

Chronology of Events -- Bow Plant

Admin # 378

- August 18, 1966 ✓ Letter Frost (Pollution Staff) to Kamman (former F & G Director) -- request our input thermal standards.
- October 3, 1966 LaCava (Pollution Staff) to Priest (Pub. Serv. Co. V.P.) -- company informed "...maximum temperature effect as compared to low flow conditions is the important consideration".
- October 19, 1966 Kamman to Healy (Pollution Director) -- plans to restore anadromous fish.
1) No heated discharge be allowed to exceed normal stream temperature by more than 5°F when normal below 58°F.
2) When normal 58°F or greater effluent cooled to normal.
- April 27, 1967 Cooperative study Public Service Company Consultants and Fish and Game agreed to.
We would study resident fishes. Consultants for Public Service Company all other factors. Our input lasted 1967, 1968 and part of 1969. Cost department estimated \$35,000.
- September, 1967 Live box tests by Water Supply & Pollution Control Commission staff demonstrated ability of river to support brook trout.
- 1967 - 1968 Netting studies revealed presence of brook trout and landlocked salmon.
- December 27, 1968 Healy to Corson -- "So far as we are concerned, whenever the cold water fishery program for the stream is instituted, the discharge of heated waters will have to be controlled so as to avoid any interference with the management policies established by your office. I am sure Eliot (Priest) recognizes this policy and is prepared to do whatever is necessary to accommodate the needs, whether it be by means of cooling towers or equivalent devices".
- Spring, 1969 Public Service Company applied to Water Supply and Pollution Control Commission for permit to discharge heated effluent.
- May 16, 1969 Corson to Healy. Presently managed primarily for smallmouth bass and walleye pike - warm water standards temporarily O.K. "We would also suggest that any plans for cooling discharge water should consider the fact that the Fish and Game Department..... will soon be engaged in a program of restoring Atlantic salmon and American shad to the Merrimack River. Shad egg stocking is planned for the spring of 1969 and it is expected that Atlantic salmon stocking will occur as early as the spring of 1970. As management of these species becomes a reality, it will be necessary that water quality standards for cold water fish be met".
- Spring & Summer, 1969 Various permits negotiated.
- ✓ October 2, 1969 Priest to Healy...."As you undoubtedly know, this will require the operation of the system on a closed circuit basis for a part of the year. We have finally resolved that we believe this can be accomplished by the use of a pond using sprays. However, a substantial penalty in the output of the plant will result during this period".

Co. also rejects idea of towers & selects cooling ponds
EXHIBIT - A

- October 8, 1969

Final permit issued by Water Supply & Pollution Control Commission (Exhibit I).
- October 8, 1969

Letter Healy to Priest. Permit incorporated revisions suggested by Priest within spirit of joint intent (Exhibit II).
- June 1, 1970

Priest to Healy -- spray pond idea suddenly dropped, now request extension of time for 1 year to test use of spray modules and extension of canal.
- June 17, 1970

Corson to Healy -- Letter of protest, company should be held to October 8, 1971 deadline or be subject to all penalties for violation of the same (Exhibit III).
- July 16, 1970

Priest to Frost -- Pg. 2, Items 1 & 2 - assurance that canals with 56 modules will meet permit conditions. Will develop alternatives in case they do not. If alternative required, completion date will be late summer 1972. Exhibit IV. Fish and Game again conceded.
- 1972

Monitoring carried out and reports issued. Verbal complaints issued to Water Supply & Pollution Control Commission staff -- permit conditions not being met.
- August, 1973

Wightman (F & G staff) to Frost. Memo-conditions of permit still being violated.
- November, 1973

Dave Merrill (Pub. Serv. Co. V.P.) has now injected an entirely new method of interpreting conditions of permit (average of cross section rather than maximum rise).
- December 4, 1973

Merrill to Healy - request permit to discontinue use of modules during winter due to energy crisis.
- January 16, 1974

Corson to Healy - Department will again concede due to energy crisis "...before doing so, however, we would want assurances from the Public Service Company that...they would demonstrate the capability of producing no more than a 1°F rise in temperature at any point in the water column at station S-4 when ambient river temperatures reach 68°F and higher". Exhibit V. Company accepted variance and (we assume) conditions.
- 1/23/74

Frost to Healy Exhibit V-A seal portion marked
- September 17, 1974

Newell to Frost - memo no construction started to meet conditions of permit.
- September, 1974

Fish and Game Department received proposed NPDES discharge permit with request for comment from EPA. Upon advice of Water Supply and Pollution Control Commission staff replied directly to EPA with copy to Pollution on October 3, 1974.
- December 9, 1974

Newell called to Governor's office to explain authority to comment to EPA re. NPDES permit.
- December 10, 1974

Corson, Newell and Public Service Company met with Governor Thomson and Assistant Fred Goode on same subject.

- December 11, 1974 Goode, Weymouth (from Governor's office) and Newell attended Water Pollution Commission meeting. Assistant Attorney General Stever was asked for an opinion as to Fish and Game Department's legal standing in matters pertaining to Federal Permit. His reply is Exhibit VI.
- December 13, 1974 Water Supply and Pollution Control staff and Fish and Game staff represented by the Director and Mr. Seamans met with Attorney General to clarify certain matters concerning the discharge permit. Exhibit VII represents Attorney Stever's summary of the understanding of both agencies.
- December 20, 1974 Meeting with Fish and Game, Water Supply and Pollution Control Commission, Public Service and Fred Goode. Attorney Stever's memo discussed in detail. Staffs directed to work out acceptable EPA permit.
- December 30, 1974 A meeting was held between staff members of Water Supply and Pollution Control Commission, Fish and Game, Public Service Company and its consultant Normandeau Associates. Fish and Game again agreed to a two year delay for study purposes and a modified NPDES permit was agreed upon. The pertinent sections relative to thermal discharges are enclosed as Exhibit VIII.

1/9/75 Horrey (PSC Engineer) to Healy. Engineers did not back up staff. Exhibit VIII - A

2/13-14/75 Exhibit IX The most recent permit. According to Poll. staff - agreeable to all.
AEN/rjw

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1/9/75

Harvey (PSC Engineers to Healy) Engineers apparently did not back up staff. Disagreement now between PSC & Pollution staff. EXHIBIT VIII-A

AEN/ljw

only if you have permission

1/18/75 monitor article Healy claims F+G + PSC have a disagreement - we have not discussed matter since 12/30! Recent news articles cooling towers 1820 million - 20th 5 million to operate get this plan rejected in 1969 Now - told temp rise thru plant 20°F requested discontinuing modules - energy crisis etc. Temp in 34° out 76°F!

2/13+14/75 EXHIBIT IX to the most recent permit.

According to WSPCC the permit is now agreeable to all.