Construction Grants Program in New Hampshire

Since 1972 EPA has funded, under the Clean Water Act, 287 grants totaling $370,000,000 in New Hampshire. The basis for determining the scheduling of funding is the Project Priority List which is reviewed and updated every year. On July 10 of this year the New Hampshire Water Supply & Pollution Control Commission held a public hearing on the draft priority list. As a result of this hearing, the Commission finalized the list and forwarded it to EPA Region I for acceptance.

At the time of publication of this newsletter, however, the FY86 allocation to New Hampshire is still uncertain since budget action has not yet occurred on the federal level. Assuming that New Hampshire will receive approximately $24,446,000 annually as we have the past few years, the following construction projects would be on the FY86 funding list:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester—West Side Interceptors</td>
<td>8,000,000</td>
</tr>
<tr>
<td>Goffstown—Interceptor to Manchester (Phase 1)</td>
<td>2,900,000</td>
</tr>
<tr>
<td>Nashua—Secondary WWTF Site Work</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Hanover—Secondary WWTF</td>
<td>4,700,000</td>
</tr>
<tr>
<td>Center Harbor Interceptor to WRB</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Walpole—Interceptor to Vermont</td>
<td>1,650,000</td>
</tr>
<tr>
<td>Sunapee—Georges Mill Sewers</td>
<td>350,000</td>
</tr>
</tbody>
</table>

In addition, Planning Lists for the next three years, again assuming continued funding at the current level, would be as follows:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHWWPCA</td>
<td></td>
</tr>
<tr>
<td>FY87</td>
<td></td>
</tr>
<tr>
<td>Nashua—Secondary WWTF</td>
<td>$16,700,000</td>
</tr>
<tr>
<td>Goffstown—Interceptors (Phase IA)</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Walpole—WWTF share</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Plymouth</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Pittsburg—IA treatment facility</td>
<td>1,300,000</td>
</tr>
<tr>
<td>FY88</td>
<td></td>
</tr>
<tr>
<td>Littleton—Secondary WWTF</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>No. Swanzey—Interceptor to Keene</td>
<td>1,700,000</td>
</tr>
<tr>
<td>Gunstock Interceptor to WRB</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Walpole—Village sewers</td>
<td>2,600,000</td>
</tr>
<tr>
<td>Manchester—WWTF, Phase I</td>
<td>6,800,000</td>
</tr>
<tr>
<td>Winchester—Ashuelot Village Sewers</td>
<td>800,000</td>
</tr>
<tr>
<td>Newport—Secondary WWTF</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Dalton—IA treatment facility</td>
<td>1,100,000</td>
</tr>
<tr>
<td>FY89</td>
<td></td>
</tr>
<tr>
<td>Manchester—WWTF, Phase II</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Portsmouth—WWTF</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Dover—Secondary WWTF</td>
<td>9,700,000</td>
</tr>
<tr>
<td>Belmont—Silver Lake Int.</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

Coming Soon
SAFETY MANAGEMENT SEMINAR

**Plant Managers**
**Superintendents**
**City Officials**
**Safety Officers**
**Supervisors**
**Etc.**

**Sponsored by:** N.H. Water Supply and Pollution Control Commission & NHWWPCA

**Location:** 6 Hazen Drive, Health and Welfare Building

**Date:** November 5, 1985

**Instructor:** Harold B. Weeks, Management Training Consultant, Hartford Insurance Group

- a certified Safety Professional Member of the American Society of Safety Engineers; his membership dates back to 1952 with 30 years experience in safety training in U.S. and Canada
- a charter member Maine, New Hampshire, Rhode Island Safety Councils
- a member of the Connecticut Valley Chapter (ASSE), Past President of Chapter; Past Regional Vice President; served on Board of Directors
- an active registered instructor/trainer for National Safety Councils in U.S. & Canada; Multi-Media First Aid for American Red Cross, Applied System Safety Engineering Techniques (ASSE)
- serves on numerous safety committees
- a guest speaker at safety conferences all over the country

**AGENDA**

**Morning Session**
- Management's Responsibilities
- Supervisor's Responsibilities
- Accident Investigation

**Afternoon Session**
- Accident Analysis, Job Briefing, Motivating the Employee

Location: N.H. Water Supply and Pollution Control Commission, Health & Welfare Building, 6 Hazen Drive, Concord, NH in the Auditorium.

