

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Bill Sheffield
Governor

Richard Neve'
Commissioner of
Environmental Conservation



FINAL REPORT

SANITATION FACILITY IMPROVEMENTS

CHEFORNAK, ALASKA

FILE COPY

VILLAGE SAFE WATER PROGRAM



FINAL REPORT

Sanitation Facility Improvements
Chefornak, Alaska

CONTENTS

Introduction	1
Project Development	2
Project Narrative	3
Project Chronology	5
Project Cost Summary	6
Project Photographs	7
Project Documents	11

Prepared for
Department of Environmental Conservation
Village Safe Water
by the
U.S. Public Health Service
March 1984

INTRODUCTION

In 1964, Chefnak received a U.S. Public Health Service (PHS) project, which included a watering point consisting of a 192 square foot woodframe structure enclosing a well, submersible pump, oil stove, and miscellaneous piping. Two water storage tanks were provided. Individual facilities included privies, seepage pits, sewage disposal bunkers, kitchen sinks and stands, refuse cans, water storage and carrying cans, and box and pail toilets. The total project cost was \$30,000.

A Council resolution dated March 31, 1978, requested a grant from PHS for improved sanitation facilities. Federal funding at that time was not available for sanitation facilities except in those communities where federal housing was planned or in the process of being built. In January 1981, the Association of Village Council Presidents (AVCP) Housing Authority announced plans for construction of 30 new houses. The City also received a \$500,000 grant under the State Village Safe Water (VSW) Program through the 1980 Water and Sewer Bond Bill (Chapter 97, SLA 1980).

PROJECT DEVELOPMENT

After Chefnak received its VSW grant in 1981, City officials sought additional technical assistance from PHS to formulate the project planning in more detail. PHS engineers presented several sanitation facility alternatives to the City in October 1981. Information on construction sites and operation and maintenance costs of the various types of sanitation facilities which could be constructed with the funds available was included with the alternatives presented. From the alternatives presented, City officials chose to construct an all-weather distribution system with watering points and a solid waste haul system for the community. This all-weather distribution system was the first of its type in Alaska. The City chose to use its VSW funding to design and build the project with PHS assistance.

The project summary was approved in March 1982 addressing the sanitation needs of the community. The summary included a project schedule and cost estimates for construction of a new pumphouse and all-weather watering points.

The Memorandum of Agreement, prepared in February 1982, outlined the roles and responsibilities of the PHS and the City in the project. The City signed the Memorandum of Agreement in April 1982.

PROJECT NARRATIVE

Materials were purchased and shipped to the project site in the spring of 1982. In June 1982, a United Transportation barge sank on its way to deliver materials for the project, losing 200 feet of 4-inch pipe casing. The replacement casing had to be flown into Chefornak in August. The mishap caused a construction delay of two-and-one-half weeks.

Design plans were completed in July and construction began at that time. All local hire labor was used during the construction. PHS provided one superintendent to oversee the project. Local craftsmen included:

Cyril Alexie	Rene Limeres	Maggie Wiseman
Bob Tunuchuk	Walter Lischik	Robert Jimmy
Nancy Thirchiak	Ben Mathew	Catherine Kairaiuak
Stanley Abraham	Mary Mathew	Tommy Kusaiak
George Billy	Glen Morgan	George Mathew
Gary Bowley	Joe Mukluk	John Mathew
Monty Burnett	John Nevak	Martina Mathew
John Erik	Peter Panruk	Peter Mathew
Alexie Flynn	Maggie Tom	Richard Mathew
Ben Flynn	Pete Tom	Mathew Panruk
Sam Flynn	Hubert Tunuchuk	Robert Panruk
David Jimmy	James Wassillie	George Sam
John Jimmy	Jobe Abraham	Katie Tony
Pauline Jimmy	Steven Billy	Jack Tunuchuk
Charlie Kairaiuak	Sara Buckles	Peter Tunuchuk
Elizabeth Kairaiuak	Cecelia Burnett	George Wassillie
Tommy Kairaiuak	Bernadette Erik	Victor Wiseman
Ralph Kylook, Sr.	Marcella Erik	Peter Wassillie
David Lewis, Jr	Bertha Jimmy	David Wiseman

Additional funding became available in September 1982 to expand the scope of the project to include the construction of on-site and off-site sanitation facilities to serve 30 new Housing and Urban Development (HUD) houses. Federal funding for the project was made available by HUD, through the AVCP Housing Authority, and by the City.

The increased scope of the project included expansion of the water distribution system to the new HUD housing, construction of a dump site, boardwalks, garage, and providing a waste haul system and equipment for the new housing sites.

