

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203

SEP 6 1979

Mr. Harry B. Jackson, Superintendent Augusta Sanitary District 170 Hospital Street Augusta, ME 04330

Re: C230206-03 Augusta Sanitary District, ME

Dear Mr. Jackson:

This office has reviewed the intermunicipal agreement, dated August 21, 1979, between the Augusta Sanitary District and the Trunkline Inter-Community Group, which we received from your Attorney, through correspondence, dated August 20, 1979. We have found that the agreement satisfies our comments on Draft No. 7 of the agreement, stated in a letter, dated July 10, 1979, from EPA to your office. The intermunicipal agreement, dated August 21, 1979, is hereby approved by this office.

If you have any questions on this matter, please do not hesitate to call.

Sincerely yours, Lowrence F. Sheehan, Vr., Chief Engineering Section, NF, NH, VT

Municipal Facilities Branch

cc: ME DEP Whitman & Howard

SANBORN, MORESHEAD, SCHADE & DAWSON

ATTORNEYS AT LAW P. O. BOX 2305 341 WATER STREET AUGUSTA, MAINE 04330

WALTER M. SANBORN (1882-1965) RICHARD B. SANBORN CHARLES E. MORESHEAD RICHARD M. SCHADE PETER T. DAWSON

LEE K. BRAGG Gordon H. Smith TELEPHONE 207-623-3579 207-622-7505

February 21, 1978

Mr. Harry B. Jackson Superintendent Augusta Sanitary District 170 Hospital Street Augusta, Maine 04330

Dear Harry:

You have recently requested that I render an opinion to you concerning the impact of paragraphs3 and 4 of an Agreement dated June 30, 1974 between the District, Winthrop Water District, Manchester Sanitary District, Hallowell Water District, Monmouth Sanitary District and Carleton Woolen Mills concerning the Inter Community Trunk Line.

As I understood your question, you wished me to determine whether or not any of the participants listed in paragraph 3 could be eliminated from their capital cost recovery share by the fact that they were not using the trunk line. It would appear there was some intent in the Agreement to adjust the percentage of participation in the event the flowages changed by more than 25,000 gallons a day or a new contributor was added to the line. The Agreement is silent as to the adjustment of the percentages in the event a change occurs due to the elimination of one of the participants. It would appear that the original intent of the capital cost recovery participation was to include all the original participants and that the elimination of any of the original participants would necessarily affect the percentage repayment by the remaining participants. Although Hallowell is not using the line, Hallowell agreed initially to share in the capital recovery cost. Unless all other participants and the Augusta Sanitary District agree, Hallowell is bound by its original agreement to participate at the level in the Agreement. Paragraph 4 of the Agreement would seem to allow the Committee to establish any change in the participation of the recovery, but it would not appear that the mere fact of non-participation by Hallowell would necessarily eliminate them from any previously agreed to payments without such a vote by the Committee.

Yours very truly,

Richard M. Schade

RMS/ce

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WALTER M. SANBORN (1882-1965)

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May 25, 1976

Mr. Haskell Dearnley, Business Manager Augusta Sanitary District 25 Wade Street Augusta, Maine 04330

Dear Hack:

In reply to your recent conference with me, I have looked over the agreement of June 27, 1969 and that of June 30, 1974 as well as the two provisions of the statutes which support these agreements, one in 1969 and the other in 1973.

I believe the pertinent language is that contained in paragraph 6 of the 1969 agreement and paragraph 5 of the 1974 agreement.

As I read these two provisions, they both appear to indicate that maintenance and operation costs of the entire line shall be prorated among the users proportionate to the gallons of sewage or waste that each contributes to the line.

In other words, each party pays his percentage of the entire line and there is no intent, apparently, to treat each pumping station separately. Therefore, I believe, add the cost of all pumping stations together and then each entity pays its proportion based on gallonage.

It may be that this will not produce particularly fair results but it appears to be what the parties agreed to and perhaps they considered that the impôrtant thing was that each should support the entire line. However, there is room for negotiation since the agreement does give a chance for a conference and certainly if all parties agreed they could agree on a slightly different formula.

On the other hand, if any party felt that prorating the entire cost of the line was not fair such party would have a right to petition the court for a declaratory judgment for an interpretation but certainly it would be desirable that this not take place if possible.

