An Environmental Assessment on a proposed aircraft hangar building, tourist receiving/waiting area, deck, staff barracks and commercial docks at T-dock, Meketii Hamlet, Koror, Palau.

JUNE 2018
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EXECUTIVE SUMMARY

The Project Proponent, Palau Chief Air Corporation (PCAC), proposes to operate a commercial aviation business in the Republic of Palau. PCAC intends to provide tourism services to both local and foreign tourists via air or sea tours of the most scenic spots in the Republic of Palau.

To operate the business, PCAC proposes to build the following:

- an aircraft hangar;
- commercial docks;
- tourist receiving/waiting area and deck; and,
- staff barracks.

The proposed PCAC Project is located at T-Dock in Meketii Hamlet, Koror Island, within the jurisdiction of Koror State, Republic of Palau. The project site is located approximately 1.20 km north of the Koror Central Business District (CBD).

The site for the proposed PCAC Project is located within the properties identified as Lots 18KS02-01 and 18KS02-02. These properties are currently owned by the Koror State Government (KSG) and leased to PCAC on January 12 and 13, 2018. The leased properties have a combined area of 2,000 square meters (m²).

The commercial land lease agreement and the water/submerged land use agreements between KSG and PCAC for 18KS02-02 and 18KS02-01 commenced on January 18, 2018 and February 1, 2018, respectively and will continue for fifty (50) years, unless terminated pursuant to the terms of the lease agreements. Appendix B presents a copy of the Lease Agreement and Water Use Right.

The leased area is bounded on the north and west by the Koror Harbor, on the east by an existing road and on the south and southwest by an open area.

The main components of the PCAC Project include the hangar building, tourist receiving/waiting area, deck (identified as porch in the plan), barracks and the dock.

The proposed hangar for the PCAC Project measures 59ft (W) x 67ft (L), sufficient to accommodate two (2) Cessna 206 single engine aircraft. The hangar is approximately 17ft when measured at both ends of the building. A generator room and warehouse will be built within the hangar building. Another spare warehouse building will be built and attached to the hangar.

Docks with a total of seven (7) floating platforms will be constructed northeast and northwest of the Project Site. Each platform measures 7ft wide and the length varies. The floating docks will be anchored and supported by concrete weights. The docks are
capable of accommodating ten (10) boats at a given time. Two seaplane floating platforms will be installed and attached to the docks.

Both local and foreign tourists who would like to avail of the PCAC services should proceed to the reception or the tourist receiving area. Booking for the sea planes and other related activities offered by the PCAC would be arranged in this area. The receiving and waiting area, approximately 39ft x 29ft in dimension, would be provided with adequate seats and coffee tables.

Staff barracks will be constructed on a second level above the tourist receiving and waiting area. The barracks, measuring 46ft x 29ft, consists of six (6) single bedroom units. Each room measures 13ft x 15ft and will be provided with individual toilet and bath.

The proposed PCAC Project will avail of the existing infrastructure systems. It is not expected to significantly impact the existing infrastructure systems due to the number of personnel involved in the operation of the project. Therefore, the water and power demand, solid waste and wastewater generation, are not expected to increase significantly.

A total of six (6) stay-in staff will be employed by PCAC to run the Project. Local people may also be hired depending on their skills and experience. PCAC intends to operate the Cessna 206 aircraft a maximum of 5 flights per day. The aircraft would be able to accommodate six (6) persons (including the pilot) at any given time. Assuming a water demand of 5 gal/person/day, the estimated total aircraft tourist water demand will be 125 gal per day (gpd). Other users (e.g., boat passengers and operators) of the toilet facility are estimated to demand approximately 25 gpd. The proposed PCAC Project, when fully operational, will require an estimated daily water demand of 450 gpd as calculated in Table 2-2.

The proposed water system will tap in to the existing potable water system in Meketii. A backflow preventer will be provided. Potable water from the Koror – Airai Water Supply System will be stored in a tank and provided with booster pump, with bypass valve for direct intake. The stored water will be pressurized to ensure constant pressure and reliable supply for the Project.

The Palau Public Utilities Corporation (PPUC) provided a water supply demand and analysis for the proposed PCAC Project (refer to Appendix C). PPUC analysis indicates that PCAC water demand is only approximately 0.01% of the total Koror-Airai Water Demand Production rate of 4 million gallons per day (MGD). PPUC concludes that the Koror – Airai Water Supply System can cope with the proposed PCAC Project water consumption and can be hooked up to the system.