Facilities constructed with VSW funds were basically completed during the 1983 construction season. A pre-final inspection of the project was held in October 1983. The facilities for the new HUD housing site and the punch list items from previous work will be completed during the 1984 construction season.

The sanitation facilities provided through the VSW funded project will be transferred to the City when all proposed facilities are completed.

PROJECT CHRONOLOGY

<u>Event</u>	<u>Date</u>
Tribal Council of Chefnak adopts resolution requesting PHS aid in construction of City sanitation facilities.	October 1979
VSW Statewide Bond Bill to support sanitation facilities approved.	November 1980
Sanitation Facilities Study, City of Chefnak, completed.	October 1981
City officials select sanitation facilities alternative.	October 1981
Chefnak Project Summary prepared.	February 1982
Memorandum of Agreement approved.	April 1982
Construction started.	July 1982
Prefinal inspection of project.	October 1983
Interim Final Report prepared for VSW.	March 1984

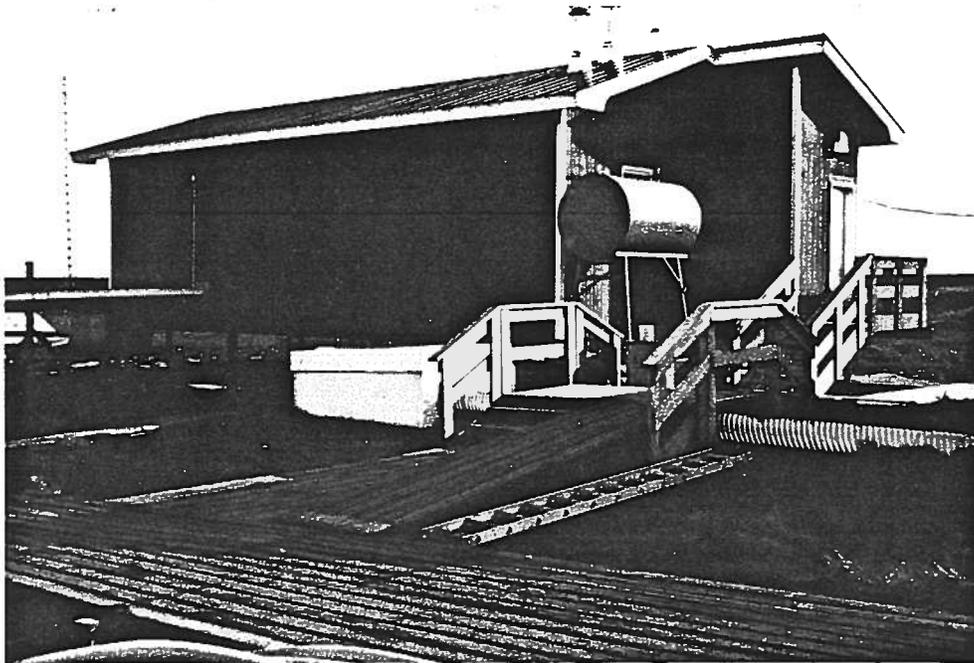
PROJECT COST SUMMARY

Based upon an estimated total cost of \$1,206,000, the City using its VSW grant funds, contributed \$500,000 to the project. This represents approximately 42 percent of the estimated project costs and paid for a share of the major project components (including materials, labor, transportation, support, etc.) as follows:

SUMMARY OF VSW SUPPORTED EXPENSES

Pumphouse building	\$ 85,000
Water storage tanks	10,000
Pumping and treatment equipment	70,000
Heating and electrical equipment	40,000
Insulated water line - 5,200 lf	225,000
8 all-weather watering points	45,000
Fuel storage facility with containment dikes	<u>25,000</u>
Total VSW funding	\$500,000

