

ミクロネシア連邦
伝統漁業改善計画(Ⅱ期)
基本設計調査報告書

別冊 ミクロネシア連邦の建設事情

昭和60年1月

国際協力事業団

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目 次

1. 自然条件	1
2. 建設事情	1
2-1 一般事情	1
2-2 建設資機材	1
2-3 労務状況	1
3. 法規・手続	2
4. 建設業者	2
5. 統計資料	2

添付資料

1. ボナベ気象データ(1)	資- 1
2. ボナベ気象データ(2)	資- 5
3. サブコントラクターリスト(トラッペ州)	資- 9
4. サブコントラクターリスト(ボナベ州)	資- 10
5. トラック州政府所有建機リスト	資- 11
6. ボナベ州建機リスト	資- 12
7. ボナベ州建材リスト	資- 13
8. FSM、土木作業許可申請書	資- 22
9. FSM、大気・土地・水汚染防止法(1979年)	資- 26

ミクロネシア連邦の建設事情

1. 自然条件

- | | | |
|-------------|---------------|-------------------|
| (1) 気 温 | 月 平 均 気 温 | 30℃ |
| | 月 最 高 平 均 気 温 | 32℃ |
| | 月 最 低 平 均 気 温 | 21℃ |
| (2) 湿 度 | 平 均 | 80% |
| (3) 降 雨 量 | 月 平 均 降 雨 量 | 221mm |
| | 月 最 高 降 雨 量 | 372mm (8月) |
| | 月 最 低 降 雨 量 | 66mm (7月) |
| (4) 風 速・風 向 | 年 平 均 風 速 | 5.3 m/sec、東及び北東の風 |
- (上記のデータはボナペ州のものであるが、トラック州についても、ほぼ同一である)

2. 建設事情

2-1 一般事情

昭和59年10月現在、トラック州・ボナペ州共に外国援助の道路工事が比較的活発であるが、建築工事はさほど活発とはいえない。

建築に関しては、木造平家建が多く、中規模建築では柱・梁等の躯体構造を補強コンクリートラーメン構造とし、壁体は、コンクリートブロック積が一般的工法で、三階建が限度であり、同国の民間建設業者により建設されている。

一般的に、学校、病院、政府関係の建物を中心としてトラック州で、中・大規模建築において活発な活動が見られる。

2-2 建設資機材

トラック州、ボナペ州における建設資材は、石材及び木材等の一次製品、及びこれに伴う二次製品としてのコンクリートブロック、木製建具等が生産されており、他はすべて輸入により調達されている。

建築重機は両州共にその絶対数はある程度保有されているが、メンテナンス不良により稼働率は低い。

2-3 労務状況

技術労務者は原則として建設会社に所属しているが、一般的に技術レベルは低く、機械技術面での技術者は極端に少ない。

一般的に、労務単価は310円～400円/時間、あるいは資材コストの40%として算定(材工方式の場合)する場合もある。

3. 法規、手続

現在、トラック州・ポナペ州共に、日本の建築規準法に該当する法律はなく、建築の単体規定に関して工事届を提出する際に審査されている。審査の規準は米国の規準が基本となっているが、集団規定を含めた法体系を現在策定中である。

4. 建設業者

添付資料に示す建設業者が、トラック州に7社、ポナペ州に12社あるが、いずれも高度な機械設備を具えた建築物の工事を一括請負できる総合請負工事業者と呼べるものではなく、技術者の質は低く、人数も少ない。

5. 統計資料

建築に関する統計資料は、現在ミクロネシアでは存在しない。

添 付 資 料

1. ポナペ気象データ (1)

JUN 1984
PONAPE, E. CAROLINE IS. PAC.
NAT'L SEA SER OFF

ISSN 0198-4381

LOCAL CLIMATOLOGICAL DATA

Monthly Summary



Weather Service Bldg.

LATITUDE 06°58' LONGITUDE -158°13' ELEVATION (GROUND) 123 FEET TIME ZONE 165E MER 40504

JUN 1984
PONAPE, E. CAROLINE IS. PAC.

DATE	TEMPERATURE °F			DEGREE DAYS BASE 65°F		WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUST/STORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW ICE PELLETS OR ICE ON GROUND AT 2300 INCHES	PRECIPITATION		AVERAGE STATION PRESSURE IN INCHES ELEV 151 FEET ABOVE M.S.L.	WIND (M.P.H.)			SUNSHINE MINUTES PERCENT OF TOTAL POSSIBLE	SKY COVER (TENTHS)		DATE		
	MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEN POINT			HEATING (SEASON BEGINS WITH JUL)	COOLING (SEASON BEGINS WITH JAN)		WATER EQUIVALENT (INCHES)	SNOW, ICE PELLETS (INCHES)	RESULTANT DIR.		RESULTANT SPEED	AVERAGE SPEED		FASTEST MILE	SUNRISE TO SUNSET
01	86	76	81	0	0									10	1	10	01		
02	86	78	82	1	1									0	0	10	02		
03	90	73	82	1	1									149	20	10	03		
04	88	77	83	2	2									254	34	9	04		
05	87	79	83	2	2									324	43	4	05		
06	89	77	83	2	2									142	19	9	06		
07	86	74	80	-1	-1	3								16	2	10	07		
08	84	74	79	-2	-2	3								0	0	10	08		
09	87	75	81	0	0									10	1	10	09		
10	86	77	82	1	1									38	5	10	10		
11	88	75	82	1	1									76	10	10	11		
12	88	74	81	0	0									298	40	5	12		
13	90	74	82	1	1									252	34	8	13		
14	89	74	82	1	1									201	27	8	14		
15	87	75	81	0	0									227	30	9	15		
16	88	74	81	1	1									116	15	9	16		
17	88	79	84	4	4									401	53	5	17		
18	90	76	83	3	3									60	8	10	18		
19	89	75	82	2	2									84	11	10	19		
20	87	77	82	2	2									196	26	10	20		
21	88	75	82	2	2									223	30	8	21		
22	85	73	79	-1	-1									0	0	10	22		
23	88	73	81	1	1									343	46	8	23		
24	88	78	83	3	3									274	36	9	24		
25	84	74	79*	-1	-1									7	1	10	25		
26	88	73	81	1	1									15	2	10	26		
27	89	71*	80	0	0									567	75	4	27		
28	90	73	82	2	2									383	51	6	28		
29	90*	77	84*	4	4									364	48	8	29		
30	89	74	82	2	2									297	40	8	30		
SUM		SUM		TOTAL		TOTAL		NUMBER OF DAYS		TOTAL		TOTAL		FOR THE MONTH		TOTAL		SUM	
2632		2254		0		499		PRECIPITATION		17.49		0.0		17 SE		5324		257	
AVG.		AVG.		AVG.		AVG.		0.01 INCH		0.10				DATE: 9		22537		24 8.6	
87.7		75.1		81.4		0.8		0		27		0		GREATEST IN 24 HOURS AND DATES		GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE		0	
NUMBER OF DAYS		NUMBER OF DAYS		TOTAL		TOTAL		SNOW, ICE PELLETS		PRECIPITATION		SNOW, ICE PELLETS							
MAXIMUM TEMP		MINIMUM TEMP		DEP.		DEP.		0		2.84		21-22		0.0					
5-90°		2-32°		2-32°		2-0°		0		300		CLEAR 0		PARTLY CLOUDY 5		CLOUDY 25			

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
† TRACE AMOUNT.
* ALSO ON EARLIER DATE(S).
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.
LESS THAN 24-HOUR WEATHER WATCH FOR DATA IN COLUMN 8.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. ONE OF THREE WIND SPEEDS IS GIVEN UNDER FASTEST MILE: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES). PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED (A / APPEARS IN THE DIRECTION COLUMN). ERRORS WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL PUBLICATION.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28801

Kenneth D. Haden
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

OBSERVATIONS AT 3-HOUR INTERVALS

JUN 1984 40504
PUNAPE, E. CAROLINE IS., PAC.

HOUR L.S.T.	JUN 19th							JUN 20th							JUN 21st																	
	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIB. (MILES)	WEATHER	AIR OF	NET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIB. (MILES)	WEATHER	AIR OF	NET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIB. (MILES)	WEATHER	AIR OF	NET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)		
02																																
05																																
08	10	16	15	R	78	76	75	94	08	4	8	130	15	RR	80	75	73	79	11	7	7	10	18	14	RR	76	75	74	94	12	4	5
11	10	140	15		86	80	77	75	09	9	10	18	12		83	77	75	77	10	11	11	10	17	14		82	78	76	82	06	5	9
14	10	120	7	RR	78	75	74	88	11	7	10	18	15		84	77	74	72	12	5	5	6	300	15		85	79	76	72	08	6	5
17	10	130	14		82	76	74	77	12	4	10	300	15		84	76	73	70	11	6	6	6	300	15		84	78	75	75	07	6	8
20	10	130	15		80	77	75	85	12	7	10	140	15		80	76	74	82	10	5	10	10	18	14		81	76	74	79	11	8	5
23	10	15	12	RR	78	76	75	91	12	7	10	300	15		80	76	74	82	11	5	10	10	15	3		78	75	74	88	11	5	9
JUN 22nd											JUN 23rd											JUN 24th										
02																																
08	10	120	14		78	75	74	88	09	5	10	18	14	RR	80	76	74	82	06	9	9	5	UNL	15		83	77	75	77	11	7	8
11	10	120	10	RR	79	76	75	88	09	8	8	19	15		84	78	76	77	07	7	10	10	UNL	15		84	77	74	72	10	10	8
14	10	130	13	R	82	77	75	79	07	7	7	300	15		85	80	77	75	06	7	10	300	15		85	77	74	70	06	8	8	
17	10	130	14		81	77	75	82	08	4	5	UNL	15		84	77	74	72	12	7	10	300	15		83	76	73	72	09	4	4	
20	10	130	14		77	75	74	91	14	4	4	UNL	15		81	76	73	77	07	8	10	300	15		81	74	71	72	10	8	8	
23	10	130	15		74	72	71	90	16	4	2	300	15		82	76	74	77	05	6	8	300	15		80	75	73	79	12	6	6	
JUN 25th											JUN 26th											JUN 27th										
05																																
08	10	130	15		79	76	75	88	13	3	10	110	5	R	74	73	72	94	16	4	3	UNL	15		78	76	75	91	13	3	8	
11	10	120	4		76	75	75	97	00	0	10	120	10		79	76	74	85	00	0	4	UNL	15		85	78	75	72	04	7	7	
14	10	120	14	R	80	76	74	82	18	3	10	130	14	RR	85	79	77	77	08	3	7	23	15		85	78	75	72	01	3	3	
17	10	130	14		82	77	75	79	07	3	10	16	10	RR	78	77	76	94	00	0	4	UNL	15		85	77	74	70	09	6	6	
20	10	130	15		78	75	74	88	12	3	7	300	15		76	75	75	97	15	4	5	UNL	15		79	76	75	88	17	3	3	
23	8	130	15		75	74	73	94	12	4	6	UNL	15		74	73	73	97	14	3	7	300	15		76	75	74	94	15	3	3	
JUN 28th											JUN 29th											JUN 30th										
02																																
05																																
08	8	300	15		78	77	76	94	12	4	2	UNL	15		83	78	76	80	11	4	10	130	15		79	77	76	91	15	3	3	
11	8	UNL	15		87	80	77	72	05	8	8	21	15		85	80	77	75	08	6	10	300	15		86	79	76	72	03	7	7	
14	8	UNL	15		87	79	76	70	07	6	6	300	15		87	78	75	68	06	8	8	7	300	15		85	78	75	72	01	3	3
17	9	18	14	RR	81	78	76	85	07	5	9	300	15		84	77	74	72	09	4	8	300	15		83	77	75	71	26	5	5	
20	10	18	14		78	76	75	91	20	3	10	300	15		80	77	76	88	18	3	8	UNL	15		78	77	76	94	09	4	4	
23	8	300	15		81	77	75	82	12	3	10	300	15		75	75	74	88	18	4	5	UNL	15		75	74	74	97	16	4	4	