It is projected that operation of the PCAC Project will generate approximately 450 gpd of wastewater. This amount is equivalent to 100 percent of the daily water demand. The proposed operation of PCAC is not expected to significantly increase the sewage generation from the Meketii area. As the site is not serviced by the Koror State
Sewage generated from the toilet facilities will be collected and discharged to a holding tank. The proposed holding tank measures 10ft (L) x 5ft (W) x 5ft (H) and has a capacity of 250ft$^3$ (1,870 gal). The tank is proposed to be located at the south end corner of the tourist receiving/barracks building. As confirmed by the Palau Public Utilities Corporation (PPUC), the nearest public sewer manhole is located approximately 660ft (200m) away from the proposed PCAC Project. An existing sewer line exists from the Summer House to the nearest existing sewer manhole. However, laying of proposed gravity line from the proposed PCAC Project to either the end of the sewer line at the Summer House or the existing sewer manhole is not possible due to the difference in elevation. PCAC Project location elevation is lower than the existing sewer system.

Rainwater falling into the hangar and barracks roof will be collected by the roof gutters and downspouts and stored in a rainwater collection tank. Rainwater falling into the tourist deck will be released directly to the ocean. Rainwater collected will be used for washing boats, watering plants and other non-potable uses. The Project intends to construct a shallow V-shaped catch drain to direct surface runoff from the site catchment to the Main Street covered ditch.

Solid waste generated at the proposed PCAC Project will primarily consist of domestic waste and some recyclable wastes (e.g., papers, tin cans, glass bottles, etc.). Solid waste disposal, therefore, is not a major concern. Solid waste collected from the Project will be via Koror Solid Waste Collection System and disposed at the M-Dock Landfill. PCAC is willing to institute waste separation and recycling procedures at the staff barracks and tourist area and the extent to which these can be effectively executed will be examined. Approximately, 135 lbs/day (61 kg/day) of solid waste will be generated from the proposed PCAC Project when fully operational.

Power will be mainly supplied by the Palau Public Utilities Corporation (PPUC) via low voltage transformer. On May 3, 2018, PPUC issued a certification providing assurance that PPUC has the capacity to provide power for the operation of PCAC Project located at Meketii, Koror State. A copy of PPUC Certification is provided in Appendix E.

Diesel generator, with a capacity of 12.5 kVA, will provide backup power supply during power interruption from the PPUC. Generator sets will be installed within the hangar building to significantly reduce the noise generation. “Room inside the room” design concept is adopted for control. With these controls in place, the noise generation should be no more than 50 dBA.

Communication services are expected to be adequately provided via Palau National Communications Corporation (PNCC).
Parking spaces will be allocated for the guests/tourists and crew. As shown in the Site Development Plan, a total of 10 parking slots will be available, four (4) in front of the tourist receiving area and six (6) in front of the hangar building.

The proposed PCAC Project will be provided with adequate security system. Gates will be installed at both the hangar building and tourist receiving/waiting area. Security guards will be on duty 24 hours a day. CCTV cameras will be installed at conspicuous places.

Fire alarms will be installed on the ceilings to alert the crew/staff in case of fire. Emergency/Evacuation Plan will be printed and posted in the hangar, barracks and tourist receiving area to provide information to the crew/staff and tourists about the escape plan during fire and emergency situation.

Construction of the PCAC Project is proposed to commence upon securing all the required government permits and licenses including the Earthmoving Permit. It is envisaged that construction activities will be undertaken within 2 months from the commencement of work.

The estimated total investment of this project is $318,300.00.

The alternatives considered with respect to the proposed project are limited to the proposed development as presented in section 2 of this EA document, the proposed alternative with some modifications and alternative site for the project.

Alternative infrastructure design schemes were not presented because of the limited area available for construction. The letters of support provided by the PPUC also influenced the decision of PCAC to implement recommendations made by the PPUC on the water, wastewater and power supply system for the PCAC Project. Hence, no alternative design schemes, other than what was presented in section 2 of this EA document, were considered for this project.

In order to collect information for use in the environmental assessment, a thorough process was made to assure accuracy on the gathered data. The EA Preparer planned for marine ecological survey to determine the aquatic life/corals that will be impacted by the proposed project on May 3, 2018. The survey will also identify the temporary relocation site for the corals that will be removed from the construction site.

On May 7, 2018, water samples for water quality analysis were collected using grab method at three (3) strategic locations point around project site based on site development plan.