Seminar Fee is $10 per person. Course enrollment is limited to 80 people. Call now for reservations: (603) 271-2586 or 271-3325.
Operator Training in New Hampshire

The Operations Division evolved in 1968 as the state agency began to realize that, in addition to funding and constructing wastewater treatment facilities, it must insure that these facilities are operated and maintained in the most efficient manner to protect the millions of dollars that have been invested.

At present, the Operations Division has a staff of five (5) with varying technical backgrounds, but all with several years experience in the field of wastewater treatment. Only municipal and privately-owned plants treating sanitary wastewater [92 plants] come under the auspices of this Division. Compliance sampling and permit enforcement have been delegated to a separate division in the Commission. Thus, Operations can wear the “white hats” and concentrate on assisting and training our treatment plant operators.

Training is conducted at our Franklin Training Center which was constructed in 1981 with an EPA 109[b] grant. The Center is located only 50’ from the operations building of the Winnipesaukee River Basin treatment plant, an 11.6 MGD activated sludge facility. Since this plant is operated by Commission personnel for the Basin, it provides the Center with a unique flexibility for hands-on operation and maintenance training using the treatment plant as a training aid. Plant management and personnel have been extremely cooperative and have assisted in the maintenance of the building. Plant personnel attend all courses and have served as instructors of several courses.

The Training Center has been adequately equipped with lab supplies, maintenance tools and training materials and literature. There are three (3) separate rooms in the Center: the library, the laboratory-classroom, and a large shop area for equipment demonstration or maintenance courses.

Franklin is located near the geographical center of New Hampshire and is accessible from all plants in the state within a two hour ride. The attendees at our courses do not seem to mind the ride as long as the courses are valuable to them in their daily operations.

In addition to the formalized classroom instruction, Operations Division personnel visit all plants on a regular basis, most plants monthly. During these visits [we try not to call them "inspections"], we will provide on-site over-the-shoulder training specific to that plant and its operators. Over the past 15 years, we have found that plant performance will show improvement when the operator knows that the state will be visiting his plant regularly. Our on-going program obviously correlates very well with the new EPA 104[0]1 training grant. Contrary to what first may be thought, the majority of operators welcome our interest in their plant and are appreciative of our technical assistance. The NHWPCA and Operations Division have an excellent rapport, which is another prime asset.

Identification of Training Needs

It was apparent to New Hampshire personnel that a successful training program had to meet the needs of operators statewide and be based upon “need-to-know” criteria. This criteria should reflect knowledge and skills necessary to satisfactorily perform plant duties. To ascertain operators’ needs, an Education Committee was formed within the New Hampshire Water Pollution Control Association. The state initially sent a training needs survey form to all plants four years ago. The Education Committee conducted a more recent survey and updated the information. As an enticement for operators to participate in this project with a quick response, cash drawings were held for those responding within one month and the names of the winners were listed in the newsletter.

The results of this survey were not only used to prioritize future training needs statewide, but also were used to:

1. Determine local training needs
2. Provide a pool of possible “operator instructors”
3. Compare existing training to the identified “need-to-know” criteria

Promotion of Training

After the statewide training needs are identified, they are ranked in order of priority. We then give these training programs maximum visibility through the following means:

1. A training brochure is prepared biannually and mailed to all treatment facilities within New Hampshire at least one month prior to the start of the training activities. This training brochure is also sent to operator associations and state regulatory agencies in adjacent states. Operators in other New England states are welcome to attend our training sessions.
2. The New Hampshire Water Pollution Control Association publishes a quarterly newsletter entitled “The Collector.” All training activities plus other articles of interest to operators are printed.
3. The New England states have recently created a Joint Training Coordinating Committee and as soon as training courses are scheduled, we notify this Committee so we can get New England-wide publicity.
4. It should be noted that in 1983, a change was made in the New Hampshire Wastewater Operator Certification Regulations. In order to hold his/her certificate, all operators above Grade I must earn 2.0 CEU’s every two years. Per national standards, we grant 0.1 CEU for each hour of training. Immediately upon completion of each training session, a course attendance roster is sent to our Concord Office listing all attendees with days attended and CEU’s earned. The operator’s records are updated and a certificate is mailed to the operator.

Evaluation of Training

In order to ensure that our training effort is well received, a brief evaluation is held at the end of most training sessions. We encourage all participants to let members of the Education Committee know of their comments on each training program. This constructive criticism is encouraged so future courses can be of maximum value.