SUMMARY BY HOURS

HOUR L.S.T.	SKY COVER (TENTHS)	STATION PRESSURE (INCHES)	AVERAGES				RESULTANT WIND		
			TEMPERATURE			WIND SPEED (MPH)	DIRECTION	SPEED (MPH)	
			AIR TEMP OF	NET BULB OF	DEW POINT OF				
02									
05									
08	8	29.670	80	76	75	85	6.7	10	5.9
11	9	29.670	83	78	76	78	7.8	08	6.7
14	8	29.630	84	78	75	76	7.4	08	6.5
17	9	29.610	82	77	75	79	6.5	09	5.6
20	9	29.650	80	76	75	85	6.4	09	5.5
23	8	29.675	79	76	74	86	6.3	10	5.3

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

JUN 1984 40504
POMAPE, E. CAROLINE IS., PAC.

DATE	A. M. HOUR ENDING AT												P. M. HOUR ENDING AT												DATE	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
01																								01		
02			0.07	T	0.03		0.22		0.02	T	0.05		0.50	0.22	0.01	T	0.01	0.02	0.02			T	T	02		
03			0.12																					03		
04			0.05			0.01		0.50	0.05	T	T													04		
05								T	0.04	0.02	T	0.10		T	T									05		
06												0.01												06		
07		0.04	0.44	0.10	0.17	T	T	T	0.06	0.02	T						0.03	T	0.05	0.07	0.14	T	T	07		
08			0.42	0.46	0.03		0.15	0.19	0.03	0.01	0.08	T		T	0.02	T	0.16	0.04	0.05	0.01				08		
09	T		0.02	0.69	0.12		0.06			0.03											0.01	0.05	T	0.01	09	
10													0.04	0.12	0.02	T			0.12	T	0.01	0.11	0.13	T	10	
11		0.27	0.16	0.20	0.02	T	0.20	T		0.03	T	0.14													11	
12		0.13											T	0.05											12	
13			0.03								0.01									0.02					13	
14			0.04						0.02	0.02										0.04	0.07	0.01	T		14	
15			0.01		0.04	0.13				T		0.21					T	0.02	0.22	0.01	0.13		0.92	0.03	15	
16	0.08	0.59	0.03	0.19																				0.02	16	
17						0.04	0.04					0.04	T	0.04											17	
18			0.01	0.17	0.04							0.02	T	0.05								0.01	0.18	0.43	18	
19	0.13	0.01		0.02		0.01	0.34	0.06	T		0.01	0.03	T	0.08	T							0.14	0.02		19	
20					0.01																	0.14	0.02		20	
21	0.01							0.34	0.11	T												0.45	0.02	0.56	0.07	21
22	0.58	0.53	0.18	T				T	T	0.10	T	T	0.01	T	T			T	T	T					22	
23																									23	
24						0.05																			24	
25									0.16	0.04	T	T	T	T	T										25	
26					0.39	0.06	0.10	0.02	T	T	T				0.02	0.03	T	T							26	
27																									27	
28	T		0.01						0.01		T	T							0.13	T				T	28	
29		0.12	0.02		0.47	0.03	0.01																		29	
30																									30	

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.33	0.58	0.74	0.82	0.93	0.94	0.95	1.04	1.11	1.14	1.26	1.59
ENDED: DATE	15	15	15	15	15	15	15	22	22	22	22	16
ENDED: TIME	2241	2246	2249	2254	2302	2317	2332	0120	0134	0154	0224	0134

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

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FIRST CLASS

Local Climatological Data

Annual Summary With Comparative Data

1983

PONAPE ISLAND, PACIFIC



Narrative Climatological Summary

Ponape, about 129 square miles in area, is a nearly circular island of volcanic origin, encircled by coral barrier reefs, and covered with lush, tropical vegetation. The island, located less than 500 miles north of the equator, rises from the Pacific Ocean to an elevation of 2,595 feet, the highest point in the Caroline Islands. The topography is a complicated system of ridges and valleys, interlaced with small rivers and intermittent streams, and covered with tall grasses, tropical trees and flowers, and the coconut palms which are the backbone of the island's economy. The interior of the island, where the average annual rainfall is estimated to reach 350 to 400 inches, is covered by a rain forest which acts as a watershed area supplying fresh water the year around.

The Weather Station lies a little north of the center of a bowl-shaped valley, about 3 miles south of the Pacific Ocean. Encircling it on a radius of 1 to 3 miles are volcanic outcroppings which rise rapidly from the ocean to an average elevation of about 2,100 feet in the east, south, and southwest, but drop steeply to heights of about 700 feet through the west and northwest. With the exception of the cliff area in the northwest, the vegetation is lush and extremely dense. The valley is relatively level in comparison with the rest of the island. A small stream, oriented northeast-southwest lies about one-eighth of a mile to the east of the Station.

From about November to June the climate of Ponape is chiefly influenced by the northeasterly trade wind, whose speeds in the vicinity of the Weather Station (as tabulated in this publication) are somewhat reduced by the blocking effect of the surrounding terrain. By about April the trades begin to diminish in strength, and by July have given way to the lighter and more variable winds of the doldrums. Between July and November the island is frequently under the influence of the Intertropical Convergence Zone (ITCZ - also called the Intertropical Front) which has moved northward into the area. This is also the season when moist southerly winds and tropical disturbances, many of them associated with the ITCZ, are most frequent and when humidities are often oppressively high.

Rainfall at Ponape is heavy and frequent throughout the year, averaging 192 inches annually. The wettest period is April and May with an average rainfall of near 19 inches for each month; but even in the driest period, January and February, the average rainfall is near 12 inches for each month. Measurable rain (.01 inch or more) falls on about 300 days a year. Showers forming within moist air rising over the steep and rugged terrain of the island add to the amount of rainfall received during both the trade wind season and when the area is under the influence of the Intertropical Convergence Zone.

The temperature is remarkably uniform throughout the year, with only slightly more than 1° separating the averages of the warmest and coolest months. With highs in the mid- to upper-80's and lows in the low- to mid-70's, the average daily range is 12.5 degrees, a value typical of rainy stations near the equator. Temperatures have dropped below 70° and risen to 90° or higher during every month of the year in the period 1950 to the present. Humidities are unusually high throughout the year.

On most days clouds, predominantly cumulus, cover more than eight-tenths of the sky, with days being cloudier than nights. Cirrus or cirrostratus, usually quite thin, appear to be present more often than observed, owing to obscuration by clouds at lower elevations. Clouds at middle heights, usually altostratus, sometimes combined with altostratus, occur quite frequently, especially if there are tropical disturbances in the vicinity.

Although Ponape is located within the spawning grounds of typhoons, the major typhoon tracks of the Western Pacific lie well to the north and west. The most destructive typhoon to strike the island did so on April 20, 1905 and, according to the local inhabitants, destroyed all of the coconut trees in production and damaged practically all of the buildings and other structures. In recent years, Typhoons LOLA in November 1957 and OPHELIA in January 1958 caused extensive damage to crops and dwellings.

That the steep heights surrounding the Weather Station reduce the speed of the trade winds observed there has already been mentioned. They give rise also to gentle up and downlope air currents which augment the diurnal cycle of land and sea breezes experienced in areas sheltered from the trades or during periods of light winds. The temperature and humidity are also greatly influenced by the reduced circulation and dense vegetation.

noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE / NATIONAL CLIMATIC DATA CENTER ASHEVILLE, N.C.