Water samples were analyzed by Metiek Ngitchechol of Palau EQPB for presence of *Enterococci* using the IDEXXEnterolert Method with incubator set at 41°C. Turbidity was measured following the EPA 180.1 method using Turbidity Meter (Hach 2100P).
On May 4, 2018, the NECO ECS team conducted marine biological survey on the project site. Sand and rubble encompasses the water/submerged land area of the project site and wherein most developments will take place. Since there is no marine fauna and flora observed within the project site and close to the harbor, the NECO team measured the distance from the dock to the edge of the first seen coral distribution. Ocular survey was then done on that known area of coral distribution by snorkeling perpendicular to the dock for 15 minutes by a two men team.

Two surveys were conducted at the West Southwest (WSW) of the dock and at the Northeastern (NE) part of the dock including the protected mooring area facing Meyuns side. These areas investigated are already outside of the project boundaries and are purposely surveyed only for reporting on marine life of adjacent water/submerged land.

Terrestrial survey was also undertaken last April 29, 2018 to identify the plants/trees that will be removed from the site. Ocular site inspection by the team was conducted together with the quantitative survey to assess plants, birds and other wildlife in the area. For a 15-minute interval, all birds seen/heard during the survey last April 29, 2018 by the NECO team was noted.

The site for the proposed project is currently unutilized. If the project will push through as planned by the Proponent, the benefits are expected to outweigh the negative impacts of the Project.

The negative impacts of the proposed PCAC Project during construction phase will include soil and seabed disturbance/erosion and sedimentation, dust emission, vibration and noise from heavy equipment. These impacts are typical of any type of development and can be mitigated through proper erosion control measures and construction management. No substantial degradation to environmental quality is foreseen.

When the PCAC project becomes operational, the negative impacts identified include potential increased water demand, sewage generation and disposal, solid waste and storm water management. The increase in water demand is estimated to be only 0.01% of the current water demand of the Koror-Airai Water System. Therefore, the PCAC project is not expected to significantly impact the water infrastructure in Koror. Likewise, sewage generated by the project is considered insignificant compared to the current wastewater generation. Sewage generated during operation of the PCAC project will be temporarily stored in a holding tank and then automatically pump to the public sewerage system.

The project also proposes to harvest rainwater as an alternative or supplemental supply of water for the project. This will prevent additional volume of surface runoff being released to the public storm water drainage facilities. Collected rainwater will be stored and used for non-potable use such as irrigation, cleaning/washing of boats and cars, dust suppression and cleaning of road, parking lots and driveways.

During operation, the PCAC project is deemed beneficial due to creation of new jobs, increase in tax revenue for the Palau Government and other indirect positive impacts.
such as potential income for the Palauan people from the sale of local foods, locally made souvenir item (e.g., story boards). Unfavorable effects may include increase in traffic problems and security concerns.

The results of this assessment are that the negative impacts that have been identified in this document shall be adequately minimized by the suggested mitigation measures. Therefore, the proposed action should not result in significant impacts on the environment.

It is suggested that an Environmental Impact Statement (EIS) is not required for the proposed PCAC project. A Finding of No Significant Impact (FONSI) is anticipated, and a Negative Declaration is determined to be in order.
1 INTRODUCTION

Palau Chief Air Corporation (PCAC), is proposing the construction and operation of a seaplane business at Meketii Hamlet, Koror State. Structures associated with this business, otherwise referred in this Environmental Assessment (EA) Report as ‘the PCAC Project’ include an aircraft hangar building, tourist receiving/waiting area and deck, staff barracks and commercial docks.

The purpose of this EA Report is to provide a summary of information and analysis considered by PCAC and the EA Preparer in reaching its conclusion in accordance with the Environmental Quality Protection Regulation on whether the PCAC Project is likely to cause significant adverse environmental effects, after taking into account the proposed mitigation measures. Proposed mitigation measures made by the proponent can be found in section 5 of this EA Report.

The EA for this project covers baseline information of the environmental values to be impacted by the construction, potential impacts to the environmental values and proposed mitigating measures. It is expected that all mitigation identified in this EA and recommended by the EA Preparer and the regulatory agency, Environmental Quality Protection Board (EQPB), will be incorporated prior to the project implementation.

The earthmoving permit applied for this project shall cover the earthmoving activities for the construction of the aircraft hangar building, tourist receiving/waiting area and deck, staff barracks and the commercial docks. Infrastructure requirements of the project include water supply system, rainwater collection system, sewage holding tank and pumping system and power/generator and communication system.

1.1 Identification of the Applicant

The Applicant is Palau Chief Air Corporation (PCAC), represented by its President/Chairman, Mr. Ming Yung Ha. The Foreign Investment Board (FIB) awarded to PCAC a Foreign Investment Approval Certificate No. 604-2017 on January 6, 2017 (later amended on October 31, 2017) to operate a seaplane business in the Republic of Palau. A copy of the FIB Certificate and its amendment is provided in Appendix A.