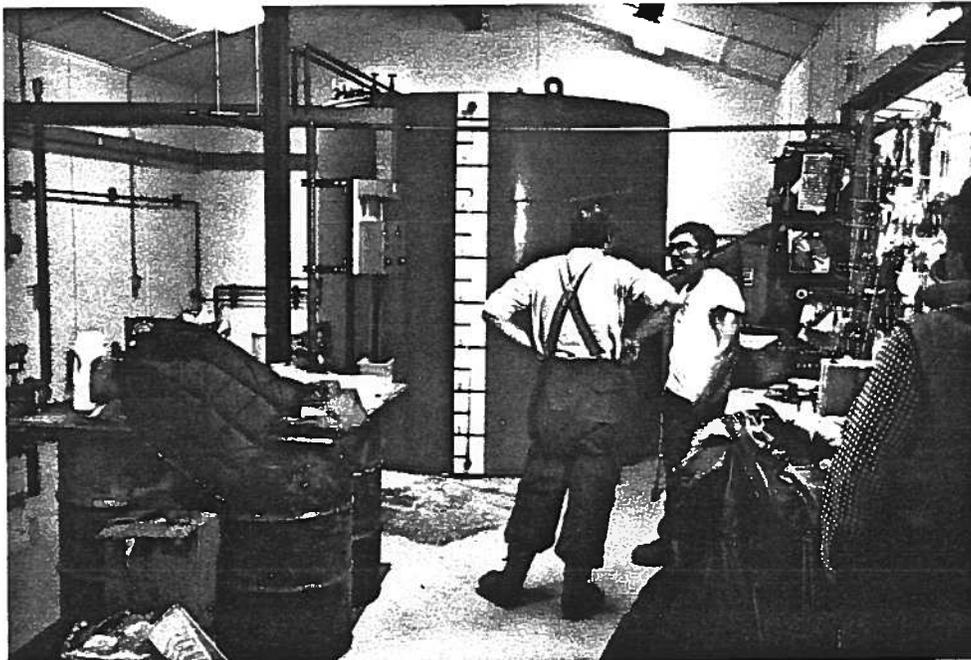
This interim final report communicates to the Alaska Department of Environmental Conservation (ADEC) the disposition of VSW grant funds. PHS will write a final report which will include a project cost summary when the project is complete and PHS accounts are closed out. A copy of PHS' final report will be provided for each of the project participants (ADEC, AVCP, and the City of Chefnak.)

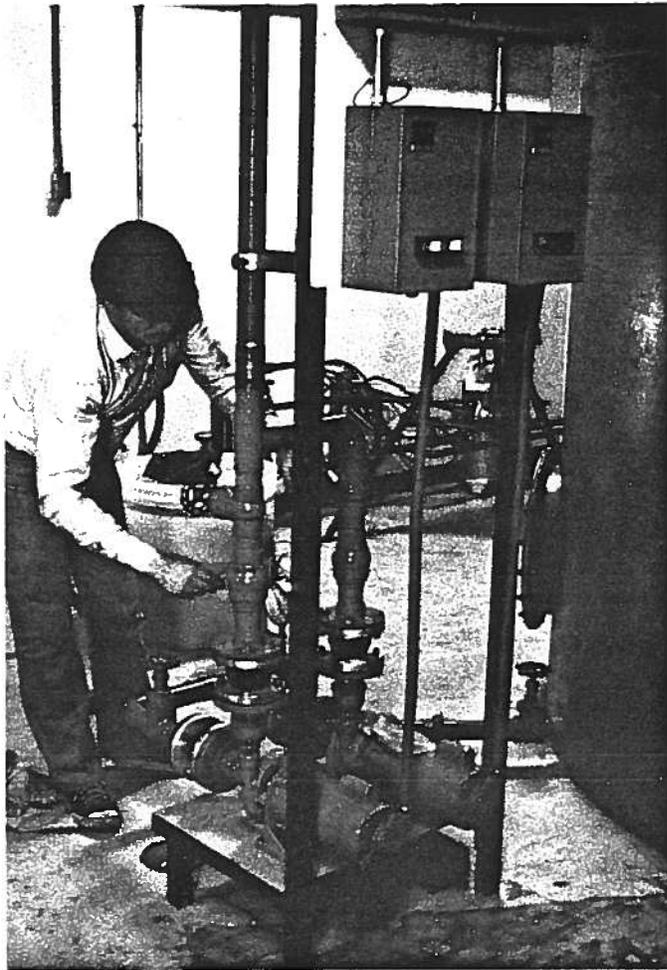


CHEFORNAK, AK

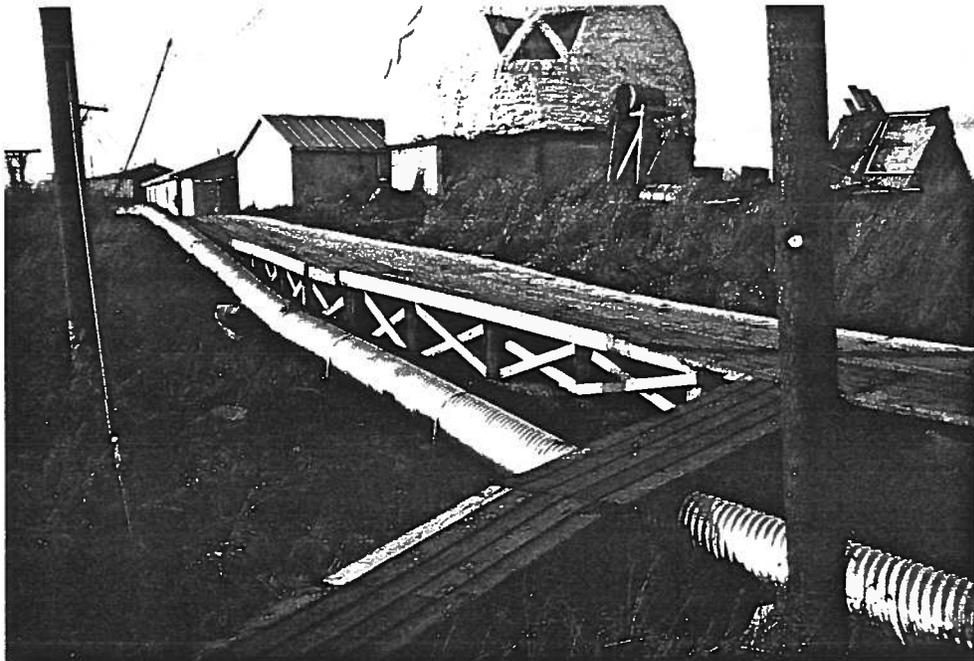
The pumphouse is a 24 by 32 square foot building which houses water treatment equipment, storage tanks, and heating and pumping equipment.