Average Temperature

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1949	81.1	81.4	82.5	81.8	81.8	81.2	79.9	80.5	80.9	80.5	79.9	80.4	80.4
1950	80.7	79.7	79.4	79.3	81.3	81.7	81.4	80.4	80.0	80.9	81.6	80.9	80.9
1951	80.7	79.7	79.4	79.3	81.3	81.7	81.4	80.4	80.0	80.9	81.6	80.9	80.9
1952	80.7	79.7	79.4	79.3	81.3	81.7	81.4	80.4	80.0	80.9	81.6	80.9	80.9
1953	81.0	80.8	81.3	81.3	81.0	80.8	79.7	79.6	79.7	79.0	80.0	79.8	80.3
1954	80.6	81.3	80.3	79.3	79.9	79.5	79.5	80.0	79.6	79.3	80.3	79.3	79.8
1955	80.7	80.6	80.4	79.7	80.1	79.9	79.2	79.6	79.5	80.0	80.6	80.7	80.1
1956	80.4	80.4	81.8	81.5	81.9	81.4	81.0	80.5	81.0	81.4	80.0	82.4	81.1
1957	80.4	80.4	81.8	81.5	81.9	81.4	81.0	80.5	81.0	81.4	80.0	82.4	81.1
1958	81.2	80.0	80.7	81.0	80.7	80.5	80.1	80.6	81.2	81.1	80.3	80.8	80.7
1959	80.7	79.0	80.6	80.2	80.5	80.5	80.1	80.5	80.3	80.8	81.0	80.6	80.4
1960	80.7	80.6	80.6	80.4	80.3	80.2	80.5	79.9	80.5	80.2	81.0	80.6	80.5
1961	80.5	80.9	80.9	81.4	80.2	80.0	79.7	80.1	79.7	80.1	79.4	80.6	80.4
1962	80.5	80.9	81.0	81.0	80.9	80.6	80.3	79.7	80.1	80.1	80.0	81.0	80.5
1963	79.5	80.3	80.6	80.5	81.0	80.4	80.3	80.5	80.2	80.1	81.0	81.1	80.5
1964	81.4	81.4	80.9	80.4	80.5	79.7	79.4	79.3	79.9	79.6	80.0	79.6	80.1
1965	80.4	80.4	80.6	80.3	80.7	80.4	78.9	80.0	79.9	80.4	80.0	80.6	80.3
1966	80.1	81.4	80.7	81.7	80.6	81.0	80.4	81.1	80.5	80.5	80.3	80.4	80.7
1967	81.5	80.8	80.8	80.8	80.0	80.1	80.4	80.8	79.8	79.8	80.1	81.2	80.5
1968	81.1	80.6	80.2	79.9	80.0	80.1	79.5	80.4	79.9	79.9	80.1	80.6	80.2
1969	80.2	79.1	80.2	80.6	81.1	80.7	79.7	79.6	79.8	80.0	79.5	80.7	80.1
1970	80.2	82.0	81.9	81.6	81.0	80.3	80.3	80.1	79.4	79.3	80.0	81.3	80.7
1971	80.5	79.5	79.5	79.7	79.4	79.5	79.5	79.4	80.3	79.9	80.6	81.2	80.0
1972	80.6	80.4	80.8	80.0	80.0	81.0	79.6	79.9	79.9	80.1	81.1	81.5	80.5
1973	81.0	80.7	82.2	81.0	81.5	81.3	81.5	80.9	80.6	80.4	81.6	81.1	81.2
1974	79.8	81.5	80.9	80.6	81.3	79.6	79.8	80.5	80.2	80.3	80.7	80.8	80.6
1975	81.6	82.5	81.0	81.2	80.8	80.2	79.8	80.2	80.5	79.5	80.2	79.4	80.6
1976	81.0	80.2	81.1	80.3	80.2	80.9	80.3	79.8	79.6	80.9	80.4	80.8	80.5
1977	81.0	82.6	81.9	82.0	81.7	81.5	81.2	81.6	81.5	81.0	81.0	81.7	81.5
1978	81.1	81.3	81.8	81.4	81.2	80.6	81.3	80.8	80.9	80.8	81.6	81.7	81.2
1979	81.7	81.5	81.3	80.6	81.6	81.7	81.4	80.7	81.0	81.6	81.7	81.3	81.4
1980	81.9	81.7	82.8	82.4	80.9	81.7	81.3	81.5	81.0	81.3	81.9	81.7	81.7
1981	81.7	81.7	82.9	82.0	82.7	81.5	81.7	81.6	81.7	81.8	81.8	81.9	81.8
1982	81.4	81.7	81.8	81.2	81.6	80.5	80.6	80.4	80.7	81.0	82.1	81.2	81.2
1983	81.4	81.7	82.4	83.4	84.4	82.8	81.5	81.5	81.7	81.3	81.9	81.5	82.1
RECORD													
MEAN	80.9	81.0	81.2	81.8	81.0	80.1	80.2	80.8	80.6	80.4	80.9	80.7	80.7
MAX	84.5	86.7	85.4	84.8	87.3	87.3	87.4	87.8	87.9	87.8	87.8	87.2	87.2
MIN	75.4	75.6	75.5	75.0	74.7	74.1	73.0	72.8	72.6	72.8	73.4	74.9	74.7

Heating Degree Days

NOAA, PACIFIC

Season	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
1949	428	401	377	360	326	279	162	140	130	124	114	92	5803
1950	494	480	534	504	521	472	472	476	442	452	450	313	5874
1951	491	408	354	350	345	342	357	352	367	368	378	508	5516
1952	492	465	499	458	472	436	461	469	455	477	493	521	5750
1953	509	443	341	368	320	495	519	509	433	485	505	507	5882
1954	485	467	501	480	506	416	468	488	463	476	476	497	5729
1955	525	481	501	509	494	464	469	481	474	461	459	458	5758
1956	522	485	507	459	477	470	479	464	444	499	491	498	5745
1957	508	498	530	516	514	504	509	527	499	505	492	525	6113
1958	508	458	554	501	516	476	499	513	484	494	494	494	6028
1959	526	465	525	477	520	506	516	484	512	524	509	503	6074
1960	531	484	557	530	502	507	514	482	487	515	511	544	6198
1961	524	474	540	519	546	503	509	521	511	530	511	521	6223
1962	512	472	527	508	509	507	481	493	489	495	485	517	5994
1963	513	473	546	567	609	544	519	519	509	531	512	516	6335

Cooling Degree Days

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1949	428	401	377	360	326	279	162	140	130	124	114	92	5803
1950	494	480	534	504	521	472	472	476	442	452	450	313	5874
1951	491	408	354	350	345	342	357	352	367	368	378	508	5516
1952	492	465	499	458	472	436	461	469	455	477	493	521	5750
1953	509	443	341	368	320	495	519	509	433	485	505	507	5882
1954	485	467	501	480	506	416	468	488	463	476	476	497	5729
1955	525	481	501	509	494	464	469	481	474	461	459	458	5758
1956	522	485	507	459	477	470	479	464	444	499	491	498	5745
1957	508	498	530	516	514	504	509	527	499	505	492	525	6113
1958	508	458	554	501	516	476	499	513	484	494	494	494	6028
1959	526	465	525	477	520	506	516	484	512	524	509	503	6074
1960	531	484	557	530	502	507	514	482	487	515	511	544	6198
1961	524	474	540	519	546	503	509	521	511	530	511	521	6223
1962	512	472	527	508	509	507	481	493	489	495	485	517	5994
1963	513	473	546	567	609	544	519	519	509	531	512	516	6335

Precipitation

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1949	8.50	7.43	15.24	22.58	17.13	12.59	11.85	11.71	15.80	18.93	10.29	20.34	164.58
1950	8.50	7.43	15.24	22.58	17.13	12.59	11.85	11.71	15.80	18.93	10.29	20.34	164.58
1951	14.59	15.46	23.25	31.88	14.39	22.44	10.60	12.56	12.00	13.36			
1952	9.98	10.32	10.22	14.48	23.56	18.99	17.31	17.81	14.81	18.23	17.51	18.75	181.20
1953	10.07	10.44	10.95	15.74	12.72	10.68	15.12	26.48	13.88	12.40	20.73	20.78	184.91
1954	11.93	9.44	13.45	16.20	21.70	14.93	11.37	17.49	17.71	14.65	22.52	20.21	196.60
1955	13.03	7.40	16.72	33.04	26.13	15.40	12.44	20.73	19.35	16.23	20.48	24.79	225.94
1956	17.61	4.51	14.35	28.04	23.40	15.81	16.46	17.43	13.79	15.40	15.88	19.98	206.02
1957	11.94	10.54	9.43	4.53	15.23	20.54	15.32	17.37	16.79	14.62	11.79	2.40	170.91
1958	9.72	15.71	17.00	23.59	20.40	16.42	21.26	11.29	16.69	20.56	23.44	9.35	205.54
1959	3.91	15.37	22.03	38.83	21.26	15.41	19.12	12.73	16.92	13.25	11.31	25.33	217.80
1960	13.87	12.45	15.81	25.72	22.01	14.36	17.05	14.02	13.11	16.10	18.88	20.85	205.29
1961	10.40	17.96	17.81	11.59	22.21	10.11	13.51	17.57	20.49	14.07	18.29	16.47	206.19
1962	24.67	16.04	11.04	11.94	22.41	11.99	13.40	16.56	22.91	18.57	24.39	13.60	215.60
1963	20.99	16.37	17.06	12.49	19.12	9.40	13.77	18.23	13.12	20.64	4.55	9.08	174.97
1964	7.59	19.76	14.03	16.02	12.89	13.16	14.33	16.47	15.44	11.02	12.46	18.22	164.39
1965	11.74	14.12	8.34	14.20	19.18	14.73	13.29	10.06	24.67	15.27	15.50	14.20	193.31
1966	13.84	1.73	14.77	6.07	21.27	11.89	24.22	10.19	10.68	16.41	18.74	14.12	170.05
1967	10.21	16.63	21.82	20.90	13.96	11.44	15.02	20.32	19.51	16.37	22.44	12.60	201.94
1968	9.38	13.00	24.77	21.09	18.89	10.54	22.32	17.16	17.58	14.65	9.12	13.15	191.13
1969	6.39	9.43	10.71	22.55	17.75	24.48	24.9						

STATION LOCATION

PONSPE ISLAND, PACIFIC

Location	Occupied from	Occupied to	Action distance and direction from previous location	Latitude North	Longitude West	Elevation above										Type W-AHOS T-AUFG	Remarks
						Sea level	Ground										
						Ground at temperature site	Wind instruments	Extreme thermometer	Psychrometer	Sunshine watch	Typhoon barometer	Washing rain gauge	30" rain gauge	Hygrometer			
Ponspe Island	1900	1913															German administration. Meteorological observations taken intermittently.
Ponspe Island	1-1927	12-1943		6° 58'	158° 13'	99		5									Japanese administration. First observations daily to 1931; six observations daily through 1933; and three observations daily afterward.
Ponspe Island	1-1946	6-1950		6° 58'	158° 13'	92											U. S. Naval administration.
Agriculture Building Ponspe Island	6-1950	6/30/51	2600 ft. SSW	6° 58'	158° 13'	112	69	3	3				39				U. S. Naval administration.
Agriculture Building Ponspe Island	7/01/51	3/20/56	No Change	6° 58'	158° 43'	112	69	3	3				22				U. S. Weather Bureau
Air Force Site Ponspe Island	3/21/56	1/14/58	1/4 mi. NNE	6° 58'	158° 13'	119	28	3	3				3				4 - 39 feet until early 1954.
Weather Bureau Building Ponspe Island	1/14/58	Present	170 ft. S	6° 58'	158° 13'	123	32	4	4	26	3	NA	3	NA	NA	NA	2 - Commissioned 3/1/65.

SUBSCRIPTION:

Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801, ATTN: Publications.

I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records received at the National Climatic Data Center, Asheville, North Carolina 28801.

[Signature]
National Climatic Data Center

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DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE

COM 210

FIRST CLASS



3. サブコントラクターリスト(トラック州)

LIST OF SUB-CONSTRUCTORS

<u>Name</u>	<u>Specialty</u>
1. Manuel D. Crisostomo, Inc.	Electrical Mechanical Civil Engineering
2. Maeda	General Construction
3. Sundt International	General Construction
4. ASA Construction Co.	Civil Engineering Soil Testing
5. Caroline Construction Co.	Building Construction
6. Mino Electrical & Réfrigeration	Electrical Refrigeration
7. Island Development Construction	Building Construction

4. サブコントラクターリスト(ポナペ州)

List of Contractors

H & K Builders	General Contractor	Strong in Carpentry & Masonry
I. D. C.	" "	" "
Mid Pac (small)	" "	" "
J.D. Lowe (new)	" "	" "
Ponape Rock (Jack Odams)	" "	Strong concrete and steel
Ponape Furniture	" "	Strong in Carpentry & Masonry
Ponape Home Builders	" "	" "
Einstein Olter	" "	Strong Gravel
Black Micro (Pig)	" "	Strong in Carpentry & Masonry
Heally Tibbits (U.S.)	" "	" "
Samson Lipai (small)	Carpentry	
Deleo Eng. & Consturction (Jesse Buniag)	Carpentry	

Wages

Unskilled minimum	-----\$1.25/hr.
Skilled minimum	-----\$1.50/hr.
Supervisors	-----\$2.00/hr.