At the Franklin Training Center, we maintain an extensive up-to-date library of the many suitable training and technical materials that have already been developed and can be identified nationally through the IRIS and EPIC retrieval systems. Several copies of all technical materials are kept on hand and made available to all interested operators at cost.

Cont. on the following page
Future Needs
In order to continue the training effort in New Hampshire and give state-of-the-art courses, our Operations staff includes experienced certified operators and a knowledgeable coordinator.

Our prime recommendation in state operator training is that courses MUST be given by experienced instructors with a first-rate knowledge in their subject matter. The coordinator is the key to a successful program. Our experience has shown that an experienced equipment maintenance troubleshooter who could give over-the-shoulder training and assistance at plants would be another very valuable asset to a state program. Maintenance of problem equipment can be a very expensive and time-consuming element of a small plant's operational workload.

CONCLUSIONS
The NH training program has been well received and all the sessions have been fully enrolled. Lectures average 25 and lab sessions average about 12 attendees. Ideally, we would like to limit enrollment in lab courses to 8-10 operators/session, since all lab training is hands-on. Operators are encouraged to bring in representative samples from their own facilities as this maintains their interest and gives them useful data. In the lecture/seminar courses, an enrollment of about 15 seems to work best, since each person gets a chance to interact and have their area of concern discussed.

The success of our wastewater operator training program is due to a number of items including:
- providing state-of-the-art courses
- involving all plant personnel in course selection
- providing courses at several sites, when possible, to minimize travel time
- teaching "need-to-know" information in all programs
- providing knowledgeable, interesting instructors
- providing a wide selection of courses
- timely turn-around of all CEU credits and quiz grades when given
- giving each attendee recognition for course attendance

The key ingredient in the New Hampshire training effort is the operator. The esprit-de-corps in the operators association is exceptional as indicated by the large turnout to, not only our training activities, but all the Association meetings. We feel fortunate that most of our operators, municipal and industrial, are intelligent, eager to learn, and take pride in their career.

TRAINING
Milford WWTF will be sponsoring the NERWI mobile training van. They will be offering a course on Optimizing Process Control of Activated Sludge.
Dates: November 19-20-21
Fee: $25 (for three days)
*Enrollment limited to 12. Contact Steve Dolloff at 673-9441.

Notes from the Education Committee
There have recently been changes in the personnel of NHWPCA's Education Committee. Jerry Manzi served with us for the past three years, but has recently relocated to Florida. Jerry was the treatment plant operator for the Spaulding Fibre Company and represented industrial concerns for education. Thanks Jerry for your contributions over the past years.

NHWPCA President Tom White has appointed two new members to the committee. Edward Rushbrook is an Engineer with Dufresne-Henry of Manchester. He has experience in planning and conducting training in the Wastewater field, and is a welcome addition. Russell Trembley, an industrial WTP Operator, works for Sanders Associates of Manchester. Russell is filling the position vacated by Jerry Manzi, and will represent the industrial sector. Both Edward and Russell will be assets in planning the courses offered thru the Franklin Training Center.

We meet several times each year to work with Don Pottle on the course schedule. Please feel free to contact any member of the committee with suggestions or constructive criticism about past or future classes. Committee members are as follows:

Bruce Kudrick
Paul Wallace
Jim Taylor
Edward Rushbrook
Russell Trembley
David Beecher
Don Pottle
George Neill
Hooksett WTP
Franklin WTP
Merrimack WTP
Dufresne-Henry, Manchester
Sanders Assoc., Manchester
Lebanon WTP
Franklin Training Ctr.
NHSPCC
485-7000
934-4032
883-8196
669-8672
645-5000-Ext. 5537
298-5986
271-2586
271-3325

NORTHEASTERN UNIVERSITY TRAINING COURSES
Northeastern University is offering two Industrial WWTF operations courses this fall starting the week of Sept. 23, 1985. One course, held Tuesdays, deals with the treatment and impact of industrial waste on biological treatment processes. The second, concerns the operation of physical-chemical treatment for industrial wastes and is held on Wednesdays. These courses are designed to cover both theory and daily operations of treatment processes and are both four hours in duration and start at 5:30 PM. The cost is $250. For further information contact Mr. Richard Mansfield at (617) 437-2500.
# 1984 Salary Survey