Table 1-1 provides information about the project owner, address and contact information of the Applicant:

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>PCAC Project (Seaplane Business)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant:</td>
<td>Palau Chief Air Corporation</td>
</tr>
<tr>
<td>Address:</td>
<td>P. O. Box 155, Koror</td>
</tr>
<tr>
<td></td>
<td>Republic of Palau 96940</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Mr. Ming Yung Ha</td>
</tr>
<tr>
<td>Telephone No.:</td>
<td>488-1336</td>
</tr>
<tr>
<td>E-Mail:</td>
<td><a href="mailto:vonca1991@qq.com">vonca1991@qq.com</a></td>
</tr>
</tbody>
</table>
1.2 Identification of EA Preparer

The proponent, PCAC, has chosen and contracted NECO Environmental Consultancy Services (ECS) to act as its EA Preparer and Environmental Consultant for this project.

NECO ECS aims to help investors and entrepreneurs alike in pursuing economic development in Palau as well as maintaining and protecting the pristine environment of the country.

Through its competent and efficient team, NECO ECS has been approved by Environmental Quality Protection Board (EQPB) as a qualified EA Preparer in Palau. Since its accreditation in 2009, NECO ECS became one of the leading environmental consultants in the Republic of Palau. NECO ECS approach to assisting its clients during project planning, identifying potential impacts of the proposed development and close coordination with the EQPB during the EA process make NECO ECS a highly sought after environmental consultant in Palau. NECO ECS ensures that its environmental service to client does not end at obtaining the EQPB earthmoving permit but continuous even during the construction phase and up to completion/operation of the project.

NECO ECS has successfully completed the EA for the Wild Orchid Hotel Project in Malakal, Koror State, Palau Pacific Resort (PPR) Water Villas Project in Ngerkebesang, Koror State, WCTC Minimart & Service Station Project in Ngeburch, Melekeok State and the Koksai–Ngchesar Compact Connecting Road Project in Ngatpang and Ngchesar States. Other EAs prepared by NECO Group include the Airai Fish Farm Project and the National Emergency Management Office –Emergency Operation Center (NEMO-EOC) Project in Ngerusar, Airai State.

1.3 Legislative Framework

The Environmental Assessment (EA) for the PCAC Project is prepared in compliance with the EQPB Regulation 2401-61-03, which requires preparation of EA for any and all actions which propose (f) any proposed action which the Board determines may have a significant impact on the environment.

In most instances, an action shall be determined to have a significant effect on the environment if it:

- Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;
- Curtails the range of beneficial use of the environment;
- Conflicts with the Republic of Palau's long-term environmental policies or goals and guidelines as expressed in the Environmental Quality Protection Act and any revisions thereof and amendments thereto, any regulations promulgated thereunder and relevant court decisions;
- Substantially affects the economic or social welfare of the community;
- Substantially affects public health;
- Involves a substantial secondary impacts, such as population changes or effects on public facilities or infrastructure;
- Involves a substantial degradation of environmental quality;
- Substantially affects a rare, threatened or endangered species, or its habitat;
- Detrimentally affects air or water quality or ambient noise levels; or
- Affects an environmentally sensitive area such as flood plain, erosion-prone area, geologically hazardous land, estuary, lagoon, reef area, mangrove swamp, fresh water, or coastal waters.

1.4 EA Process Documentation

The EA Process is dependent on the extent and consequence of the project involved. On this project, the EA Process Documentation was done in accordance with existing outline for environmental assessment preparation. Regular gathering and surveys were done to bring together the necessary data for the completion of the EA. With the maximum support and cooperation of the applicant, the documentation process was made simple yet complete and accurate.

The EA Preparer noted all meetings with the PCAC, consultation with the government agencies, site visits and surveys related to the proposed PCAC project. Presented in Table 1-2 are the activities performed by the EA Preparer prior to finalization and submission of EA Report to EQPB.