Altogether, my advice would be to prorate the entire maintenance and operation expense of the whole line and see if the parties will all agree that this is reasonable.

Very truly yours,

Richard B. Sanborn

RBS:mdk

Whitman & Howard, Inc.

Engineers and Architects

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February 11, 1988

Mr. Dale Glidden, Assistant Superintendent Augusta Sanitary District 170 Hospital Street Augusta, Maine 04330

RE: ASD Trunkline Agreement

Dear Mr. Glidden:

Pursuant to our telephone discussion this date, this is to offer the engineering intent of some of the terms and conditions, of the Intermunicipal Agreement. Specifically Article I, para. 5.1, concerning future tie ins relates to lateral sewers, if in accordance with the rules and regulations of the District. The key word here is <u>lateral</u> sewer, which constitutes a gravity sewer only. In turn, a gravity sewer can only tie in to a gravity sewer (and even then there are some restrictions on this, ruled by the necessary hydraulics that must be evaluated on a case by case basis).

Siphons and force mains are clearly not gravity sewers.

Siphons, especially, should never be tied into, for two primary reasons. One is that the energy grade line is fixed for a given design and cannot be changed. Any flow tie-ins change the hydraulics, and can adversely effect the main line flow in the siphon. The second reason, is that experience has shown that connections can never be made tight enough for the life of the pipe, to insure that the hydraulic regime of the siphon is not comprised. Bear in mind, the consequence is not just a leaky siphon, but a siphon that won't work at all.

You may recall one bit of trouble shooting we did with ASD soon after startup that involved the careful placement of a 3" air vent line tap that was needed at a precise location to eliminate a surcharging problem at a siphon influent structure. This should give you an idea as to how precise siphon hydraulics must be.

Designed for a given set of circumstances, and designed properly, a siphon can save a lot of what would otherwise be pumping costs. If the circumstances are changed after the fact, the hydraulic regime could be affected with disastrous results.

Whitman & Howard, Inc.

Force mains in this system are high pressure. It would require an equally high pressure for any connection to flow into it.

Since check values are not 100% tight, high trunkline force main pressures, could easily be delivered down someone's indiscriminate connection, rather than those pressures and flows remaining in the trunkline force main.

For these reasons, and other liabilities, no connections to force mains and particularly siphons, are allowed by the Intermunicipal Agreement. Gravity sewer connections only, and these should be fully evaluated and engineered before they are allowed.

Very truly yours,

WHITMAN & HOWARD, INC.

Charles N. Smith, P.E. Vice President

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Augusta Sanitary District Intercommunity Trunkline Group Asset Contributions

	Year(s) Acquired	* Trunkline Contributed Asset Value
Old Trunkline	1969-1972	527,618
New Trunkline	1981-1982	4,702,269
Trunkline Chemical Improvements	1994	127,241
Winthrop Pump Station Improvements	1995	50,397
Manchester Pump Station Storage	1995	272,458
Trunkline 2 Storge Rolief Control With	1997	203,417
Treatment Plant Upgrade	1999-2002**	371,398
Primary Treatment Plant Upgrade	1983	50,000
Treatment Plant Upgrade	1981	202,825
Old Trunkline and Trunkline Interceptor	1974	345,000
Portion of ASD Debt Paid by Trunkline based on % of Treated Flow	1982-2002**	732,138
	Total	7,584,761

* - Includes Federal/State grants awarded to communities but used on trunkline projects.

** - Annual costs to date paid for by trunkline communities. Will continue until assets are fully depreciated.

NOTE: Trunkline contributions towards assets equal approximately 19% of total ASD assets.

CAPITAL COST

INTER-COMMUNITY TRUNKLINE

New Trunkline

1) BY the 1979 AGREEMENT Non-Eligible Costs

Carleton Woolen	23.4%
Hallowell Water	2.0%
Manchester Sanitary	14.3%
Monmouth Sanitary	18.3%
Winthrop Water	42.0%

Unfunded Eligible Costs (1004/ showe)

Because of State and Federal Funding

Carleton Woolen	53.5%
Hallowell Water	4.6%
Manchester Sanitary	.08
Monmouth Sanitary	41.9%
Winthrop Water	.08

2) Upon completion of an audit of the Trunkline Grant the eligible and non eligible costs became known and the percentages in 1) above were combined to get the percentages shown below. This action was approved at the September 19, 1984 Intercommunity meeting and the distribution applied retroactively to 1982.