Wastewater Treatment Facilities in New Hampshire

<table>
<thead>
<tr>
<th>Grade I Plants</th>
<th>No. Plants Submitted</th>
<th>High</th>
<th>Low</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent</td>
<td>4</td>
<td>17,000</td>
<td>13,000</td>
<td>15,733</td>
</tr>
<tr>
<td>Operator</td>
<td></td>
<td>15,392</td>
<td>15,392</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade II Plants</th>
<th>No. Plants Submitted</th>
<th>High</th>
<th>Low</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent</td>
<td>13</td>
<td>24,420U</td>
<td>17,200</td>
<td>20,440U</td>
</tr>
<tr>
<td>Chief Operator</td>
<td></td>
<td>20,500</td>
<td>16,336</td>
<td>17,459</td>
</tr>
<tr>
<td>Operator</td>
<td></td>
<td>15,226</td>
<td>11,774</td>
<td>13,810</td>
</tr>
<tr>
<td>Laborer</td>
<td></td>
<td>13,000</td>
<td>7,280</td>
<td>9,864</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade III Plants</th>
<th>No. Plants Submitted</th>
<th>High</th>
<th>Low</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent</td>
<td>5</td>
<td>32,000</td>
<td>21,061</td>
<td>25,692</td>
</tr>
<tr>
<td>Chief Operator</td>
<td></td>
<td>21,444</td>
<td>15,683</td>
<td>18,567</td>
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<tr>
<td>Shift Operator</td>
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<td>20,841</td>
<td>15,000</td>
<td>18,533</td>
</tr>
<tr>
<td>Operator</td>
<td></td>
<td>18,886</td>
<td>14,350</td>
<td>16,216</td>
</tr>
<tr>
<td>Laborer</td>
<td></td>
<td>13,987</td>
<td>13,977</td>
<td>13,982</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade IV Plants</th>
<th>No. Plants Submitted</th>
<th>High</th>
<th>Low</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent</td>
<td>4</td>
<td>34,840</td>
<td>22,214</td>
<td>27,594</td>
</tr>
<tr>
<td>Assistant Superintendent</td>
<td></td>
<td>26,175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Operator</td>
<td></td>
<td>28,205</td>
<td>19,156</td>
<td>23,061</td>
</tr>
<tr>
<td>Shift Operator</td>
<td></td>
<td>21,486</td>
<td>18,700</td>
<td>20,260</td>
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<tr>
<td>Operator</td>
<td></td>
<td>16,931</td>
<td>14,914</td>
<td>15,921</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Support Systems for Grade III and IV</th>
<th>No. Plants Submitted</th>
<th>High</th>
<th>Low</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanic</td>
<td>9</td>
<td>26,582</td>
<td>17,742</td>
<td>20,827</td>
</tr>
<tr>
<td>Electrician</td>
<td></td>
<td>21,070</td>
<td>16,300</td>
<td>18,724</td>
</tr>
<tr>
<td>Chemist</td>
<td></td>
<td>24,068</td>
<td>17,365</td>
<td>19,628</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td></td>
<td>16,328</td>
<td>12,600</td>
<td>15,036</td>
</tr>
</tbody>
</table>

**NOTE:** The 1984 Salary Survey represents a total of 26 treatment plants. We would like to thank the plants that did take the time to complete the survey and send it in. (Although we would like to encourage the other 50 plants that did not participate).

This survey is for your information, and the more input there is, the more realistic the figures will be. So please, take the time to complete and mail the results. They could be advantageous to you someday!

---

### Job Openings

- **Merrimack, NH:** WWTP has an opening for:
  - Mechanic II - $9.25-$9.80
  - Mechanic I - $6.74-$7.16
  Contact: Larry Spencer at 269-8195

- **York Consultant:**
  - Operator - $20,000-$27,000
  - Mechanic - $15,000-$27,000
  For more information, contact Kim Backlund at 203-261-4459

- **Durham, NH:** WWTP is looking for an experienced WWTP operator. Knowledge in laboratory, process control system monitoring, instrumentation, and computer operation needed. Need to obtain NH WW Operator Class Master Grade II. Send resume to: George Crane, Town of Durham, 1315 Newmarket Road, Durham, NH 03824-2998 or call 603-895-5371. Salary: $16,000-$30,000.

- **Mansfield, NH:** Has an operator position available. Glen Road Groundwater dechlorination treatment plant. Rotating shifts. NH Operators Certification required. Salary: $16,000-$20,000. Contact: Eric Tettenon at 617-246-8693, ext. 4555.