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Activity</th>
<th>Agenda</th>
<th>Parties Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 16, 2018</td>
<td>Initial meeting with the Applicant</td>
<td>Project Review / Site Visit</td>
<td>Applicant – PCAC; EA Preparer – NECO ECS</td>
</tr>
<tr>
<td>April 29, 2018</td>
<td>Terrestrial Survey and Bird Survey</td>
<td>Identify and measure existing trees; Note all birds seen or heard</td>
<td>EA Preparer – NECO ECS</td>
</tr>
<tr>
<td>May 2, 2018</td>
<td>Scoping meeting</td>
<td>Presentation of project to EQPB; Identify the main concern/issues that need to be addressed in the EA.</td>
<td>EQPB Applicant – PCAC; EA Preparer – NECO ECS</td>
</tr>
<tr>
<td>May 4, 2018</td>
<td>Marine Survey</td>
<td>Ocular Marine Survey</td>
<td>EA Preparer – NECO ECS</td>
</tr>
<tr>
<td>May 7, 2018</td>
<td>Water Sampling</td>
<td>Collect water samples for testing at EQPB laboratory</td>
<td>EA Preparer – NECO ECS</td>
</tr>
</tbody>
</table>

In accordance with the EQPB Earthmoving Regulations 2401-1-06, the project developer and contractor are required to participate in a mandatory project concept meeting (otherwise referred to as “scoping meeting”) with the EQPB prior to undertaking
any significant earthmoving activities that require the investment of over one hundred thousand dollars ($100,000.00) and/or require the submission of an Environmental Assessment. The purpose of the scoping meeting is to properly assess the potential impact of the project on the Republic of Palau’s environment, to ensure the applicant understand all EQPB rules and regulations, and to raise any other environmental issues relevant to the permit application.

On May 2, 2018, NECO ECS and the Applicant, PCAC, met with the EQPB staff for the scoping meeting. The scoping meeting with the EQPB resulted to identification of the main concern and issues that need to be addressed in the EA for this project.

1.5 EA Methodology

In order to collect information for use in the environmental assessment, a thorough process was made to assure accuracy on the gathered data.

1.5.1 Preliminary Assessment for Marine Survey

The EA Preparer planned for marine ecological survey to determine the aquatic life/corals that will be impacted by the proposed project on May 3, 2018. The survey will also identify the temporary relocation site for the corals that will be removed from the construction site.

1.5.1.1 Water Quality Analysis

On May 7, 2018, water samples for water quality analysis were collected using grab method at three (3) strategic locations point around project site based on site development plan.

Water samples were analyzed by Metiek Ngirchechol of Palau EQPB for presence of Enterococci using the IDEXXEnterolert Method with incubator set at 41°C. Turbidity was measured following the EPA 180.1 method using Turbidity Meter (Hach 2100P).

1.5.1.2 Marine Biological Survey

On May 4, 2018, the NECO ECS team conducted marine biological survey on the project site. Sand and rubble encompasses the water/submerged land area of the project site and wherein most developments will take place. Since there is no marine fauna and flora observed within the project site and close to the harbor, the NECO team measured the distance from the dock to the edge of the first seen coral distribution. Ocular survey was then done on that known area of coral distribution by snorkeling perpendicular to the dock for 15 minutes by a two men team.

Two surveys were conducted at the West Southwest (WSW) of the dock and at the Northeastern (NE) part of the dock including the protected mooring area facing Meyuns side. These areas investigated are already outside of the project boundaries and are purposely surveyed only for reporting on marine life of adjacent water/submerged land.
1.5.2 Terrestrial and Bird Surveys

Terrestrial survey was also undertaken last April 29, 2018 to identify the plants/trees that will be removed from the site. Ocular site inspection by the team was conducted together with the quantitative survey to assess plants, birds and other wildlife in the area.

For a 15-minute interval, all birds seen/heard during the survey last April 29, 2018 by the NECO team was noted.
2 PROJECT DESCRIPTION

2.1 Project Objectives

The Project Proponent, Palau Chief Air Corporation (PCAC), proposes to operate a commercial aviation business in the Republic of Palau. PCAC intends to provide tourism services to both local and foreign tourists via air or sea tours of the most scenic spots in the Republic of Palau.

To operate the business, PCAC proposes to build the following:

- an aircraft hangar;
- commercial docks;
- tourist receiving/waiting area and deck; and,
- staff barracks.

2.2 Project Location

The proposed PCAC Project is located at T-Dock in Meketii Hamlet, Koror Island, within the jurisdiction of Koror State, Republic of Palau. The project site is located approximately 1.20 km north of the Koror Central Business District (CBD). Figure 2-1 provides the location of the proposed PCAC Project.

![Figure 2-1, Location Map, PCAC Project](image)
2.3 Project Site Description

The site for the proposed PCAC Project is located within the properties identified as Lots 18KS02-01 and 18KS02-02. These properties are currently owned by the Koror State Government (KSG) and leased to PCAC on January 12 and 13, 2018. The leased properties have a combined area of 2,000 square meters (m²).

The commercial land lease agreement and the water/submerged land use agreements between KSG and PCAC for 18KS02-02 and 18KS02-01 commenced on January 18, 2018 and February 1, 2018, respectively and will continue for fifty (50) years, unless terminated pursuant to the terms of the lease agreements. Appendix B presents a copy of the Lease Agreement and Water Use Right.