Labor Cost

Cost of labor generally 40% of material cost

5.トラック州政府所有建機リスト

TRUK STATE GOVERNMENT
GOVERNMENT EQUIPMENT AVAILABLE FOR RENT

July 1, 1983

	<u>Rate Per Hour</u>
1. Bus (48 passengers)	\$ 14.50
2. Ambulance (light)	13.50
3. Dump Truck (5 cu. yds.)	11.20
4. Dump Truck (10 cu. yds.)	19.15
5. Truck (tank) - (1500-2400)	12.00
6. Truck (fuel) - (2500-5000)	13.50
7. Trailer - lowboy, 2 axle	12.00
8. Loader - Front-end, 3/4 - 2 cu. yds.	25.00
9. Loader - Front-end, 3-3½ cu. yds.	32.00
10. Loader - Front-end-backhoe	28.35
11. Loader - Front-end, caterpillar and John Deere 500	28.65
12. Crane - mobile - 25 tons	54.30
13. LCU Boat	168.75
14. Road Grader	20.90
15. Tractor, Crawler, with dozer caterpillar D-7	52.10
16. Tractor, crawler, D6C	38.55

Rental payment may be made in cash (as above) or in-kind contributions in terms of labor (number of people and value) or food (such as taro, breadfruit, coconut, meat, vegetables, fish, etc. with amount and value) or a combination of two or all of the above.

6. ポナペ州建機リスト



POHNAPEAN TERRITORIAL AUTHORITY

P. O. Box 37

Kolonia, T. U.S.P.M.

WESTERN CAROLINE ISLANDS 941
Cable Address: PTA POKAPP
Telephone: 377

JUNE 23, 1983

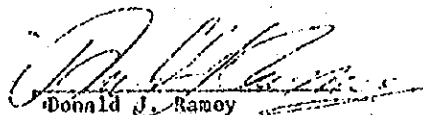
P.T.A. EQUIPMENT RENTAL RATES FOR COMMERCIAL OPERATIONS

PTA will not participate in the subsidy of contractors or commercial operations. PTA Management will be the sole judge as to the definition of contractors or commercial operations.

<u>EQUIPMENT</u>	<u>HOURLY RATE</u>	<u>NO</u>	<u>DAILY RATE</u>
CAT D9 BULLDOZER	75.00	1	600.00
CAT D6C BULLDOZER	\$ 35.00	1	\$280.00
CAT D7F BULLDOZER	55.00	2	440.00
CAT 941 TRAXCAVATOR	24.00	3	192.00
CAT 950 WHEEL LOADER	30.00	3	240.00
CAT NO. 12 ROAD GRADER	28.00	1	224.00
CAT DYNABOB	30.00		240.00
P&H BACKHOE	30.00	2	240.00
P&H CRAWLER CRANE	100.00	1	800.00
AMERICAN 599C CRAWLER CRANE	80.00	1	640.00
BROS SPV-725 COMPACTOR	28.00	1	224.00
DUMP TRUCK (5' CY. CAPACITY)	22.00	7	176.00
DUMP TRUCK (10' CY. CAPACITY)	28.00		224.00
CEMENT MIXER	12.00		96.00
WELDING MACHINE	10.00	3	80.00
BARGE			50.00
BOAT WITH MOTOR*			60.00
JEEP*	8.00		96.00
MAZDA	8.00		320.00

RENTAL CONDITIONS

1. Rentor shall check with PTA for availability of equipment before renting.
2. Rentor shall pay in advance the equipment rental price. This may be modified if in mutual agreement between the rentor and PTA.
3. Time begins at the shop or the location of the equipment and concludes until the equipment is returned to the shop or its previous locations.
4. Only PTA operators shall operate PTA equipment.
5. Daily rate is equivalent from 6 to 10 hours. Beyond 10 hours is charged at the hourly rate.
6. Above prices include PTA operator's salaries.
7. All equipments with (*) may be rented only by PTA employees.


Donald J. Ramoy
Commissioner

7. ボナベ州建材リスト

Memorandum:

To; Store Management
From; Community Development Office
Subject; Building Material Price List

The Community Development Office is asked many times a month to design building projects and to provide cost estimates for these projects. To do this we need up to date prices on building materials. To save both you and us time we feel that rather than sending you a material list for each and every project it would be better if, from time to time, we sent you just one master list of materials for you to provide prices for.

Please give prices for as many of the materials as you can. Write the cost of each item in the "Unit Cost" column and if there should be a special price for large orders please write the size that such an order would have to be and the price in the columns marked "Bulk Size and Bulk Cost".

Please fill out and return this list as soon as possible thank-you.

Sincerely,

Community Development Office

<u>Store</u>	<u>Code</u>	
Membrus	M	
KCCA	K	
Federation	F	
Martins	M+	
Bernards	B	(PTA MANAGER'S K. Motoko)
Leo's	L	
PIDCO	P	
Ambros	A	

MATERIAL PRICE LIST

date _____

name of store _____

No.	Item	Unit Price	Bulk Size	Bulk Cost
1.	Foundation Work:			
①	Cement 88 lbs.	6.55		
②	Sand cyd.	9.00		
3.	Aggregate, cyd. 1/2"-5/8"	7.50		
4.	Coral Fill cyd.			
5.	12x8x16 Con. Block			
6.	10x8x16 Con. Block			
7.	8x8x16 Con. Block			
8.	6x8x16 Con. Block	.95		
9.	4x8x16 Con. Block			
10.	Polyethylene 4 mil. 16x100'			
11.	Rebar #2 20'			
12.	Rebar #3 20'	2.50		
13.	Rebar #4 20'	4.25		
14.	Rebar #5 20'	6.84		
15.	Rebar #6 20'	9.86		
16.	Rebar #7 20'			
17.	Rebar #8 20'			
18.	Rebar #9 20'			
19.	Rebar #10 20'			
20.	Rebar #11 20'			
21.	Dur-O-Wall #4x10'			
22.	Dur-O-Wall #6x10'			
23.	Dur-O-Wall #8x10'			
24.	Dur-O-Wall #10x10'			
25.	Dur-O-Wall #12x10'			
26.	Tie Wire, 16 ga.			
27.	WNF 6x6, 10x10, 200'	241.00?		

A F
7.65 - 81
6.55 7.00 - 101
9.05 6.85 - 201

A F
2.50 2.38
A F
4.25 } 15% OFF 100' - 177 lbs.
6.84 } 20% OFF 200' - 350 lbs.
9.86

II. Lumber

1. Treated Douglas Fir 2x12x___
2. 2x10x___
3. 2x8x___
4. 2x6x___
5. 2x4x___
6. 2x3x___
7. 1x4x___
8. 1x3x___
9. 1x2x___
10. 1x1x___
11. Untreated Douglas Fir 2x12x___
12. 2x10x___
13. 2x8x___
14. 2x6x___
15. 2x4x___
16. 2x3x___
17. 1x4x___
18. 1x3x___
19. 1x2x___
20. 1x1x___
21. Qtr. Round Redwood 3/4" *Not Redwood*

K 10'		F 10'
17.90		11.98
K 12'	B 18'	F 16'
11.77	10.60	9.58
K 12'	B 16'	F 16'
9.92	6.50	7.14
K 20'	B 16'	F 16'
6.65	5.65	4.74
K 16'	B 16'	F 16'
3.76	2.60	3.08
K 12'		F 12'
7.46		1.24

F
10/F1

III. Partions - Ceilings - Doors

1. 1/4" Plywood, Ext. Douglas Fir
2. 1/2" Plywood, Int. Douglas Fir
3. 1/2" Plywood, Ext. Douglas Fir
4. 1/8" Temp. Masonite
5. 1/4" Temp. Masonite
6. 1/8" Std. Masonite
7. 1/4" Std. Masonite
8. Formica Top *4x9*
9. 1 3/4x36x80" Solid Door
10. 1 3/4x30x80" Solid Door
11. 1 3/8x30x80" Hollow Door
12. 1 3/8x24x80" Hollow Door
13. 3/16" Paneling

F		
16.89		
B		F
24.98		20.84
B		F
24.98		24.49
K		
12.75		
F		
11.66		
F		
18.08		
K	B	F
77.45	66.25	50.69
K	B	F
36.02	39.45	27.94
B	F	
12.35	8.15	

Note Feb. 28 90.

- IV. Roofing
- 1. Galv. Corr. 26 ga. 27 1/2"x8'
- 2. Galv. Corr. 26 ga. 27 1/2"x12'
- 3. Galv. Flat Tin 26 ga. 3'x8'
- 4. Aluminum Roofing
- 5. Onduline 1/8"x3'-10"x6'-7" (Isola)
- 6. Onduline 1/8"x3'-10"x6'-7" (Granulated)
- 7. Onduline Skylight Panel
- 8. Onduline Ridge Unit
- 9. Onduline Closure Strip
- 10. Onduline Nails
- 11. Corr. Fiberglass

B
6.75
B
10.90
K
6.25 5.60

F
7.50 10% OFF 1-24
11.35 15% OFF 25-94
7.50 20% OFF 100-

- V. Window Fixtures
- 1. 64" Alum. Louver Frame
- 2. 60" Alum. Louver Frame
- 3. 58" Alum. Louver Frame
- 4. 50" Alum. Louver Frame
- 5. 48" Alum. Louver Frame
- 6. 42" Alum. Louver Frame
- 7. 36" Alum. Louver Frame
- 8. 24" Alum. Louver Frame
- 9. Glass, Obscure 4x36"
- 10. Glass, Clear 4x36"
- 11. Insect Screen 36"x100'
- 12. Insect Screen 48"x100'
- 13. Security Wire 1"x1" 36"x100'
- 14. Security Wire 1"x1" 48"x100'

F
16.15

K F
12.10 12.98

K F
10.95 10.47

F
1.04
K B R
1.10 1.05 1.04

K B
.66 .60
K B F
.88 .80 .74

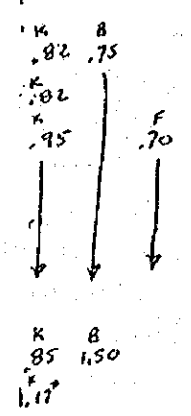
1/2" x 1" 3.80.66

1/2" x 5/8"

- VI. Nails
- 1. CW 2d, 1" 847/lb.
- 2. CW 3d, 1 1/4" 543/lb.
- 3. CW 4d, 1 1/2" 294/lb.
- 4. CW 6d, 2" 167/lb.
- 5. CW 8d, 2 1/2" 101/lb.
- 6. CW 10d, 3" 66/lb.