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### Certification Quiz — Volume #9

#### Grade I

Like the addition of any acid, if sulfuric was added to water, the number of ______ ions would increase.

#### Grade II

One volume of liquid chlorine confined in a chlorine cylinder under pressure will yield about ______ volumes of gaseous chlorine?

- a. 250
- b. 350
- c. 460
- d. 500

#### Grade III

The chlorine demand of a certain effluent water is 3 mg/L. The operator treats 250,000 gal. of water with 10 lbs. of chlorine gas. What will the chlorine residual be?

- a. 1.8 mg/L
- b. 3.0 mg/L
- c. 4.8 mg/L
- d. 6.0 mg/L

#### Grade IV

If you mixed equal volumes of pH 3 (0.001") HCl and pH 11 (0.001") NaOH, what would be the resultant pH?

If acetic acid 0.001" was substituted for HCl, would the resultant pH be the same?

---

### Answers to Certification Quiz #8

<table>
<thead>
<tr>
<th>Grade I — B</th>
<th>Grade II — B</th>
<th>Grade III — B</th>
<th>Grade IV — C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Public Relations Committee

Since March of 1983, the PR Committee has made available the Collector, which we have utilized as an information source as well as a service [i.e., employment opportunities, etc.]. We wish to thank those who have supported the newsletter and also wish to welcome those who would like to contribute to future newsletters.

All are welcome to directly participate in an upcoming project — a general training module/slide show presentation. The presentation will emphasize the need for trained operators in New Hampshire. In order to achieve this objective, we are looking for slides [color or black and white] of pristine and polluted New Hampshire waters, and slides of New Hampshire Treatment Plants and/or any other slides or suggestions you would like to contribute [all materials will be returned].

We are welcoming all ideas. The Committee is planning to meet at the next NHWSPCC Association Meeting on September 26th. If you have any helpful ideas, plan to attend the meeting. Also, any materials which may be appropriate for the slide show presentation may be sent for review to:

Mark Gauthier, c/o NHWSPCC
P.O. Box 95 - Hazen Drive, Concord, NH 03301

PR COMMITTEE
Mark Gauthier, Chairman
Janet Rompala-Pillion
Mickey Snow
Robert Livington
Greg Mack

Seasonal Chlorination Update

The New Hampshire Legislature has agreed to extend the experimental seasonal chlorination two more years with a full report back to the General Assembly by Sept. 1986. Several Treatment Plants throughout the state have been asked to help N.H.W.S. & P.C.C compile information for this report. It is hoped by the participants of the seasonal chlorination program that this will become a permanent practice as it is in many other states.

It should be noted that any treatment facility desiring a seasonal chlorination waiver this year must, by law, sample the receiving stream in order to assess impact. The commission will be issuing a letter on this matter shortly.

NHWSPCC Operations Services

The Operations Division of NHWSPCC now offers additional training, trouble-shooting and monitoring services.

Equipment available for loan:
- Portable strap-on ultrasonic flow meter
- Amps, voltage, resistance meter
- Hand-held RPM meter
- Portable V-notch flow indicators, 10' and 8' pipe
- Oxygen and combustible detectors
- MSA universal gas measurement tester
- Training equipment and materials

For more information, call the Operations office at 271-2586 or 271-3325.
A familiar face? Anyone who has come into contact with this gentleman will agree that it is a face you will never forget.

George Neill was born and raised in Boston, and now makes his home on 16 acres of land in Sanbornton, New Hampshire. Although George enjoys skiing, hiking, gardening, canoing, sailing and the Celtics, his dedication to the wastewater field takes up the majority of his time.

After acquiring a B.S. in Environmental Engineering from Worcester Polytechnic Institute, George joined the New Hampshire Water Supply & Pollution Control Commission in 1974, working as a Sanitarian for the Subsurface Service Division, and shortly thereafter, transferred to the Operations Division. He obtained a Master's Degree in Civil Engineering at Northeastern University while working for the Design Review Division as a Project Engineer for the Construction Grants Program. George was promoted to Director of the Operations Division in 1983, and still holds this position.

Along with the many duties of his job with the Commission, George is on the NH Certification Committee and the New England Water Pollution Control Association Certification Committee, does teaching and training at the Franklin Training Center, and is on the Education Committee for the NHWPSCA.