The leased area is bounded on the north and west by the Koror Harbor, on the east by an existing road and on the south and southwest by an open area. Figure 2-2 shows the project location and approximate boundaries of the leased land/submerged land referred to as “the Project Site”.

![Approximate Project Site Boundary](image-url)
2.4 Project Site Development Plan

The proposed site development plan for the Project is shown in Figure 2-3 while Figure 2-4 shows photographs of the existing site to be developed into the PCAC Project. The main components of the PCAC Project include the hangar building, tourist receiving/waiting area, deck (identified as porch in the plan), barracks and the dock.
2.4.1 The Hangar Building

A hangar is a closed building structure to hold aircrafts. It is used for protection from the weather, direct sunlight, maintenance, repair, manufacture, assembly and storage of aircrafts. Hangars need special structures to be built. The width of the doors has to be large; this includes the aircraft entrance. The bigger the aircraft to be introduced, the more complex a structure is needed.

The proposed hangar for the PCAC Project measures 59ft (W) x 67ft (L), sufficient to accommodate two (2) Cessna 206 single engine aircraft. The hangar is approximately
17ft when measured at both ends of the building. Figure 2-5 provides the floor plan for the proposed hangar building while Figures 2-6 shows the front elevation of the hangar building. A generator room and warehouse will be built within the hangar building. Another spare warehouse building will be built and attached to the hangar as shown Figure 2-7 (Hangar Section B-D).
The Cessna 206, known primarily as the Stationair, is a member of a family of single-engined, general aviation aircraft with fixed landing gear, used in commercial air service and also for personal use. The six seat Model 206 was introduced as a 1964 model and was built until 1986, when Cessna halted production of its single-engined production line. It was then re-introduced in 1998 and remains in production in 2013. Details of Cessna 206 Stationair is presented in Table 2-1 and a photo is shown in Figure 2-8.

<table>
<thead>
<tr>
<th>TABLE 2-1, CESSNA 206 STATIONAIR DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Height</td>
</tr>
<tr>
<td>Wings Width</td>
</tr>
<tr>
<td>Size</td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Maximum Carriage Weight</td>
</tr>
<tr>
<td>Maximum Landing Weight</td>
</tr>
<tr>
<td>Maximum Parking Weight</td>
</tr>
<tr>
<td>Maximum Fuel Storage (by Volume)</td>
</tr>
<tr>
<td>Maximum Fuel Weight</td>
</tr>
</tbody>
</table>
2.4.2 The Docks

Docks with a total of seven (7) floating platforms will be constructed northeast and northwest of the Project Site. Each platform measures 7 ft wide and the length varies. The floating docks will be anchored and supported by concrete weights. Figure 2-9 shows the proposed dock layout while Figure 2-10 shows the typical elevation of the dock. The docks are capable of accommodating ten (10) boats at a given time. Two seaplane floating platforms will be installed and attached to the docks.
2.4.3 Tourist Receiving/Waiting Area and Deck

Both local and foreign tourists who would like to avail of the PCAC services should proceed to the reception or the tourist receiving area. Booking for the sea planes and other related activities offered by the PCAC would be arranged in this area. The receiving and waiting area, approximately 39ft x 29ft in dimension, would be provided with adequate seats and coffee tables. Figure 2-11 shows the floor plan for the tourist receiving and waiting area.

Ample space for the tourist deck will also be provided. For safety purposes, the deck will be surrounded with railings to prevent tourists, particularly the children, from falling into the water. A perspective view showing the tourist receiving and waiting area and the deck is shown in Figure 2-12.
2.4.4 Staff Barracks

Staff barracks will be constructed on a second level above the tourist receiving and waiting area as shown in the perspective view (Figure 2-13). The barracks, measuring 46ft x 29ft, consists of six (6) single bed room units. Each room measures 13ft x 15ft and will be provided with individual toilet and bath. Figure 2-14 shows the floor plan of the staff barracks.
2.5 Support Infrastructure & Facilities

The proposed PCAC Project will avail of the existing infrastructure systems. It is not expected to significantly impact the existing infrastructure systems due to the number of personnel involved in the operation of the project. Therefore, the water and power demand, solid waste and wastewater generation, are not expected to increase significantly.

Infrastructure considerations are summarized as follows:

2.5.1 Water Supply

A total of six (6) stay-in staff will be employed by PCAC to run the Project. Local people may also be hired depending on their skills and experience. In the absence of specific water demand recommendation in the EQPB Regulations, the 50 gal/person/day water rate adopted from the quantities of sewage flow recommended for work or construction camp in the EQPB Regulation Chapter 2401-13 (Table II) is used in calculating the water demand.