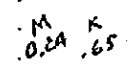
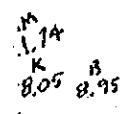
K B F
.82 .75 .72
K B F
.82 .66
K B F
.82 .62
K B F
.82 .66
K B F
.82 .61

7. CW 12d, 3 1/4" 61/1b.
8. CW 16d, 3 1/2" 47/1b.
9. CW 20d, 4" 29/1b.
10. Finishing Nails 3d
11. Finishing Nails 4d
12. Finishing Nails 6d
13. Finishing Nails 8d
14. Screw Tite Nail 4d
15. Roofing Nail 8d galv.
16. Lath Staples 1"



- VII. Rough Hardware
1. Angle Steel Anchor (Var. Size)
 2. Machine Bolt 1/2"x4" w/w
 3. Anchor Bolt 1/2"x8"
 4. Expansion Shield 3/8"x2 1/2"
 5. Wood Screw #6 Al. Var. Size
 6. Wood Screw #8 Al. Var. Size
 7. Wood Screw #10 Al. Var. Size
 8. #6 Steel
 9. #8 Steel
 10. #10 Steel
 11. #6 Brass
 12. #8 Brass
 13. #10 Brass

- VIII. Finish Hardware
1. Steel Door Hinge 3 1/2"x3 1/2"
 2. Steel Door Hinge 3"x3"
 3. Door Key Lock Set Bronze Fin.
 4. Privacy Lock Bronze Fin.
 5. Alum. Treshold
 6. Butterfly Hinge
 7. Cabinet Knobs
 8. Cabinet Catches (Mag.)



- IX. Plumbing
- 1. PVC Pipe 4"x20'
- 2. 2"x20'
- 3. 3/4"x20'
- 4. 1/2"x20'
- 5. PVC 4" Long Turn Elbow 90
- 6. PVC 4" Long Turn Elbow 45
- 7. PVC 4" Elbow 90
- 8. PVC 4" Elbow 45
- 9. PVC 4" Tee
- 10. PVC 4" Cross
- 11. PVC 4" Y Branch
- 12. PVC 4" P-Trap
- 13. PVC 4" Clean- Out
- 14. PVC 4" Coupling
- 15. PVC 2" Long Turn Elbow 90
- 16. PVC 2" Long Turn Elbow 45
- 17. PVC 2" Elbow 90
- 18. PVC 2" Elbow 45
- 19. PVC 2" Tee
- 20. PVC 2" Cross
- 21. PVC 2" Y Branch
- 22. PVC 2" P-Trap
- 23. PVC 2" Coupling
- 24. PVC 2" Valve
- 25. PVC 3/4" Elbow 90
- 26. PVC 3/4" Elbow 45
- 27. PVC 3/4" Tee
- 28. PVC 3/4" Cross
- 29. PVC 3/4" Coupling
- 30. PVC 3/4" Valve

M	K	B
57.70	55.95	55.95
M	K	B
17.20	21.65	21.50
K		B
7.05		6.95
K		B
5.25		5.15
M	K	B
5.25	8.00	4.95
M	K	B
5.10	8.80	4.75
M	K	B
7.92	10.76	6.78
M	K	B
7.25	7.20	8.85
M	K	B
5.18	4.55	21.80
M	K	B
2.02	3.57	4.75
		B
		1.75
		B
		.70
M	K	B
.90	1.78	.70
M	K	B
.78		.70
M	K	B
1.65	2.17	1.50
M	K	B
2.18	1.57	1.78
M	K	B
9.88	3.90	3.80
M	K	B
.60	.97	.60
M	K	B
16.05		
K		B
.41		.60
K		B
.83		1.25
K		B
.36		.70
B		
M	K	B
1.80	.24	.42
		B
		4.65

- 31. PVC 1/2" Elbow 90
- 32. PVC 1/2" Elbow 45
- 33. PVC 1/2" Tee
- 34. PVC 1/2" Cross
- 35. PVC 1/2" Coupling
- 36. PVC 1/2" Valve
- 37. PVC 4"-2" Reducer
- 38. PVC 3/4"-1/2" Reducer
- 39. PVC Solvent
- 40. PVC Glue 1 Pint
- 41. Oakum
- 42. Bowl Max
- 43. Shower Drain
- 44. Shower Valve
- 45. Angle Valve
- 46. Lavatory Sink, White, Complete
- 47. Kitchen Sink, White, Complete
- 48. Water Closet, White, Complete
- 49. Caulking Compound Tube

K	B	
.33	.48	
K	B	
.47	.75	
K	B	
.34	.80	
M	K	B
1.54	.21	.30
M		
3.85		
M	K	B
6.56	4.20	3.90
K	B	
6.98	4.10	
Available		
K		
1.27		
K	B	
2.42	4.85	
	B	
	6.20	
M	B	
4.42	2.80	
M	B	
7.56	7.95	
B		
10.15		
B		
10.50		

- X. Electrical
- 1. Electrical Tape
- 2. 220 Outlet
- 3. 3-Way Switch
- 4. Single Pole Switch
- 5. Duplex Outlet
- 6. Switch Cover
- 7. Outlet Cover
- 8. "D" Panel Board w/100a. main
- 9. Outside Light Fixture
- 10. Pull Chain Light
- 11. Ceiling 6" Light Fixture
- 12. Utility Box Rectangle
- 13. Utility Box Octagon
- 14. Utility Box Square

K	B	
1.60	1.75	
B		
2.85		
M	K	B
1.05	1.62	1.30
M	K	B
1.55	4.35	1.85
M	K	B
.30	.53	.30
M	K	B
1.40	.33	.30
B		
6.95		
Available		
B		
1.60		
B		
1.15		
B		
1.40		
M	B	
1.55	1.15	

- 15. Wire 12-3
- 16. Wire 10-1
- 17. Wire 8-1
- 18. Wire 6-1
- 19. Weatherhead
- 20. Utility Box Connector 1/2"
- 21. Utility Box Connector 3/4"
- 22. Circuit Breaker 20A
- 23. Circuit Breaker 30A
- 24. Circuit Breaker 50A
- 25. Ground Clamp

B
35
B
40
B
35
B
50
B
2.60
B
20
B
50
M
1.75
B
5.20
B
5.20
B
5.20
M
1.50

- XI. Paints And Varnish
- 1. Interior Enamel gal.
- 2. Exterior Enamel
- 3. Concrete Paint (acrylic, alkd) gal.
- 4. Wall Sealer
- 5. Wood Stain
- 6. Wood Varnish
- 7. Thinner (rubber base)
- 8. Wood Putty
- 9. Wood Perservative gal.

F
11.82
B
9.95
F
6.62
F
14.58
B
90
16.92 (Primer)
F
15.99

- XII. Miscellaneous
- 1. Floor Tile 12x12" 5000/cs
- 2. Ceramic Tile 4x4"
- 3. Tile Adhesive gallon
- 4. Contact Cement gallon
- 5. Tecco Connectors "Triplgrip"

B
18.95
F
13.95
B
21.50
B
8.95
F
8.97
M
17.22



PONAPE TRANSPORTATION AUTHORITY



P.O. Box 36 *Kolonia, Ponape*
EASTERN CAROLINE ISLANDS 96941
Cable Address: PTA PONAPE
Telephone: 377


	<u>PRIVATE /NOT DEL.</u>	<u>GOV'T & EMPLOYEES/NOT DEL.</u>
1. AGGREGATE	\$6.75	\$4.25
2. CRUSHED SAND	7.75	5.25
3. SHOT ROCK	2.75	2.75
4. CORAL	2.75	2.75 0

1. KOLONIA	\$1.50	DELIVERY CHARGE	
2. NETT	2.00	"	"
3. SOKEHS	2.00	"	"
4. UH OFFICE	2.50	"	"
5. NANISOU	3.00	"	"
6. OHWA	3.50	"	"
7. LUKOP	4.00	"	"
8. SAPWALAP	4.50	"	"
9. NANMAL	1.50	"	"
10. MEILAP	2.00	"	"
11. KEPKEP	2.50	"	"



GOVERNMENT OF THE TRUST TERRITORY OF THE PACIFIC ISLANDS

8. F S M、土木作業許可申請書

 APPLICATION FOR T.T. ENVIRONMENTAL PROTECTION BOARD EARTHMOVING PERMIT		
Enclose one (1) set of original drawings and two (2) copies, which show the location and character of the proposed activity, and your proposed Erosion and Sedimentation Control Plan and Processing Fee of \$100.00. (Refer to 63 TTC Chapter 13, Subchapter III, and the T.T.EPB's Earthmoving Regulations.)		
1. Application Number (Assigned By T.T.EPB) _____ _____ Permit Number	2. Date _____ Application Received _____ Permit Issued	3. For T.T.EPB Use Only _____ Permit Disapproved
DO NOT WRITE IN ABOVE SPACE		
4. Name, Address and Title of Person or Agency Applying for Permit Name, Address and Title of Applicant's Agent for Permit and Project Coordination		
5. Telephone Number (if any) _____		
6. Location of Proposed Activity Island _____ Municipality _____ Village _____		Name of Project _____
7. Proposed Earthmoving Activity Will Be: On Land Only <input type="checkbox"/> In Water Only <input type="checkbox"/> Both on Land and in Water <input type="checkbox"/>		
8. Describe the proposed activity, its purpose and intended use, including a description of the type of structure, if any, to be erected on fill, etc., and composition and quantity of material to be dredged or moved. Identify location of dredging area, quarry site(s) and disposal site(s) on drawings. (If space provided is inadequate, attach a separate sheet.)		
9. Proposed Use: Private <input type="checkbox"/> Public <input type="checkbox"/> Commercial <input type="checkbox"/>		

TT-HS-083 (2/13/78)

10. Date Activity is Proposed to Commence _____
 Date Activity is Expected to be Completed _____

11. Is any portion of the Activity for which Authorization is sought now complete? Yes () No (). [If answer is "yes", give reasons in Remarks (16).]
 Month and Year the Activity was Completed _____
 Indicate the existing work on the drawing. _____

12. List all approvals or certifications required by other Federal, Territorial or local agencies for any structures, construction, discharges, or other activities described in this application.

Issuing Agency	Type of Approval	I.D. Number	Date of Application	Date of Approval
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

12.a Does applicant have a clear right to ownership or use of land where proposed earthmoving will take place under existing Trust Territory laws including the provisions of Title 67 of the T.T. Code, "Public Land and Resources"? Yes () No ()

13. Indicate if Public Hearing held. Yes () No ()
 If answer is "yes", attach a copy of the public hearing proceedings.

14. Has any Agency denied approval for the activity described herein or for any activity directly related to the activity described herein? Yes () No ()
 If answer is "yes", explain. (If space provided is inadequate, attach a separate sheet.)

14.a Have you discussed this earthmoving activity(s) with the District Division of Environmental Health and/or District Board? Yes () No ()

15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities.

