backup Operator duties for each of the water systems when the full time shared operator is unavailable. This may be ideal for Remsen, since Remsen is required to have a backup operator. The costs of his employment would be split between each community either through the IMA or an outside agreement. Under this scenario, each water system would be covered by a backup operator which could be advantageous.

   C. The communities could hire a part-time backup/assistant operator to oversee the three systems and incorporate his compensation directly into the IMA. Please recall that on pg. 15/16 of the Phase I report we estimated the cost for a part-time backup operator for the three systems to be about $10,000 annually.

## Jason Preisner

**From:** Clive, Sean [sclive@ocgov.net]
**Sent:** Friday, September 17, 2010 2:51 PM
**To:** Dave Jones; Jason Preisner
**Subject:** FW: Operator Certifications
**Attachments:** pic07783.gif

FYI – We don't always agree...heated but friendly. ☺

**********
Sean Clive
Principal Public Health Sanitarian
Oneida County Health Department
185 Genesee Street - 4th Floor
Adirondack Bank Building
Utica, NY 13501

ph:315-798-5064
fx:315-798-6486
em:sclive@ocgov.net

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

---

**From:** Teresa M. Boepple [mailto:tmb03@health.state.ny.us]
**Sent:** Friday, September 17, 2010 2:54 PM
**To:** Clive, Sean
**Cc:** Andy Tse; Brenda L. Salisbury; NYSDOH - Christine Vooris; Lemieux, Eric; Patterson, Joseph; John Strepelis
**Subject:** RE: Operator Certifications

Sean,

An A certification does not require distribution training or experience to have an A certification issued. C certification requires distribution training/experience for systems that serve 1000 people or less. So the minimum operating experience needed for a C would be C, A&D or B&D.

The interpretation provided to you is based on:

1. my knowledge of the development, intent and how I wrote this code citation,
2. EPA requirements to provide the NYSDOH with the authority to implement the regulations,
3. how the Bureau has been consistently implementing this section of the code for 9 + years,
4. the model curriculum for the C and A course,
5. the requirements of the OSA for the C and A,
6. my knowledge of the experience needed to operate an A facility (no D knowledge is required) vs. a C facility (distribution knowledge is required - see Plant type in Table 5-4.2).
7.

It is MVWA's (or anyone else's) right to request a code interpretation.

You suggested that the operators take a C course. Do you know if any of the operators have D experience? If yes, why don't the operators take a D course (which will give them the distribution knowledge for the C), gain some C experience while they are taking the D course and apply for the D and C certification at the same time? With this approach, the operators could get the C and D.

If you have any further questions, please feel free to ask.

Have a nice weekend.

Teresa
Teresa M. Boepple, P.E.
Section Chief, Professional Certification
New York State Department of Health
Bureau of Water Supply Protection
Flanigan Square, 547 River Street
Troy, New York 12180-2216
Phone (518)402-7654/Fax (518)402-7599

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

"Clive, Sean" ---09/17/2010 01:25:58 PM---I guess I'm not seeing how we would interpret that from the code itself. I still would have to respectfully disagree.

**"Clive, Sean"**
**<sclive@ocgov.net>**

09/17/2010 01:25 PM

To"Teresa M. Boepple" <tmb03@health.state.ny.us>

cc"Andy Tse" <axt09@health.state.ny.us>, "Brenda L. Salisbury" <bls02@health.state.ny.us>, "NYSDOH - Christine Vooris" <cnv01@health.state.ny.us>, "Lemieux, Eric" <elemieux@ocgov.net>, "Patterson, Joseph" <jpatters@ocgov.net>, "John Strepelis" <jxs06@health.state.ny.us>

SubjectRE: Operator Certifications

I guess I'm not seeing how we would interpret that from the code itself. I still would have to respectfully disagree.

It appears you are suggesting is that experience at an A plant (with all the treatment, testing and reporting that is done) does not meet the "minimum Grade C water treatment plant (basic treatment style plant)" experience called out in Table 5-4.3? Can that be possible? It doesn't say anything about the distribution system that goes with a C plant, just that it requires "minimum C plant" experience. If so, what would be "maximum" plant experience under Table 5-4.3 for Grade C experience? It is not listed in the code so I don't feel like we could say objectively, based solely on the code itself, that B is the maximum grade of WTP experience allowed for Grade C operators. If that is the state's stance on this, I will probably strongly encourage the systems to officially request a code interpretation ruling on this one.

I really think the code supports what I am suggesting. I would still hold to the B / C initial certification courses for any staff working on the systems, but the experience would be the critical issue here.

So, I ask that you possibly reconsider the interpretation of the code's noted experience necessary for the C / B systems with A plant experienced operators based on the Table language.