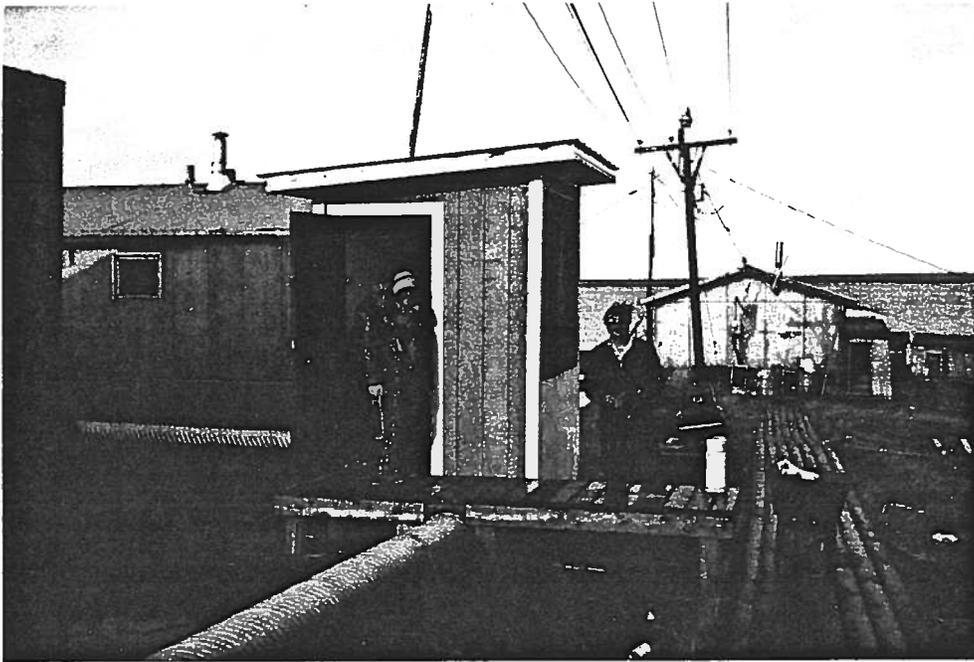
Project AN-82-127 utilized the existing community well developed by PHS in 1964. Water pumped from the well is stored in a 4,000 gallon storage tank shown in the photo above. The well water is treated with chlorine and fluoride before entering the tank.