 Signature of Applicant

 DATE

10. Date activity is proposed to commence: _____
 Date activity is expected to be completed: _____

11. Is any portion of the activity for which authorization is sought now complete? YES NO
 If answer is "Yes" give reasons in the remark section. Month and year the activity was completed: _____
 Indicate the existing work on the drawings: _____

12. List all approvals or certifications required by other federal, interstate, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

<u>Issuing Agency</u>	<u>Type Approval</u>	<u>Identification No.</u>	<u>Date of Application</u>	<u>Date of Approval</u>

13. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?
 Yes No (If "Yes" explain in remarks)

14. Remarks (Checklist, Appendix H for additional information required for certain activities).

15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

 Signature of Applicant or Authorized Agent

The application must be signed by the applicant; however, it may be signed by a duly authorized agent (named in Item 5) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

18 U. S. C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT

For use of this form, see EP 1145-2-1

The Department of the Army permit program is authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of P. L. 92-500 and Section 103 of P. L. 92-532. These laws require permits authorizing structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided in ENG Form 4345 will be used in evaluating the application for a permit. Information in the application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application [see sample drawings and checklist] and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

<p>1. Application number (To be assigned by Corps)</p>	<p>2. Date</p> <p align="center">_____/_____/_____ Day Mo. Yr.</p>	<p>3. For Corps use only.</p>								
<p>4. Name and address of applicant.</p> <p>Telephone no. during business hours</p> <p>A/C () _____</p> <p>A/C () _____</p>	<p>5. Name, address and title of authorized agent.</p> <p>Telephone no. during business hours</p> <p>A/C () _____</p> <p>A/C () _____</p>									
<p>6. Describe in detail the proposed activity, its purpose and intended use (private, public, commercial or other) including description of the type of structures, if any to be created on fills, or pile or float-supported platforms, the type, composition and quantity of materials to be discharged or dumped and means of conveyance, and the source of discharge or fill material. If additional space is needed, use Block 14.</p>										
<p>7. Names, addresses and telephone numbers of adjoining property owners, lessees, etc., whose property also adjoins the waterway.</p>										
<p>8. Location where proposed activity exists or will occur.</p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> <p>Address:</p> <p>_____ Street, road or other descriptive location</p> <p>_____ In or near city or town</p> <p>_____ County State Zip Code</p> </td> <td style="width:50%; border: none;"> <p>Tax Assessor's Description: (If known)</p> <table style="width:100%; border: none;"> <tr> <td style="border: none;">Map No.</td> <td style="border: none;">Subdiv. No.</td> <td style="border: none;">Lot No.</td> </tr> <tr> <td style="border: none;">_____ Sec.</td> <td style="border: none;">_____ Twp.</td> <td style="border: none;">_____ Rge.</td> </tr> </table> </td> </tr> </table>			<p>Address:</p> <p>_____ Street, road or other descriptive location</p> <p>_____ In or near city or town</p> <p>_____ County State Zip Code</p>	<p>Tax Assessor's Description: (If known)</p> <table style="width:100%; border: none;"> <tr> <td style="border: none;">Map No.</td> <td style="border: none;">Subdiv. No.</td> <td style="border: none;">Lot No.</td> </tr> <tr> <td style="border: none;">_____ Sec.</td> <td style="border: none;">_____ Twp.</td> <td style="border: none;">_____ Rge.</td> </tr> </table>	Map No.	Subdiv. No.	Lot No.	_____ Sec.	_____ Twp.	_____ Rge.
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Map No.	Subdiv. No.	Lot No.								
_____ Sec.	_____ Twp.	_____ Rge.								
<p>9. Name of waterway at location of the activity.</p>										

ENG Form 4345, 1 OCT 77 Edition of 1 Apr 74 is obsolete.

9. F S M、大氣・土地・水汚染防止法(1979年)

ADOPTED REGULATIONS

TITLE 63
PUBLIC HEALTH, SAFETY AND WELFARE

CHAPTER 13
AIR, LAND AND WATER POLLUTION

SUBCHAPTER VI
TRUST TERRITORY SOLID WASTE REGULATIONS

PART 1 AUTHORITY

Pursuant to the authority granted by Public Law 40-78 as set forth in Title 63 of the Trust Territory Code, the Environmental Protection Board hereby promulgates the following regulations to be effective ten (10) days following their final publication in the Trust Territory Register upon the date as set forth herein.

PAI. 2 POLICY

The purpose of these regulations is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste storage, collection and disposal systems. Such standards are intended to:

- (a) Prevent pollution of the drinking water or waters of the Trust Territory;
- (b) Prevent air and land pollution;
- (c) Prevent the spread of disease and the creation of nuisances;
- (d) Protect the public health and safety;
- (e) Conserve natural resources; and,
- (f) Preserve and enhance the beauty and quality of the environment.

PART 3 DEFINITIONS

- (a) "All-Weather Access Road" means a roadway designed, constructed, and maintained to accommodate vehicular traffic under all climatic conditions.
- (b) "Automobile Graveyard" means any establishment or place of business which is maintained, used or operated for storing, keeping, buying, or selling wrecked, scrapped, ruined or dismantled motor vehicles or motor vehicle parts.
- (c) "Baling" means the mechanical process of compression and binding of solid waste materials into bales.
- (d) "Board" means the Trust Territory Environmental Protection Board, or its authorized agent.
- (e) "Bulky Waste" means large items of solid waste such as household appliances, furniture, motor vehicles, trees, branches, stumps, and other oversize wastes whose large size precludes or complicates their handling by normal solid waste collection, processing, or disposal methods.

f) "Chairman" means the Chairman of the Trust Territory Environmental Protection Board or his duly authorized representative.

g) "Collection" means the act of removing solid waste.

h) "Collection Frequency" means the number of times collection is provided in a given period of time.

i) "Commercial Solid Waste" means all types of solid wastes generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities, excluding residential and industrial wastes.

j) "Compactor Collection Vehicle" means a vehicle with an enclosed body containing mechanical devices that convey solid waste into the main compartment of the body and compress it into a smaller volume of greater density.

k) "Farm" means any plot of land used for the production of crops, livestock, or horticulture products.

l) "Farm Products Processing Facility" means a facility which receives and/or processes farm products, excluding livestock and dairy products.

m) "Food Waste" means the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods, commonly called garbage.

n) "Generation" means the act or process of producing solid waste.

o) "Hazardous Waste" means any waste or combination of wastes which pose a substantial present or potential hazard to human health or living organisms because such wastes are nondegradable or persistent in nature, or because they can be lethal, or because they may otherwise cause or tend to cause detrimental cumulative effects.

p) "Incineration" means the destruction of solid waste by burning in a furnace designed for the purpose wherein solid waste is essentially reduced to ash, carbon dioxide and water vapor.

q) "Incinerator" means an engineered combustion device specifically designed for volume reduction, by controlled burning, of combustible solid waste.

r) "Infectious Waste" means:

(1) Equipment, instruments, utensils, and fomites of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies;

(2) Laboratory wastes, such as pathological specimens (e.g., all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites (any substance that may harbor or transmit pathogenic organisms) attendant thereto;

(3) Surgical operating room pathologic specimens and disposable fomites attendant thereto, and similar disposable materials.

s) "Institutional Solid Waste" means solid wastes generated by educational, health care, correctional, or other institutional facilities.

t) "Junk" means old or scrap copper, brass, rope, rags, batteries, paper, trash, rubber debris, waste, or junked, dismantled, or wrecked automobiles, or parts thereof, iron, steel, and other old or scrap ferrous or nonferrous material.

- (u) "Landfill" means a land area used for the disposal of solid waste.
- (v) "Leachate" means water that has percolated through solid waste and contains dissolved or suspended portions from the solid waste.
- (w) "Lift" means a compacted layer of solid waste and its overlying earth or coral cover in a landfill.
- (x) "Milling" means the mechanical process of material size reduction by grinding, crushing, chipping, or shredding.
- (y) "Permit" means a written authorization issued by the Board, bearing signature of the Chairman or his authorized representative, which by its conditions may authorize the permittee to construct, install, modify, or operate specified solid waste disposal facilities, conduct specified solid waste disposal activities or engage in the management of solid waste in accordance with specified limitations.
- (z) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision/agency thereof or any legal successor, representative, or agency of the foregoing.
- (aa) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant.
- (bb) "Pollutant" means one or more substances or forms of energy which when present in the air, land, or water, are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which may unreasonably interfere with the enjoyment by the people of life or property.
- (cc) "Public Litter Receptacle" means a container provided for the public, as a convenience, for the sanitary placement of solid waste.
- (dd) "Reclamation Facility" means a facility, including automobile graveyards, in which solid waste is stored, dismantled or reprocessed into new products in such a manner that the original products lose their identity.
- (ee) "Residential Solid Waste" means the wastes generated by the normal activities of households, including, but not limited to, food wastes, rubbish, ashes, and bulky wastes.
- () "Rubbish" means a general term for solid waste excluding food wastes and ashes, taken from residences, commercial establishments, and institutions.
- (gg) "Salvaging" means the authorized removal of material from a solid waste disposal facility.
- (hh) "Satellite Vehicle" means a small collection vehicle that transfers its load into a larger vehicle operating in conjunction with it.
- (ii) "Scavenging" means the unauthorized removal of material from a solid waste disposal facility.
- (jj) "Shredding" means the mechanical process of material size reduction by cutting.
- (kk) "Sludge" means the accumulated semiliquid suspension of settled solids deposited from wastewaters or other fluids in tanks or basins. It does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved materials in irrigation return flows or other common water pollutants.

(ll) "Solid Waste" means garbage, refuse, and other discarded solid materials including solid waste materials resulting from industrial and commercial operations, and from community activities, but does not include solid or dissolved material in domestic sewage or other substances in water sources, such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flows or other common water pollutants. This definition is intended to include liquid waste materials such as waste oil, pesticides, paints, solvents, and hazardous waste.

(mm) "Solid Waste Disposal Facility" means an intermediate disposal facility, transfer station, landfill, composting plant, recycling or reclamation facility or any site utilized for the reduction, consolidation, conversion, processing or disposal of solid waste.

(nn) "Solid Waste Disposal System" means the entire process or part thereof of the storage, collection, transportation, processing and disposal of solid waste by any person engaging in such a process as a business or by any municipality, authority, district, or any combination thereof.

(oo) "Solid Waste Storage Container" means a receptacle used for the temporary storage of solid waste while awaiting collection.

(pp) "Storage" means the interim containment of solid waste after generation and prior to final disposal.

(qq) "Transfer Station" means a supplemental transportation facility used as an adjunct to solid waste route collection vehicles. Such a facility may be fixed or mobile and may include recompaction of solid waste.

(rr) "Treatment" means any activity or processing designed to change the physical form or chemical composition of wastes.

(ss) "Vector" means a carrier that is capable of transmitting a pathogen from one organism to another.