Thanks for the time on this. Ultimately, we want the best operators for these systems and I would be VERY supportive of MVWA assisting or providing operations for these systems. They will go from average to well run with a much deeper "bench" to assist when problems occur. Though not a goal of this department, the combining of these kinds of services with an outfit like MVWA would be a HUGE step forward. This would solve the retirement issue and the single operator who know everything and when he dies noone knows, etc... issue. Planning is everything, and this is the best plan

around.

Thanks again, I really do appreciate the insights (even if I disagree ☺).

Have a nice weekend.

Sean

**********
Sean Clive
Principal Public Health Sanitarian
Oneida County Health Department
185 Genesee Street - 4th Floor
Adirondack Bank Building
Utica, NY 13501

ph:315-798-5064
fx:315-798-6486
em:sclive@ocgov.net

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

---

**From:** Teresa M. Boepple [mailto:tmb03@health.state.ny.us]
**Sent:** Friday, September 17, 2010 1:02 PM
**To:** Clive, Sean
**Cc:** Andy Tse; Brenda L. Salisbury; NYSDOH - Christine Vooris; Dave Jones; Lemieux, Eric; Patterson, Joseph; John Strepelis; Teresa M. Boepple
**Subject:** RE: Operator Certifications

Sorry Sean but this does not work for the C. In your example, the operator needs C experience. If you go with the A + D =C exemption, although we prefer C experience, the OSA determines whether the operator has adequate experience to operate the C system.

You are correct for the B.

If you have any further questions, please feel free to ask.

Teresa
Teresa M. Boepple, P.E.
Section Chief, Professional Certification
New York State Department of Health
Bureau of Water Supply Protection
Flanigan Square, 547 River Street
Troy, New York 12180-2216
Phone (518)402-7654/Fax (518)402-7599

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

"Clive, Sean" ---09/17/2010 12:39:56 PM---Teresa –

**"Clive, Sean"**
**<sclive@ocgov.net>** To "Teresa M. Boepple"

<tmb03@health.state.ny.us>

09/17/2010 12:39 PM

cc "Andy Tse" <axt09@health.state.ny.us>, "Brenda L. Salisbury" <bls02@health.state.ny.us>, "NYSDOH - Christine Vooris" <cnv01@health.state.ny.us>, "Dave Jones" <djones@mvwa.us>, "Lemieux, Eric" <elemieux@ocgov.net>, "Patterson, Joseph" <jpatters@ocgov.net>, "John Strepelis" <jxs06@health.state.ny.us>

Subject RE: Operator Certifications

Teresa –

One more question – if an A operator (IA or IIA) goes to the C class can they be immediately listed as a C operator? The code says they need "6 months of operating experience at a minimum of a grade C water treatment plant". Their experience would be at an A plant, so my interpretation would be they would have the experience with their A certification (it is a minimum grade C and there is no listing of what would be maximum).

To go along with that, the code also says the IIB operator would only need "1 year of operating experience at a water treatment plant". No plant grade listed. I would think that an A operator who takes the B class would by default get the B certification (with proof of work experience, of course).

Is that right?

This would make it easily possible for MVWA to work with the 3 systems to provide contractual operator supervision.

Thanks.

Sean

**********
Sean Clive
Principal Public Health Sanitarian
Oneida County Health Department
185 Genesee Street - 4th Floor
Adirondack Bank Building
Utica, NY 13501

ph:315-798-5064
fx:315-798-6486
em:sclive@ocgov.net

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

---

**From:** Teresa M. Boepple [mailto:tmb03@health.state.ny.us]
**Sent:** Monday, September 13, 2010 11:54 AM

**To:** Clive, Sean
**Cc:** Andy Tse; Brenda L. Salisbury; NYSDOH - Christine Vooris; Dave Jones; Lemieux, Eric; Patterson, Joseph; John Strepelis; Teresa M. Boepple
**Subject:** RE: Operator Certifications

Hi Sean.

Below are my questions/comments:

1. OCHD should ensure that there is adequate coverage for all systems to ensure that the system(s) are operated so to protect public health and with due care and diligence,
2. any facility using SCADA must comply with the Policy on Automated/Unattended Operation outlined in 10 States Standards, and
3. any system needs to be operated by the class of operator as defined in 5-4. When are the current operators for the systems leaving? Could the MVWA operators work under the existing operators until they gained the necessary certifications?

Have a nice day.

Teresa

Teresa M. Boepple, P.E.
Section Chief, Professional Certification
New York State Department of Health
Bureau of Water Supply Protection
Flanigan Square, 547 River Street
Troy, New York 12180-2216
Phone (518)402-7654/Fax (518)402-7599

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

"Clive, Sean" ---09/10/2010 11:27:03 AM---Hi Teresa –

Hi Teresa –

I was contacted by Dave Jones of Mohawk Valley Water Authority to ask about the Prospect / Remsen / Barneveld situation and the potential for MVWA operators to provide services by contract. Here is the scenario:

The MVWA water filtration plant, located in Prospect is manned 2 of 3 shifts per day (automated operations for 3rd shift – we have recommended manning the operation 24-hours). The MVWA plant is a IA plant. The system has many A operators available. It also has a number of D operators available throughout the water distribution system. It does not appear that there are any operators who are dually certified A and D (possibly one). No C operators exist within the system.