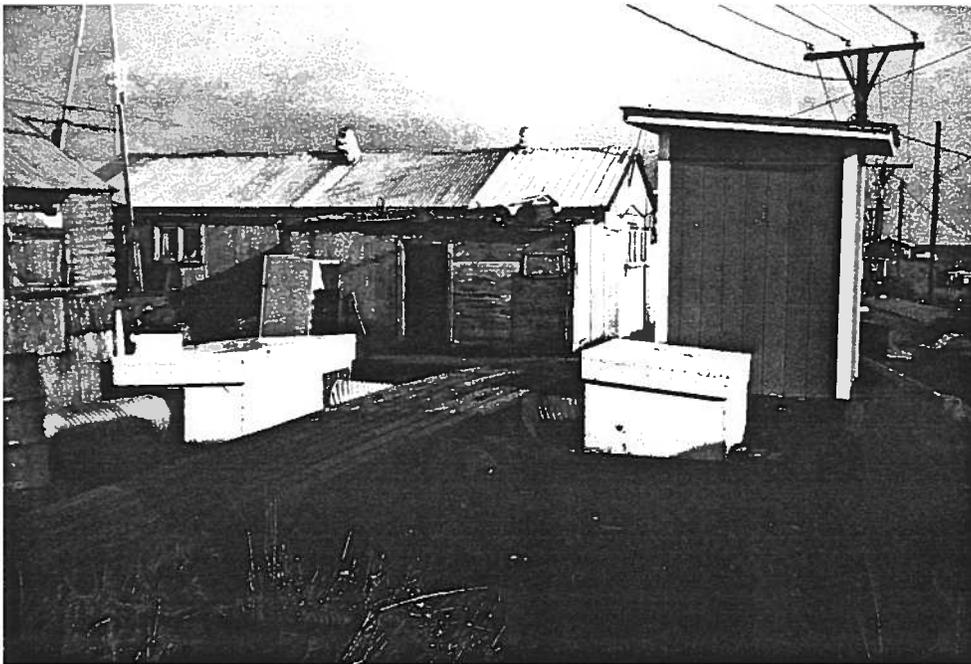


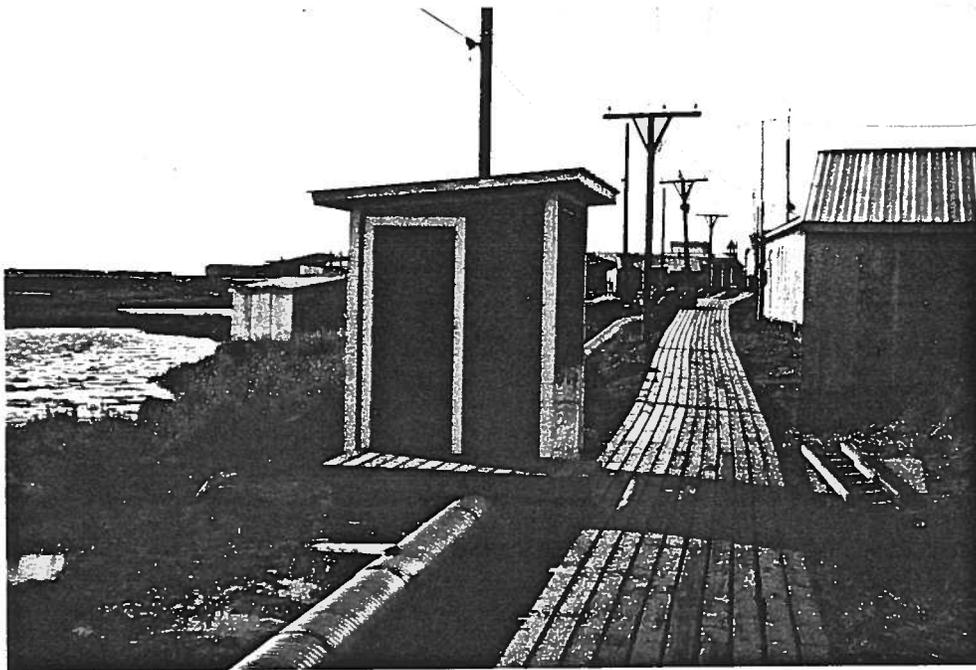
The treated water is pumped throughout the community via circulating pumps through the 5,200 linear foot circulating water line shown in the photo below. The waterline was constructed with 3-inch PE pipe inside insulated corrugated pipe and laid above ground.