(tt) "Working Face" means that portion of the landfill in which solid waste is deposited and compacted prior to the placement of an earth or coral cover.

PART 4 STORAGE

(a) Requirements.

(1) All solid waste shall be stored in such a manner that they do not constitute a fire, health, or safety hazard or provide food or harborage for vectors, and shall be contained or bundled so as not to result in spillage. All solid waste containing food wastes shall be securely stored in covered or closed containers which are nonabsorbent, leakproof, durable, easily cleanable (if reusable), and designed for safe handling. Containers shall be of an adequate size and in sufficient numbers to contain all food wastes, rubbish, and ashes that a residue or other establishment generates in the period of time between the collections.

(2) Storage of bulky wastes shall include, but is not limited to, removing all doors from large household appliances and covering the item(s) to reduce the problems of an attractive nuisance, and the accumulation of solid waste and water in and around the bulky items.

(3) Reusable waste containers which are emptied manually shall not exceed 75 pounds when filled and shall be capable of being serviced without the collector coming into physical contact with the solid waste.

(4) In the design of all buildings or other facilities which are constructed, modified, or leased before or after the effective date of this regulation, there shall be provisions

in accordance with this regulation which will accommodate the volume of solid waste anticipated, which may be easily cleaned and maintained, and which will allow for efficient, safe collection.

(b) Design.

(1) Reusable waste containers should be constructed of corrosion resistant metal or other material which will not absorb water, grease, or oil. The containers should be leakproof, including sides, seams, and bottoms, and be durable enough to withstand anticipated usage without rusting, cracking, or deforming in a manner that would impair serviceability. The interior of the container should be smooth without interior projections or rough seams which would make it difficult to clean or interfere with its emptying. The exterior of the container should be safe for handling with no cracks, holes, or jagged edges. Containers should be stored on a firm, level, well-drained surface which is large enough to accommodate all of the containers and which is maintained in a clean, spillage-free condition.

(2) Reusable waste containers which are emptied manually should have a capacity of no more than 35 gallons in volume, unless they are mounted on casters and can be serviced by being rolled to the collection vehicle and tilted for emptying. The containers should be constructed with rounded edges and tapered sides with the larger diameter at the top of the container to facilitate discharge of the solid waste by gravity. Containers should have covers which are tight-fitting to resist the intrusion of water and vectors, and should be equipped with a suitable handle. Containers should be designed so that they cannot be tipped over easily.

PART 5 COLLECTION

(a) Safety

(1) Collection systems shall operate in such a manner as to protect the health and safety of personnel associated with the operation.

(2) All solid waste personnel shall receive instructions and training in safe container and waste handling techniques, and in the proper operation of collection equipment.

(3) Personal protective equipment such as gloves, safety glasses, respirators, and footwear shall be used by collection employees, as appropriate.

(4) Scavenging is prohibited at all times to avoid injury and to prevent interference with collection operations.

(b) Equipment.

(1) The equipment used in the collection and transportation of solid waste shall be constructed, operated, and maintained in such a manner as to minimize health and safety hazards to solid waste management personnel and the public. This equipment shall be maintained in good condition and kept clean to prevent the propagation or attraction of vectors and the creation of nuisances.

(2) Collection vehicles shall be maintained and serviced according to manufacturers' recommendations, and receive periodic vehicle safety checks, including, but not limited to, inspection of brakes, windshield wipers, taillights, backup lights, audible reverse warning devices, tires, and hydraulic systems. Any irregularities shall be repaired before the vehicle is used. Vehicles should also be cleaned thoroughly at least once a week.

(c) Frequency. Solid wastes shall be collected with frequency sufficient to inhibit the propagation or attraction of vectors and the creation of nuisances. Solid wastes which contain food wastes shall be collected at a minimum of once during each week. Bulky wastes shall be collected at a minimum of once every three (3) months.

(d) Operations.

(1) The collection of solid wastes shall be conducted in a safe, efficient manner, strictly obeying all applicable traffic and other laws. The collection vehicle operator shall be responsible for immediately cleaning up all spillage caused by his operations, for protecting private and public property from damage resulting from his operations, and for creating no undue disturbance of the peace and quiet in residential areas in and through which he operates.

(2) Records shall be maintained detailing all costs (capital, operating, and maintenance) associated with the collection system. These records shall be used for scheduling maintenance and replacement, for budgeting, and for system evaluation and comparison.

(3) The collection system shall be reviewed on a regular schedule to assure that environmentally adequate, economical, and efficient service is maintained.

PART 6 SOLID WASTE MANAGEMENT PERMIT SYSTEM

(a) Permits Required. It shall be unlawful for any person to establish, modify, or operate any solid waste disposal facility or a part thereof or any extension or addition thereto without a permit issued in accordance with the provisions of this regulation, except for those private systems in Part 7(f).

(b) Application for Permit.

(1) Application for a permit, as required by Part 6(a), shall be completed on forms furnished by the Board and shall be accompanied by the following for approval:

(a) Detailed plans and specifications for the facility.

(b) Certification of compliance with Territorial and local ordinances and zoning requirements.

(c) An operations plan report detailing the proposed method of operation, population and area to be served, the characteristics, quality and source of materials, method of processed residue disposal, emergency operating procedures, the type and amount of equipment to be provided and the proposed ultimate use of land or ocean disposal sites.

(d) An Environmental Impact Assessment of the proposed site.

(2) All persons responsible for existing solid waste disposal facilities shall file, within sixty (60) days after the effective date of these regulations, an application for a permit to continue to operate. If such application is not filed within the sixty (60) day period, all activities not in conformance with this regulation shall cease until such permit is issued, and activities come into regulatory compliance.

(3) Each application shall be signed by the applicant and shall constitute an agreement that the applicant will assume responsibility for the construction or modification and operation of the facility in accordance with these rules and regulations.

(c) Action on Application.

(1) The Chairman shall act on an application within a reasonable time, but not to exceed sixty (60) calendar days from the date the application is received by the Chairman, and shall notify the applicant in writing of its approval or denial of the application. If the Chairman has not acted within the sixty (60) day period, the application shall be deemed to have been approved, provided that the Chairman may request additional information from the applicant and

an additional thirty (30) calendar day period shall commence on the day the supplementary information is received.

(2) The applicant may submit answers and comments to the Chairman's response to the application.

(3) The Chairman shall consider the applicant's answers and comments and shall notify the applicant in writing of his final approval or intent to deny the application. No application for a permit shall be denied unless the applicant has had an opportunity for a public hearing by the Board.

(4) The Chairman shall approve an application for a permit if the application and the supporting information clearly show that the issuance thereof is in the public interest and that the solid waste disposal facility is designed, built, and equipped in accordance with the best practicable technology so as to operate without causing a violation of applicable rules and regulations.

(5) The Chairman may issue to the applicant a conditional approval of the application. Under such an authority, the Chairman may:

(a) Require the applicant to provide such facilities as are necessary for sampling and testing to determine the degree of pollution from the solid waste disposal facility.

(b) Specify conditions which will bring the operation of the solid waste disposal facility described in the application within the conditions of Part 6(c)(4) of this rule.

The commencement of work under such an authority by the applicant shall be deemed acceptance of all the conditions so specified.

(d) Duration of Permit. The Chairman may grant a permit for any term, not to exceed five (5) years, if such is in the public interest.

(e) Modification, Suspension, or Revocation of Permit. The Chairman may, on his own motion or the application of any person, modify, suspend, or revoke a permit pursuant to TTC 63, Section 507.

(f) Transfer of Permit. A permit shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one solid waste disposal operation to another, or from one person to another without the written approval of the Chairman.

(g) Reporting Termination. It shall be the responsibility of that person to which the permit was issued to indicate to the Chairman within thirty (30) days the permanent termination of a solid waste processing or disposal facility for which the permit had been issued by surrendering the permit to the Chairman.

(h) Posting of Permit. Upon granting an approval for a permit, the Chairman shall issue to the applicant a permit which shall be posted in a conspicuous place at or near the operation site for which the permit was issued.

(i) Falsifying or Altering Permit. A person shall not willfully deface, alter, forge, counterfeit or falsify a permit.

(j) Filing Fees

(1) Every applicant for a permit shall pay a filing fee of \$10.00. This filing fee shall be submitted with the application and shall not be refunded nor applied to any subsequent application following final action of cancellation or denial of an application.

(2) All federal or district governmental agencies shall be exempt from paying the filing fee.

(3) A request for a duplicate permit shall be made in writing to the Chairman within ten (10) days after the destruction, loss or defacement of a permit. A fee of \$1.00 shall be charged and submitted with the request.

PART 7 STANDARDS FOR SOLID WASTE DISPOSAL FACILITIES

Planning, design, construction, operation, and maintenance of any solid waste disposal facility requiring a permit under Part 4 shall be in accordance with the rules and regulations of the Board and the provisions of any permit granted. The Chairman shall adopt and, from time to time, revise such standards as he deems necessary. Such standards and revisions shall include procedures to insure suitability of the site and the proper operation of the solid waste disposal facility.

No person shall operate a solid waste disposal facility or system which is not in compliance with these standards.

(a) General Operating Standards

(1) A permittee shall be required to:

(a) Provide a permanent sign posted at the facility entrance identifying the facility, the hours and days of operation, the name and address of the operator, and other information pertinent to the operation of the facility.

(b) Provide an all-weather access road negotiable by loaded collection vehicles from the public road to the working surface of the landfill.

(c) Provide adequate equipment and necessary measures to extinguish fires.

(d) Provide for effective methods and adequate storage of all solid waste so as to prevent the attraction, harborage, or breeding of insects or rodents and to eliminate conditions harmful to public health or which create safety hazards, odors, unsightliness and other public nuisances.

(2) A permittee may be required to:

(a) Provide controlled access to the facility in the form of fences and gates that shall be kept locked when an attendant is not on duty.

(b) Submit results of monitoring analyses for the detection of pollution or contamination resulting or tending to result from the operation of the facility, in accordance with methods and procedures acceptable to the Chairman at specified locations and intervals.

(c) Submit annual reports itemizing the type and quantity of solid waste processed, the quantity of waste requiring final disposal, hours and days of facility operation.

(b) Standards for Permitted and Private Landfills. The disposal of solid waste on land shall comply with the following requirements:

(1) The disposal of solid waste in areas subject to flooding or leachate generation shall be allowed only in conjunction with special procedures approved by the Board.

(a) A vertical separation shall be maintained between the deposited solid waste and the anticipated high ground water table sufficient to prevent contamination of the water.

(b) Adequate provisions shall be provided to manage surface water flow at the landfill site such that the flow of off-site drainage over a landfill will be minimized.

(c) Solid waste shall be deposited in a sanitary manner to prevent waste materials, leachate or eroded soil particles from entering the waters of the Trust Territory without receiving the best practicable treatment or control.

(2) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards. Scavenging is prohibited.