The desire would be for MVWA staff (possibly supplemented by SCADA systems) to operate all 3 systems providing daily WTP visits and whatever required system maintenance is desired. The hope would be that there would be a couple MVWA operators that would be the primary WTP operators (at each plant) and a couple D operators for the distribution systems. The current operations require operators to be present for maybe 30 minutes a day with extra time when sampling, repairs, Dig Safely NY requests, problems, leaks, flushing, valve exercise, paperwork, etc… are needed. Some services such as meter reading and billing may not be provided unless a part of the contract.

The MVWA operator oversight at the 3 systems would likely be built into their shifts with MVWA. So, Mr. A could visit each site, taking ~1.5 hours total and then finish his shift at the MVWA plant for the next 6.5 hours. If there were a problem, notifications would be established (calls to MVWA customer service or other arrangement) or if possible, SCADA could be set up by MVWA to monitor (and report) on water use, treatment systems, pressure, water storage tank levels, etc… This monitoring would likely be incorporated into the MVWA plant's SCADA system which is also remotely available to operators. This SCADA capacity would be strongly encouraged.

MVWA has provided services by contract to other water systems over the years (e.g. Rome, Bridgewater). This kind of arrangement would be beneficial to all. The MVWA plant is very close to all systems. Current water operators are part-time operators and have full-time jobs. If MVWA were to assist in operations, response would be nearly immediate if there were any problems (especially if SCADA is part of the arrangement).

Could we consider this type of arrangement for these systems? If not, would it be reasonable to give a compliance schedule to the systems so that MVWA operators could obtain the required certifications (B / C) while working at the systems? They could not get B or C certified working in the MVWA system since it is an A system with D required.

Although the arrangement would separate responsibilities Plant and Distribution, I believe the intent would be met. Plus, it would ensure an official availability of operators during MVWA's operation day where a B / C/ D operator arrangement with a different part time operator might not be as available.

What are your thoughts?

Thanks.

Sean

**********
Sean Clive
Principal Public Health Sanitarian
Oneida County Health Department
185 Genesee Street - 4th Floor
Adirondack Bank Building
Utica, NY 13501

ph:315-798-5064
fx:315-798-6486
em:sclive@ocgov.net

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

---

**From:** Teresa M. Boepple [mailto:tmb03@health.state.ny.us]
**Sent:** Tuesday, August 31, 2010 12:11 PM
**To:** Clive, Sean
**Cc:** NYSDOH - Christine Vooris; Brenda L. Salisbury; Andy Tse; Lemieux, Eric; Patterson, Joseph; John Strepelis
**Subject:** Re: Operator Certifications

Sean,

The answers to your questions are below. Just a few words of caution ... at a minimum, by regulation, the more complex system will be required to have two operators. These systems must have an appropriate number of operators to be operated with due care and diligence which is determined by the LHD (beyond the minimum in the regulations). Based on this arrangement, it is my professional opinion to recommend redundancy in operation in case the system loses an operator. One other thing to add is operator duties. Although these systems may be simplistic, operators need to be fullfilling their duties to ensure the systems have capacity. See EPA's operator duties at http://water.epa.gov/type/drink/pws/smallsystems/upload/2008_07_01_smallsystems_guide_smallsystems_operator_08-25-06.pdf

If you have any questions, please feel free to contact me.

Have a nice day.

Teresa
Teresa M. Boepple, P.E.
Section Chief, Professional Certification
New York State Department of Health
Bureau of Water Supply Protection
Flanigan Square, 547 River Street
Troy, New York 12180-2216
Phone (518)402-7654/Fax (518)402-7599

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

-----"Clive, Sean" <sclive@ocgov.net> wrote: -----
To: "Teresa M. Boepple" <tmb03@health.state.ny.us>, "NYSDOH - Christine Vooris" <cnv01@health.state.ny.us>, "Brenda L. Salisbury" <bls02@health.state.ny.us>, "Andy Tse" <axt09@health.state.ny.us>
From: "Clive, Sean" <sclive@ocgov.net>
Date: 08/31/2010 11:09AM
cc: "Lemieux, Eric" <elemieux@ocgov.net>, "Patterson, Joseph" <jpatters@ocgov.net>, "John Strepelis" <jxs06@health.state.ny.us>
Subject: Operator Certifications
Teresa, Christine, Brenda and Andy

We are working with the villages of Remsen, Barneveld and Prospect to determine the appropriate certification level for a shared operator. Basically the municipalities want to share services and cover the costs of one operator to operate all

three systems instead of 3 different operators.