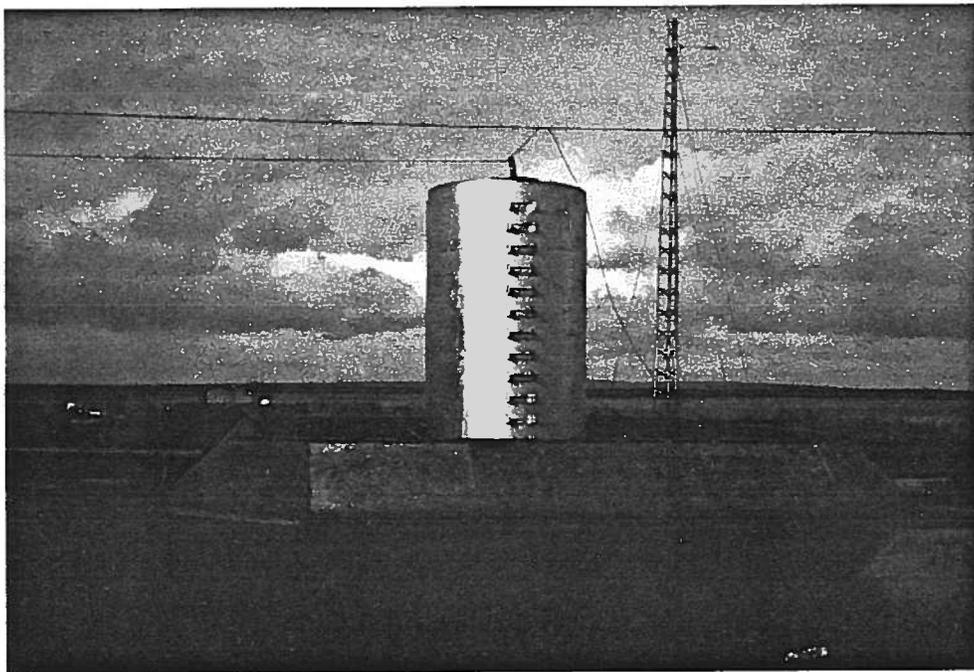


Eight all-weather watering points were constructed at various points in the community for easy access to treated water. These watering points were constructed in line with the circulating water line as shown in these two photos. The white junction boxes shown in the water line below serve as expansion boxes in case the line should freeze. Flexible hose is used inline in the boxes.





The photo above is another view of the community and the all-weather watering points. Below is a photo of the 5,000 gallon fuel storage tank constructed during the project.



STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

JAY S. HALLETT, GOVERNOR

POUCH 0 - JUREAU 99311

May 29, 1981

The Honorable David Jimmy
Mayor
City of Chefnak
Chefnak, Alaska 99561

Dear Mayor Jimmy:

In accordance with AS 46.07 (Village Safe Water Act), the Department of Environmental Conservation offers the City of Chefnak a grant of \$12,000.00 for planning of sanitary facilities. Consistent with discussions which have taken place between the residents of Chefnak, my staff and the Public Health Service, these funds will be used for a feasibility study for sanitation facility construction at Chefnak. This study will:

- (1) Outline the various types of facilities which could be used to serve the city.
- (2) Estimate the cost of operation for the different types of facilities.
- (3) Recommend the type of facility which, in an engineering analysis best suits the conditions at Chefnak.

Your acceptance of the grant is subject to the following conditions:

- (1) The City of Chefnak designates the U.S. Public Health Service, Sanitation Facilities Construction Section as its representative in requesting payments under this grant agreement.
- (2) Two grant payments will be made, one to Chefnak not to exceed \$5,000 and one will be made to the PHS not to exceed \$7,000. The City will employ a resident of Chefnak to assist the Public Health Service with developing a water, sewer and solid waste feasibility study. The exact nature of his duties will be determined by a scope of work which will be approved by the Public Health Service, the Department of Environmental Conservation and the City of Chefnak. Based on this scope of work, the City will request grant

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

465-2600 POUCH 0 - JUNEAU 99811

The Honorable Peter Mathew, Sr.
Mayor, City of Chefnak
Chefnak, AK 99561

Dear Mayor Mathew:

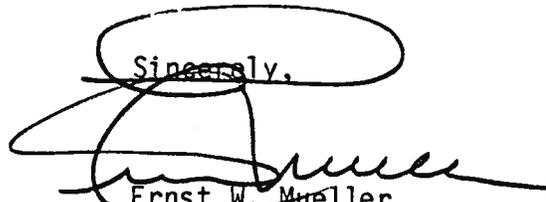
In accordance with AS 46.07 (Village Safe Water Act), the Department of Environmental Conservation offers the City a grant of \$438,000 for construction of sanitation facilities. Consistent with discussions between the residents of Chefnak, my staff, and the Public Health Service, these funds will be used for construction of all-weather watering point facilities at Chefnak. This project will

- 1) replace the existing pumphouse;
- 2) install heating and pumping equipment, including necessary plumbing; and
- 3) install a circulating waterline in the community to serve several watering points.

Your acceptance of the grant is subject to the following conditions:

- 1) The City of Chefnak designates the U.S. Public Health Service (PHS), Sanitation Facilities Construction Section, as its representative in planning, designing, and building this project.
- 2) Two grant payments will be made; one to Chefnak, not to exceed \$335,000, and one to PHS, not to exceed \$103,000. The City's grant funds will be transferred to a bank account established by the City for purchase of materials, equipment, and payrolls necessary for the construction of this project. The PHS will establish a separate project account utilizing its share of this grant out of which all engineering and planning expenses for the Chefnak project will be paid.
- 3) The City agrees to obtain all titles and easements necessary to provide clear title needed to construct and maintain the proposed facilities.
- 4) The City acknowledges that the State is serving only as a funding source for this project and, as such, is to be held harmless by the City for any claims or damages arising as a result of the VSW grant assisted project.