Carleton Woolen	45.1%
Hallowell Water	3.9%
Manchester Sanitary	4.0%
Monmouth Sanitary	35.3%
Winthrop Water	11.7%

3) Effective Jan. 1, 1986 the Winthrop Water District transferred 200,000 gallons per day of T/L capacity to Carleton Woolen Mills, Inc. (approved at the 12/18/85 Intercommunity meeting) and the percentages changed to:

Carleton Woolen	52.4%
Hallowell Water	3.4%
Manchester Sanitary	4.08
Monmouth Sanitary	30.7%
Winthrop Water	9.5%

PROPOSED METHOD OF ALLOCATING OPERATING AND MAINTENANCE COSTS AT MANCHESTER AND EAST WINTHROP SEWER FACILITIES

The Manchester Sanitary District has indicated that the obligation by it to assume costs of the Manchester local pump will impose a burden that it cannot tolerate. The remaining participants of the intercommunity group, except Hallowell which is unaffected, have indicated that they too have as much of a cost burden as they can bear. This review of the situation is offered as a solution to achieve a reasonable distribution of the related costs.

Any consideration of the aforementioned problem must include recognition of the reason for the construction of the pumping station, what interests it is serving, and what revenues may be dependent, even indirectly, on the proper operation of the facilities.

There are three components to be addressed in this review: (1) the Manchester local pump station, (2) the Manchester grinder pumps, and (3) the Cobbossee Beach pump station.

The Manchester local station functions as the means of introducing nearly all of the Manchester sanitary output into the relocated trunk line. Originally Manchester's system fed to the trunk by gravity. This design required substantial investment in order to save on operating cost, the benefit of which was partially negated when the new trunk design evolved, and it seems justified to consider that the intercommunity group has a responsibility in these costs. But Manchester is suspected of having an infiltration problem and the operating costs associated with this system deficiency should not be the group's obligation. It is recommended that Manchester assume all power costs for the local station and that the group pay the labor and miscellaneous costs.

The Manchester grinder pumps function strictly as the means of servicing certain of the District's customers from whom the District receives revenues. They have no relation to the group's required facilities and therefore the group should have no cost obligation relating thereto. It is recommended that <u>all</u> costs of operation and maintenance be Manchester's responsibility.

The Cobbossee Beach station is a situation closely akin to the Manchester local. It is required only because of the relocation of the trunk line, and a consistent rationale dictates allocating the associated costs to the group. However, both Manchester and Winthrop derive revenue from users who depend on the Beach station for their sanitary sewage service. Both communities utilize a segment of the original trunk sewer line as a collector. Thus both communities presumably enjoy the revenue benefits extracted from these users, but bear a minimal financial responsibility for the plant needed to provide those services solely. It seems completely equitable to recommend that Winthrop and Manchester share the cost of power needed to operate the Beach station in proportion to the annual flow contributed from each community with the labor and miscellaneous costs allocated to the group.

The old trunk line used by Manchester and Winthrop is, practically speaking, functioning as a collector line and nothing more. The capital cost of this line is supported by those participants in the group although they no longer benefit from it.

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Accordingly, it is recommended that all operating and maintenance costs associated with the line be carried by the community in which the cost is incurred.

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In summary, it is recommended that:

1. The group assume the cost of labor and miscellaneous costs spent on the Manchester local station, and that Manchester assume all power costs related to it.

- 2. Manchester assume all costs associated with the grinder 12.000. pumps.
- 3. The group assume the cost of labor and miscellaneous UP 360A. costs spent on the Cobbossee Beach station, but that N *3600 Manchester and Winthrop share the cost of power used at that facility in proportion to their respective contribution of flow.
 - Manchester and Winthrop assume all operating and 4. maintenance costs related to that part of the original trunk line now used by them as a collector service on the basis that each will fully support the part of the line within its respective community.

\$500

R. L. Bean 5-10-82