PCAC intends to operate the Cessna 206 aircraft a maximum of 5 flights per day. The aircraft would be able to accommodate six (6) persons (including the pilot) at any given time. Assuming a water demand of 5 gal/person/day, the estimated total aircraft tourist water demand will be 125 gal per day (gpd).

Other users (e.g., boat passengers and operators) of the toilet facility are estimated to demand approximately 25 gpd.

The proposed PCAC Project, when fully operational, will require an estimated daily water demand of 450 gpd as calculated in Table 2-2.

<table>
<thead>
<tr>
<th>Water demand</th>
<th>Calculation</th>
<th>gpd</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCAC Crew</td>
<td>50 gal/person/day (^1) \times 6 persons</td>
<td>300</td>
</tr>
<tr>
<td>Guests/Tourists (Aircraft)</td>
<td>5 gal/person/day (^2) \times 5 persons/flight \times 5 flights</td>
<td>125</td>
</tr>
<tr>
<td>Other users</td>
<td>25 gpd (lump sum)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td><strong>Total wastewater generation</strong></td>
<td><strong>450</strong></td>
</tr>
</tbody>
</table>

\(^1\) EQPB Regulation Chapter 2401-13 (Table II).
\(^2\) Approximate only.

The proposed water system will tap in to the existing potable water system in Meketii. A backflow preventer will be provided. Potable water from the Koror – Airai Water Supply System will be stored in a tank and provided with booster pump, with bypass valve for direct intake. The stored water will be pressurized to ensure constant pressure and reliable supply for the Project.

The Palau Public Utilities Corporation (PPUC) provided a water supply demand and analysis for the proposed PCAC Project (refer to Appendix C). PPUC analysis indicates
that PCAC water demand is only approximately 0.01% of the total Koror-Airai Water Demand Production rate of 4 million gallons per day (MGD). PPUC concludes that the Koror – Airai Water Supply System can cope with the proposed PCAC Project water consumption and can be hooked up to the system.

2.5.2 Wastewater System

It is projected that operation of the PCAC Project will generate approximately 450 gpd of wastewater. This amount is equivalent to 100 percent of the daily water demand, which was based on calculations shown in Table 2-3 above.

The proposed operation of PCAC is not expected to significantly increase the sewage generation from the Meketii area. As the site is not serviced by the Koror State Sewerage System, it is proposed that a holding tank with appropriate pump system be installed within the PCAC Project.

Sewage generated from the toilet facilities will be collected and discharged to a holding tank. The proposed holding tank measures 10ft (L) x 5ft (W) x 5ft (H) and has a capacity of 250ft³ (1,870 gal). Holding tank details are provided in Table 2-3. The tank is proposed to be located at the south end corner of the tourist receiving/barracks building as shown in Figure 2-15.
As a precautionary measure to prevent sewage overflow from the holding tank, a ball-tap in the tank connected to an alarm at the PCAC security house will be installed. The sounds will alert the guard on duty that the tank is near its full capacity and pumping of sewage from the holding tank is required within the next 24-48 hours. In addition, regular monitoring of the tank shall be undertaken to ensure it is effectively functioning.

**Table 2-3, Holding Tank Details, PCAC Project**

<table>
<thead>
<tr>
<th>‘L’ (Length) ft</th>
<th>‘B’ (Breadth) ft</th>
<th>‘D’ (Depth) ft</th>
<th>Volume ft³</th>
<th>gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>5</td>
<td>250</td>
<td>1,870</td>
</tr>
</tbody>
</table>

Daily Wastewater Generation 60 450

No. of Days of Storage 4 ~ 5 days

The PCAC crew are not expected to cook foods within the barracks. At this stage, a grease trap is not required.

As confirmed by the Palau Public Utilities Corporation (PPUC), the nearest public sewer manhole is located approximately 660ft (200m) away from the proposed PCAC Project. An existing sewer line exists from the Summer House to the nearest existing sewer manhole. However, laying of proposed gravity line from the proposed PCAC Project to either the end of the sewer line at the Summer House or the existing sewer manhole is not possible due to the difference in elevation. PCAC Project location elevation is lower than the existing sewer system. Figure 2-16 shows the location of the proposed PCAC Project with respect to the existing PPUC sewerage system.