- 5) The City acknowledges the right of the State to rescind the grant and seek recovery of payments already made on the project if payment requests contain incorrect or misleading information or if a grant condition contained herein is violated.
- 6) Funds not utilized will be returned to the State upon completion of the project.
- 7) The City agrees to allow, at any reasonable time, State inspection of all project work, including related records and data, for which VSW grant money is used. The City agrees to maintain project accounts and payroll records to verify project expenditures. These accounts and records shall be kept apart from other records.

Sincerely,

 Ernst W. Mueller
 Commissioner

ACCEPTED FOR THE CITY OF CHEFONAK

Peter Mathew
 Mayor

March 3, 1982
 Date

[Signature]
 Council Member

March 3, 1982
 Date

Paul Abraham
 Council Member

March 3, 1982
 Date

Walter Lewis
 Council Member

March 3, 1982
 Date

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

Pouch 0 - Juneau 99811

April 26, 1983

The Honorable Peter Mathew
Mayor, City of Chefnak
Chefnak, AK 99561

Dear Mayor Mathew:

In accordance with AS 46.07 (The Village Safe Water Act), the Department of Environmental Conservation wishes to offer you a grant of \$50,000 to complete the VSW Project now underway. This grant is in addition to previous grants and will be made directly to PHS.

All other conditions of the February 26, 1982, grant will remain in effect.

Please indicate your acceptance of this grant offer by signing below and returning the original copy to this office.

Sincerely,

Richard A. Neve
Commissioner

Accepted for the City of Chefnak

Peter Mathew
Peter Mathew, Mayor

5/29/83
Date

Paul Abraham
Council Member

5-29-83
Date

Walter Lewis
Council Member

5-29-83
Date

Inessa Morgan
Council Member

5-29-83
Date

Whereas, the Chefnak City Council is recognized as the local governing body of Chefnak, Alaska, and

Whereas, the Chefnak City Council represent the people of Chefnak in matters pertaining to State and Federal needs, and

Whereas, the Chefnak City Council has applied for funding through the Village Safe Water Act to build a water distribution line at Chefnak, and

Whereas, the request for this project was approved, and

Therefore be it resolved that the Chefnak City Council accepts the project that was approved for the village of Chefnak under the Village Safe Water Act, and

Be it further be resolved that the P.H.S. (Public Health Service) has accepted and will continue to provide the engineering services to the completion of the project.

Passed this 20 day, of January, 1982.

Peter Mathews, Jr. Mayor
Neil G. Erick - clerk

Chefnak City Council

Chefnak, Alaska

99561

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

JAY S. HAMMOND, GOVERNOR

POUCH 0 - JUNEAU 99811

AMENDMENT NO. 6-127

To DEC-PHS Memorandum of Understanding

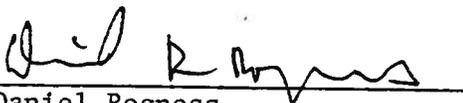
For Chefornak, Alaska

The memo of understanding dated June 2, 1981 is hereby amended to apply to the VSW Project for Chefornak, Alaska.

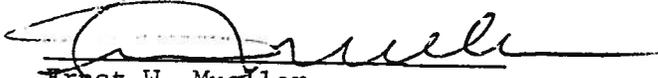
The total estimated project cost is \$500,000.00. Of this amount PHS will be allowed 12% of the actual construction cost (not to exceed \$58,000.00) for support activities. In addition, PHS will be allowed the actual travel costs for engineering staff working on the Chefornak project.

Design of the project shall be accomplished early in 1982 and shall be submitted the VSW Engineer for review and approval. Construction shall commence as soon as practicable, contingent upon receipt of equipment and material at the project site.

This VSW Engineer for this project is Edmund Jacobsen.


Daniel Rogness,
Chief, SFS, EHB, AANHS, PHS.

7-6-82
Date


Ernst W. Mueller
Commissioner,
Department of Environmental
Conservation

7.22.82
Date

- PARTIAL
TRANSFER AGREEMENT
BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE CITY OF CHEFORNAK, ALASKA

PROJECT NO. AN-82-127
PUBLIC LAW 86-121

DATE OF AGREEMENT:
June 1984

WHEREAS, the United States of America, acting through the Indian Health Service, Department of Health and Human Services, hereinafter referred to as the IHS, under and pursuant to the provisions of Public Law 86-121 (OMB 13.229) and the City of Cheforanak, Alaska, hereinafter referred to as the City, acting under the authority of the City Council, entered into an agreement executed for the IHS on April 7, 1982, and signed for the City on March 30, 1982, regarding the provision of sanitation facilities for the Native residents of Cheforanak, Alaska, and

WHEREAS, Amendment No. 1 to the agreement was executed by IHS on March 16, 1983; by the City on January 28, 1983; by the AVCP Housing Authority (AVCP) on March 11, 1983; and by the Department of Housing and Urban Development on April 7, 1983 to include the AVCP in the project, and