(3) Live, domestic animals are prohibited within the landfill.

(4) The working face of a landfill shall be limited to as small an area as practicable and designed to confine wind blown solid waste, which shall be collected and returned to the working face.

(5) All equipment provided for the operation of a landfill shall be adequate in number and performance capability to continuously conduct the landfill in a safe and sanitary manner.

(6) Solid waste shall be spread in shallow layers not exceeding a depth of two (2) feet prior to compaction; each completed lift shall be no greater than eight (8) feet in vertical depth; and, at least one (1) foot of compacted intermediate earth or other approved cover material shall be applied between lifts.

(7) Solid waste, including that solid waste processed by shredding, milling, baling, or other operations specifically approved by the Chairman, shall be compacted and covered with a minimum of four (4) inches of earth, coral or other approved material at a frequency specified by permit requirements.

(8) A completed landfill or major portion thereof shall be covered with at least eighteen (18) inches of compacted earth or coral material, graded with proper drainage to minimize soil erosion and planted immediately after the grading work has been completed.

(9) Open burning at any storage, reclamation or disposal site shall be carried out only in conjunction with special procedures approved by the Chairman.

(10) Provisions shall be made to maintain the landfill for at least one (1) year after termination of operation to prevent health hazards or nuisances from occurring. Maintenance shall include, but not be limited to, repair of cracks or fissures, repair of areas where settling occurs and control of problems which result from leachate or odors. Compliance with these requirements shall be a basis for future recommendation by the Board on land use.

(c) Standards for Reclamation Facilities. No person may maintain or operate a reclamation facility or permit the use of property for such an operation unless the operation complies with the following:

(1) By-products removed during processing shall be handled in a sanitary and nuisance-free manner and shall be recycled or disposed of in a manner approved by the Chairman.

(2) The facility shall be located at least 100 feet from any road or adjoining property and be so constructed as to prevent health hazards, public nuisances, and unsightliness.

(3) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards. Scavenging is prohibited.

(a) Infectious and pathological wastes generated at medical, veterinary and other facilities shall be incinerated, sterilized or otherwise rendered safe prior to removal from these facilities for final disposal.

(b) Toxic, caustic, volatile and flammable chemical waste may be incinerated or disposed of in a manner approved by the Chairman prior to final disposal. If such wastes are delivered directly to a landfill, it shall be rendered non-hazardous by chemical neutralization or stabilization prior to final disposal.

The disposal of chemical wastes at a landfill shall be in a special trench or pit that is designed to retain the wastes and prevent infiltration into ground and surface waters.

The burial area shall be clearly marked with adequate warning signs and under no circumstances will smoking or open flames be allowed when these types of wastes are being disposed of. The burial site shall be recorded in the final plan of the completed site and made a part of the legal description of the property.

(c) Dewatered sludge from water treatment plants and dewatered digested sludges from waste water treatment plants shall be mixed with the other deposited solid wastes at the landfill to prevent localized leaching. Raw sewage sludges and septic tank pumpings are prohibited at all solid waste disposal facilities.

(d) Any proposed new activity or modification to an existing activity which will cause the generation of hazardous wastes shall submit to the Chairman a hazardous waste management plan. The new or modified activity shall not commence prior to acceptance of the plan by the Chairman.

(e) Generators of waste oil shall adopt all practical measures to reduce waste quantities and to reuse or recycle waste oil to the maximum extent possible. Where it can be demonstrated that wastage is necessary, disposal methods shall be approved by the Director. Spreading of oil on roadways, airports, or other areas for the purpose of dust control shall be initially limited to areas which preclude the possibility of contamination of (1) potable ground water; (2) surface waters; and, (3) areas under agricultural cultivation of food crops.

PART 9 SOLID WASTE MANAGEMENT RESPONSIBILITY

(a) The aesthetic, non-hazardous and sanitary storage of solid waste is the responsibility of the person owning, operating or managing the property, premise, business establishment or industry where the solid waste is accumulated.

(b) A person not included in Part 7(f) owning, operating or managing a property, premise, business establishment or industry has the responsibility of removing accumulated solid waste to an approved solid waste disposal facility. Contractual or other arrangements for the removal of accumulated solid waste shall not relieve a person of this primary responsibility. Solid waste shall be removed to an approved solid waste disposal facility, prior to creating a nuisance condition.

(c) A person sponsoring any public activity, including but not limited to, recreational, sporting or entertainment events, is responsible for the collection, storage, transportation and disposal of all solid waste generated as a result of the event. Solid waste shall be collected, removed and disposed of in an approved solid waste disposal facility.

(d) The disposal of animal carcasses is the responsibility of the land owner or land occupant upon whose land the animal carcass is found to be creating a nuisance. On-site disposal of the carcass shall be by immediate burial, covered by at least two (2) feet of compacted earth, incineration or by other method approved by the Chairman.

(d) Standards for Incineration

(1) Incinerator fly ash and residue generated from incineration of solid waste shall be treated and disposed of in a manner to prevent odor and dust nuisance and to control insects, birds, rodents and other vectors.

(2) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards. Scavenging is prohibited.

(e) Standards for Transfer Station

(1) An all-weather road negotiable by loaded collection vehicles shall be provided from the entrance of the transfer station to the unloading area.

(2) The unloading area shall be adequate in size and design to facilitate the loading of solid waste to vehicles with minimum delay or confusion.

(3) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards. Scavenging is prohibited.

(f) Standards for Private Waste Disposal Systems

(1) No private disposal site may be established or operated without the written approval of the District Environmental Protection Advisory Board and their staff.

(2) The systems to be regulated under this section include, but are not limited to:

(a) A single family residential property on which solid waste is generated and disposed of on premises, due to distance from collection route or transfer station.

(b) A farm on which the solid waste from the operation of the farm or from a farm products processing facility is disposed.

(c) A landfill site which is used only by the owner or person in control of the premises to dispose of soil, rock, concrete or other non-decomposable material.

(3) Private disposal sites shall provide for adequate storage and screening of all solid waste so as to prevent the attraction, harborage, or breeding of insects or rodents and to eliminate conditions harmful to public health or which create safety hazards, odors, unsightliness and other public nuisances.

PART 8 STANDARDS FOR HAZARDOUS WASTE

Each district shall be responsible to see that facilities for the disposal of hazardous waste materials are available.

Any person desiring to dispose of hazardous waste materials shall notify the Chairman or his authorized district representative of the intention to do so. Such disposal shall be completed only upon authorization of the Chairman or his representative.

Any solid waste facility that accepts hazardous waste materials for disposal shall dispose of such wastes in accordance with the rules and regulations of the Board and the standards of this section. The Chairman shall adopt and, from time to time, revise such standards as he deems necessary. Such standards and revisions shall include procedures designed to prevent damage to human health or living organisms from exposure to the hazardous wastes identified in this section.

PART 10 SOLID WASTE MANAGEMENT ON PUBLIC PROPERTY

(a) No person may deposit solid waste in, on or along a road right-of-way, street, trail, spur, turnaround, tunnel, drainage structure, water of the Trust Territory, public recreation facility or other public or private property, unless:

- (1) Such property is an authorized solid waste disposal facility.
- (2) The solid waste is deposited in a public litter receptacle.

(b) A person providing a litter receptacle for use by the public shall maintain the receptacle in a sanitary condition so as to prevent the propagation of flies, odors and overflowing conditions.

PART 11 VARIANCES

(a) Every application for a variance shall be made on forms furnished by the Board and shall be accompanied by a complete and detailed description of present conditions, how present conditions do not conform to standards and other information as the Chairman may prescribe by rules or regulations.

(b) Each application for a variance shall be reviewed in light of the descriptions, statements, plans, histories, and other supporting information submitted with the application, such additional information as may be submitted upon the request of the Chairman and the effect or probable effect upon the solid waste disposal standards established pursuant to this regulation.

(c) Whenever an application is approved, the Chairman shall issue a variance authorizing the design, construction, installation, operation and maintenance of solid waste disposal systems in excess of applicable standards. Approval of a variance shall be made only after a public notice is posted and, if responses indicate, a public hearing is held by the Board in the district where the solid waste system is situated. No variance shall be granted by the Chairman unless the application and the supporting information clearly show that:

(1) The continuation of the function or operation involved in the disposal of solid waste by the granting of the variance is in the public interest.

(2) The adverse effects of the solid waste disposal system arising or proposing to arise does not substantially endanger human health or safety.

(3) Compliance with the rules, regulations or standards from which variance is sought would produce serious hardship without equal or greater benefits to the public.

(d) Any variance or renewal thereof shall be granted within the requirements of this section and for time periods under conditions with the reasons therefore and within the following limitations:

(1) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, control or abatement of the pollution involved, it shall be only until the necessary means for prevention, control or abatement become practicable and subject to the taking of any substitute or alternate measures the Chairman may prescribe. No renewal of variance granted under this subsection shall be allowed without a thorough review of known and available means of preventing, controlling or abating the pollution involved.

(2) The Chairman may issue a variance for a period not exceeding five (5) years.

(3) Every variance granted under this section shall include conditions requiring the grantee to perform, air, discharge, effluent or noise sampling and report the results of such sampling to the Chairman.

(e) Any variance granted pursuant to this section may be renewed, from time to time, on terms and conditions and for periods not exceeding five (5) years which would be appropriate on initial granting of a variance, provided that the application for renewal has met all of the conditions specified in the immediately preceding variance, and provided, further, that the renewal, and the variance issued in pursuance thereof, shall provide for a solid waste disposal system not different from that allowed pursuant to the terms of the immediately preceding variance at its expiration. No renewal shall be granted except on application therefor. Any such application shall be made at least sixty (60) days prior to the expiration of the variance.

(f) No variance granted pursuant to this part shall be construed to prevent or limit the application of any emergency provisions and procedures provided for by law.

PART 12 PENALTIES

Any person who shall violate any of the provisions of this act, shall be fined in an amount not to exceed \$10,000 for each day in which such violation occurs, provided that the Attorney General or the appropriate District Attorney shall represent the Board in the Trust Territory High Court for the purposes of enforcing and collecting penalties imposed under this section.

PART 13 HEARINGS AND APPEALS

Hearings and appeals from any decisions of the Board for any violations of these regulations shall be held before the Board or its designated body.

PART 14 APPLICATION

The provisions of this regulation shall apply to the Trust Territory, except where specifically exempted.

PART 15 SEVERABILITY CLAUSE


If any provision of this regulation or the application of any provision of this regulation to any person or circumstance is held invalid, the application of such provision to other persons or circumstances and the remainder of this regulation shall not be affected thereby.

PART 16 DATE OF EFFECT

These regulations shall be effective ten (10) days from their publication herein in the Trust Territory Register.

The above regulations concerning Solid Waste have been promulgated by the Trust Territory Environmental Protection Board and are hereby approved.

1/24/79
DATE



Adrian P. Winkel
High Commissioner

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