Anyway, the system rundown is as follows:

A. Barneveld is GWUDI, <1000 people with basic filtration (cartridge) and chlorination. C certification required – no backup operator.
B. Prospect is True Groundwater, <1000 people with chlorination only. C certification required – no backup operator.
C. Remsen is True Groundwater, but has complicated treatment due to aesthetic issues (iron) in water. System utilizes pH adjustment, aeration and filtration in addition to chlorination. The treatment is basically automated. Per earlier discussions with Teresa, we are requiring a Grade IIB operator. Since the system has <1000 people, no D operator is required. **NOTE: A distribution system operator is required at the classification level of C.** However, with the IIB, a backup C operator is required according to 5-4.

So, please let me know if the following statements are OK and in accord with the code:

1. Although the total population for all systems is >1000 people each system is a separate entity, therefore Grade D certification is not actually required for a shared operator.
2. It will be OK to have the Barneveld and Prospect systems operated by a Grade C operator.
3. The Remsen system could have the same C operator as the Assistant operator but will have to have a Grade IIB as the primary / designated operator for the system.

The questions I have are as follows:

1. Could a Grade IIB operator be responsible for all 3 systems if that operator also has a D certification? Obviously if they have a C cert, it would work. My understanding is that IIB + D meets the intent of the C especially since they have much more training in both treatment AND distribution. We have IIB + D operators in the county. **The IIB and D would simply apply to have the C added to their certification and they could be the ORC for all three. Below is language that has been sent out regarding the IIB and D.**
2. Or, would the IIB operator still be required to have a C dual certification as well? **SEE ABOVE.**
3. Since the Remsen system's treatment is for aesthetic issues only, does the IIB have to be supported by a C operator? Or, can we allow the system to operate with one operator with the understanding that if they need assistance, there is already an inter-municipal agreement with another nearby system to assist if necessary? **A C would be required. The definition of the assitant requires that the operator be involved in the day to day operation of the system (definition to follow). The arrangement would need to conform with 5-4. *Water treatment assistant operator* means a person who, under the direction of a certified water treatment operator in responsible charge, is involved in the day to day operation of a water treatment plant (or distribution system) or a major segment of a water treatment plant at a community water system or nontransient noncommunity water system.**
4. Would a IA or IIA operator be allowed in place of a IIB operator? **Only if they held the B certification.** We have several IIA operators that work for Mohawk Valley Water Authority that have A certifications. The MVWA plant is in Prospect, so they are right there. Could they be the operator in place of a IIB or C? If so, I assume they would need D certification as well (or at least another person as backup)? **They would have to hold the B and C. How would a MVWA operator fullfill their duties at the MVWA facility as well as the three facilities proposed?**

We would like to see an official / legitimate agreement setup to ensure proper operations into the future. The current operators are older in Barneveld and Prospect and the Remsen system has been working with Boonville for operator oversight – with in-house staff being trained as C or IIB operators. Not an easy task for the small systems without full-time capabilities.

Thanks for your help.

Sean

**********

Grade C Substitution Policy

The Grade IA certification does not supercede other certification grades (except the Grade IIA). Each classification level the operator is certified for must be listed on their certification file within the SDWIS add-on. If the classification level is not listed, the operator is not certified to operate that classification of system.

**10 NYCRR 5-4 Substitution & Distance Education Policies**

Professional Certification Section

If an operator holds a Grade IA/IIA or IB/IIB and a D certification and wants a C certification, the C can be added if the operator completes the following:

• submits an application (DOH-354) to the LHD,

• provides the required Grade IA/IIA or IB/IIB and a D course completion documents. Note: Although operators may have provided this documentation in the past, these records may not have been kept prior to 2001. The Bureau is making an effort to assemble complete certification files for all operators. An application will not be held up if these records are not provided,

• provides the required documented experience. ***(Although Grade C experience is preferred, an operator may use a combination of Grade IA/IIA or IB/IIB and D experience towards the experience requirement outlined in Subpart 5-4.3, Table 5-4.3),*** and

• successfully passes an OSA.

Once the LHD endorses the application, the BWSP reviews the application and verifies that there are no outstanding enforcement actions pending as well as compliance with 10 NYCRR 5-4. If there are no pending enforcement actions or compliance issues, the BWSP will add the Grade C certification.

---

Sean Clive
Principal Public Health Sanitarian
Oneida County Health Department
IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.
IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

IMPORTANT NOTICE: This e-mail and any attachments may contain confidential or sensitive information which is, or may be, legally privileged or otherwise protected by law from further disclosure. It is intended only for the addressee. If you received this in error or from someone who was not authorized to send it to you, please do not distribute, copy or use it or any attachments. Please notify the sender immediately by reply e-mail and delete this from your system. Thank you for your cooperation.

# ATTACHMENT NO. 4