WHEREAS, Amendment No. 2 to the agreement was executed by IHS on August 5, 1983, and by the City on August 3, 1983, to provide for an additional IHS labor contribution to the project's labor account, and

WHEREAS, Amendment No. 3 to the agreement was executed by IHS on September 27, 1983, and by the City on September 15, 1983, to provide for an additional IHS labor contribution to the project's labor account, and

WHEREAS, the project provided for in this agreement, as modified, is partially complete, and

WHEREAS, the IHS has an interest in the domestic water service and waste disposal facilities and their appurtenances, materials, supplies, and equipment provided for and incorporated therein pursuant to the aforesaid agreement, and

WHEREAS, the parties desire to make available for use those facilities completed under the project to date and to provide for and assure the proper and efficient maintenance and continued operation of the sanitation facilities, and

WHEREAS, under Section 7(a)(4) of Public Law 86-121, the IHS is authorized to transfer the completed facilities with or without a monetary consideration, and under such terms and conditions as in its judgement are appropriate, considering the contributions made and the maintenance responsibility undertaken, and the special health needs of the Native people.

NOW THEREFORE, in accordance with the terms of the aforesaid agreement, and pursuant to Section 7(a)(4) of Public Law 86-121:

1. The IHS hereby transfers, assigns, and conveys to the City, without a monetary consideration and under the terms and conditions set forth in the agreement, all of the right, title, and interest of the IHS in the following items:

Partial Transfer Agreement for Chefornak Project AN-82-127
June 1984

- a. One each - 24 by 32-foot pumphouse complete with electrical and heating equipment, pumping and treatment equipment, and water storage tanks (4,000-gallon reservoir and three 120-gallon pressure tanks);
 - b. Approximately 5,200 feet of 3-inch insulated PE circulating water line with six watering points;
 - c. Approximately 3,500-feet of 8-foot wide boardwalk;
 - d. One each - Dump site with movable trash fence;
 - e. One each - Garage with two 500-gallon fuel storage tanks; and
 - f. One each - 5,000 gallon fuel storage tank.
2. The following items of equipment are transferred to the City in order to operate and maintain said sanitation facilities:
- a. One each - John Deere JD-350 crawler/dozer with mounted backhoe, S/N 271410T, Voucher 78-11-0082, CN. 20;
 - b. One each - Honda ATC200E three-wheel all-terrain vehicle, S/N 241658, Voucher 83-03-0003, CN. 108;
 - c. One each - Honda ATC200E three-wheel all-terrain vehicle, S/N 241536, Voucher 83-03-0003, CN 109;
 - d. Three each - Haul trailers; and
 - e. Seven each - PE waste haul containers.
3. The following miscellaneous hand tools and materials are transferred to the City in order to operate and maintain said facilities:
- A complete set of hand tools including rachets, sockets, open-end and box-end wrenches, adjustable wrenches, screwdrivers, pliers, chisels, a circular saw, drill, files, miscellaneous plumbing materials, and spare parts.
4. The City hereby accepts such transfer of items listed in Paragraphs 1, 2, and 3 under the terms and conditions set forth in the aforesaid agreement and agrees to operate, maintain, and repair such community facilities in order to keep said facilities in an effective operating condition.
5. The City agrees to enact and enforce appropriate ordinances and regulations to protect the community water system and agrees to collect appropriate service charges from users of said facilities. The city further agrees to use revenues received from service charges for electricity, operators wages, equipment repairs, chemicals, fuel, and those items necessary to operate and maintain said facilities properly.
6. The IHS will transfer the remaining facilities provided for in Amendment No. 1 to the Project Summary as set forth in the MOA for Project AN-82-127 in an Amendment to the Transfer Agreement upon completion of the project. IHS expects to complete the remainder of the project by September 1984.

Partial Transfer Agreement for Chefornak Project AN-82-127
June 1984

7. The IHS will warrant all workmanship and materials provided under and pursuant to the aforesaid agreement for a period of one year after transfer of said facilities. This warranty is limited to those facilities provided under this project. This warranty clause does not cover normal wear and tear of equipment, replacement parts, operational costs, or abuse or vandalism to equipment or facilities.

Partial Transfer Agreement for Cheforanak Project AN-82-127
June 1984

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE CITY OF CHEFORNAK, ALASKA

6/21/84
Date

Bob Innis
Mayor, City of Cheforanak, Alaska having been duly
authorized by the City to enter into this
agreement on behalf of the City of Cheforanak,
Alaska

RECOMMENDED APPROVAL

6/15/84
Date

Richard D. Frost
Richard D. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

6-26-84
Date

Edward B. Ivey
E. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of
Health and Human Services