When George is not out in the field troubleshooting at a plant, he spends most of his time behind his desk trying to stay “afloat” of all the paperwork that surrounds him. In his spare time, George takes the time to answer questions of the many calls from the public as well as coordinating his staff’s activities. It’s hard to believe that George found time to volunteer to man the Bud Van next year at the Clambake! His dedication just never ends...

On the serious side, George’s personality and sense of humor, combined with his dedication and sense of caring, make him a real asset to the wastewater field.

THANK YOU SPONSORS

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WASTE, INCORPORATED
Kari Bradley
603-224-6596

PROFESSIONAL SERVICES GROUP, INC.
O. George Harrington
603-625-1212

METCALF & EDDY, INC.
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617-246-5200

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BAHR SALES & SERVICE, ENGINEERS
John G. Campbell
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Al Firmine
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Karen Johnson-Kimball
603-228-1334

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207-772-5173

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Damon C. Moore
800-325-5071

G.C. SERVICES
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207-563-3080

ATLANTIC TRACY, INC.
Frank Hankus
603-883-0533

WHITMAN & HOWARD, INC.
John L. Scott
603-228-0535

EASTERN PIPE SERVICE, INC.
Herb Hafley
603-889-0929

T-I SALES, INC.
Tim Salem
800-225-4616

ZEP MFG. CO.
Glen Briggs/Frank Geis
603-412-3292

ENVIRODYN SYSTEMS, INC.
Laurence T. Sheker, Pres.
717-763-0500

A/D INSTRUMENT REPAIR
Tom McPherson
603-382-4667

EVERETT J. PRESCOTT
James Gorton
603-224-9545

NOTICE: Anyone wishing to join our sponsor listing, please send name, firm, phone number and yearly fee of $60. Send check to NHWPSCA, Attn: Bob Livingston, P.O. Box 95, Hazen Drive, Concord, NH 03301.
SAFETY CORNER

Start the Job Safely

The first step in any maintenance or repair project should be to initiate the proper safety precautions to protect both the personnel and the equipment involved in the job. Serious injury can result when a machine or process is activated while someone is working on it. Extensive and expensive damage can also occur when a partially disassembled machine is turned on. These accidents can easily be avoided with just a little forethought.

Know the equipment you are going to work on. Pay particular attention to who controls it and its source of power. The power source may be referred to as a Motor Control Center, Power Panel, or Breaker Panel. These cabinets contain the Meter-Short Contactor, and this is the unit that must be disabled to safely deactivate any machine. Turning off the local start-stop station may not be adequate. Many treatment plant processes can be operated from remote areas of the plant by an operator who is totally unaware that the equipment is undergoing maintenance or repair. Some processes are also controlled by automatic timers or remote process sensors. All of these devices have one point in common — they all activate the Motor Start Contactor.

A heavy duty circuit breaker is provided ahead of the contactor to protect the circuit from overload. Tripping the circuit breaker will prevent the motor contactors being activated by any of the remote devices. The breaker handle is provided with a locking bar. It is a good idea to use a small padlock on the breaker. An operator may assume the repair has been completed and the breaker forgotten, when, in fact, the system is waiting for parts. If the breaker has been tripped off and tagged, the operator can still reset it and activate the equipment. A small padlock will prevent this kind of accident. So, start the job safe, lock out the power at the source.

John Dolbeare for NHWPCA Safety Committee

Safety Equipment List
Wastewater Treatment Plants

1. Large Mower First Aid Kit. The size of the plant and location will determine the size of kit needed. A g. large maintenance shop should possibly have its own. Someone should be in charge of inspection and refilling on a weekly basis. How many times have you looked for a spare bandage to find the box empty? When an accident occurs and first aid is needed, a full-stocked medical cabinet is needed.

2. Mobile Vehicle First Aid Kits. One for each mobile unit.

3. Outdoor Area Safety Bag. A white bag, with red and yellow reflectors, can be used to transport the kit. In an emergency, it should be placed so that it is visible from a distance.

4. Reusable Safety Harnesses. Designed for an individual worker to work in a high area or on a high, moving machine.

5. Self-Contained Breathing Apparatus. Should include an oxygen mask, a carbon dioxide mask, a Breathing Apparatus, and a self-contained breathing unit.

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7. Personal Protective Clothing. Should include a hard hat, protective glasses, protective gloves, protective suit, and protective shoes.

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REMINDER
Do not let Nov. 5 Safety Management Seminar pass you by. Make reservation now. Limited to 80 enrollments.
Familiar Faces in New Places

Dale Thornton, formerly an operator in Woodville, has taken over as Chief Operator for the Sullivan County Home in Union.

Susan Lamblin is now the new Chief Operator in Newington WWTP, working for Whitman & Howard Engineers.

Mike Harembur, former plant superintendent of Gloucester, Mass., is now the new Chief Operator at Concord.

James Scott, Chief Operator and Steve Clifton are chief operators in Salem, working for G. & Underwood Engineers.

Peter Hellbach, formerly Chief Operator in Exeter, is now the Operator at Pease Air Force Base, Portsmouth, NH.

James Cervin, formerly of Plymouth WWTP, is the new Chief Operator of Exeter, working for York Consultants.

Richard Gould is the new Operator at Farmington WWTP.

Jerry Winters has left Spaulding River to become in Hanover. Barry Bressa has taken over Jerry's duties at Treatment Plant Operator.

Doug Bissell, graduate of JERWI, is now Operator in Barnstead.

Jon Patterson has been moved to Somersworth and is working as a foreman for Bower Construction Company, building plants and lining wells.

Charles McDowell, former superintendent of Berlin, will be moving to Portland, Maine, as a assistant superintendent.

Mark Saltmarsh, formerly of Newport, is now a new operator at Manchester EPO.

Kenneth Bristow, former Operator in Merrimack, is now employed as an Operator at Manchester EPO.

Steve Dembly has left Concord and joined us at Merrimack, D.C.

Mike Dube has left Somersworth and is now employed with Greater Lawrence Sanitary District, N.H.

Maria Legere has left Manchester and is now working for Social Utility District.

Ray McMillan has left the Deptartment in Charlotte and is working now in Northfield with the department.

Robert Petteine has left Concord and is now working for the State Bureau of Solid Waste Management.

Tim Dennis has left Andover Water & Waste Water and is now working for the Bureau of Solid Waste.

Bryan Benson is a new Operator at Pembroke WWTP.

Williamson Connally is a new Operator at Derry WWTP.

Don Kennedy has left Sanders Associates and returned back to RayDean.

Russell Trembley, formerly from Wadu Industries, is now working for Sanders Associates as Treatment Plant Superintendent.

Christine Puschat has left the lab at Milford and is now an Operator at Hal Street, Concord Plant.

Dave Pochacz has left Hall Street Concord Plant and is now employed in Portland as a WWTP Operator.

Bob Allen has left Hill Stree, in Concord.

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HAVE YOU HEARD

Nashua Update

The Nashua Wastewater Treatment Plant is rapidly approaching expansion to secondary treatment. Site preparation will commence in the fall of this year. The initial facilities plan for expansion dates back to 1976. After much deliberation regarding design, sludge disposal options, costs, odor control, and energy utilization, Camp, Dresser and McKee, Inc., was contracted in 1984 to evaluate secondary treatment alternatives and recommend secondary treatment facilities.

CDM, Inc. determined that the preferred alternatives are fine bubble air activated sludge with separate thickening/storage of the primary and secondary sludge and belt press dewatering. Future off-site sludge disposal options include landfilling, composting, and co-incineration with energy recovery. The average design flow is 15 MGD with a maximum design flow of 26 MGD.

Construction of the secondary treatment works is scheduled for fiscal 1987. Start-up of the facilities is anticipated for fiscal 1990.

Epping, NH

Epping, NH is now in the process of upgrading their two lagoon system. The Consulting Engineer is Dufresne-Henry, Inc. The Contractor is Penta Corporation.

Plans for the upgrade include lowering and cleaning both lagoons; improving diking banking; adding fine bubble aeration equipment to lagoons; constructing new head-works building with septage handling and aerated holding tanks; converting gas chlorination to sodium hypochlorite.

The upgrading should be completed in the spring of 1986.

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NOTICE

T-Shirts with the new NHWPCA logo were a big hit at the Clambake. Sorry we didn't have the hat available. But, they were worth waiting for! The new hats are blue and white with an embroidered, sewed-on logo patch. They are just beautiful. Patches are also available without the hat.

They all will be on sale at all association meetings.

T-Shirts $5.00 — all sizes (kids also). Hats $6.00. Patches $3.00.

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NEW HAMPSHIRE WATER POLLUTION CONTROL ASSOCIATION
P.O. BOX 95
CONCORD, NH 03301