![Figure 2-16, Proposed Sewerage Network, PCAC Project](image)

The PCAC holding tank will be connected to the existing sewer manhole approximately 200m south of the PCAC Project as shown in Figure 2-16 above. It will be automatically pumped via 4 in diameter pipe from the holding tank to a new manhole along the proposed
sewer line on a daily basis. Sewage will then flow by gravity from the new manhole to the existing PPUC sewer manhole. Details of the proposed sewerage network in shown in the PPUC Report (Appendix D).

2.5.3 Drainage System

Rainwater falling into the hangar and barracks roof will be collected by the roof gutters and downspouts and stored in a rainwater collection tank. Rainwater falling into the tourist deck will be released directly to the ocean. Rainwater collected will be used for washing boats, watering plants and other non-potable uses. Figure 2-17 shows the proposed location of the rainwater collection tank.

![FIGURE 2-17, PROPOSED RAIN WATER COLLECTION SYSTEM, PCAC PROJECT](image)

The Project intends to construct a shallow V-shaped catch drain to direct surface runoff from the site catchment to the Main Street covered ditch. A plan/details of the proposed drainage system will be presented in Section 5 and in the ESCP.

2.5.4 Solid Waste Disposal

Solid waste generated at the proposed PCAC Project will primarily consists of domestic waste and some recyclable wastes (e.g., papers, tin cans, glass bottles, etc.). Solid waste disposal, therefore, is not a major concern. Solid waste collected from the Project will be via Koror Solid Waste Collection System and disposed at the M-Dock Landfill.

PCAC is willing to institute waste separation and recycling procedures at the staff barracks and tourist area and the extent to which these can be effectively executed will be examined.
Approximately, 135 lbs/day (61 kg/day) of solid waste will be generated from the proposed PCAC Project when fully operational. The estimated solid waste generation is presented in Table 2-4.

### Table 2-4, Solid Waste Generation, PCAC Project

<table>
<thead>
<tr>
<th>Waste Generator</th>
<th>Calculation</th>
<th>Solid Waste Generation Rate (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCAC Crew</td>
<td>9.2 lbs/employee/day (\times) 6 persons</td>
<td>55</td>
</tr>
<tr>
<td>Guests/Tourists (Aircraft)</td>
<td>2.2 lbs/person/day (\times) 5 persons/flight (\times) 5 flights</td>
<td>55</td>
</tr>
<tr>
<td>Other users</td>
<td>25 lbs/day (\text{(lump sum)})</td>
<td>25</td>
</tr>
<tr>
<td>Total wastewater generation</td>
<td></td>
<td>135</td>
</tr>
</tbody>
</table>

1. Source: Guide to Solid Waste and Recycling Plans for Development Projects (Santa Barbara County Public Works Department); May 1997: [https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates](https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates)
2. Approximate only

Solid waste generated from the PCAC Project will generally consist of organic waste, paper, plastic and metals. Refuse collection and solid waste disposal will be contracted to a service provider and coordinated with the BPW to ensure proper disposal to an operational landfill.

#### 2.5.5 Electrical and Communication System

Power will be mainly supplied by the Palau Public Utilities Corporation (PPUC) via low voltage transformer. On May 3, 2018, PPUC issued a certification providing assurance that PPUC has the capacity to provide power for the operation of PCAC Project located at Meketii, Koror State. A copy of PPUC Certification is provided in Appendix E.

Diesel generator, with a capacity of 12.5 kVA, will provide backup power supply during power interruption from the PPUC. Generator sets will be installed within the hangar building to significantly reduce the noise generation. “Room inside the room” design concept is adopted for control. With these controls in place, the noise generation should be no more than 50 dBA.

Communication services are expected to be adequately provided via Palau National Communications Corporation (PNCC).

#### 2.5.6 Parking Spaces

Parking spaces will be allocated for the guests/tourists and crew. As shown in the Site Development Plan, a total of 10 parking slots will be available, four (4) in front of the tourist receiving area and six (6) in front of the hangar building.

#### 2.5.7 Administration, Safety & Security System

The proposed PCAC Project will be provided with adequate security system. Gates will be installed at both the hangar building and tourist receiving/waiting area. Security guards will be on duty 24 hours a day. CCTV cameras will be installed at conspicuous places.
Fire alarms will be installed on the ceilings to alert the crew/staff in case of fire. Emergency/Evacuation Plan will be printed and posted in the hangar, barracks and tourist receiving area to provide information to the crew/staff and tourists about the escape plan during fire and emergency situation.

2.6 Project Implementation Schedule

Construction of the PCAC Project is proposed to commence upon securing all the required government permits and licenses including the Earthmoving Permit. It is envisaged that construction activities will be undertaken within 2 months from the commencement of work.

The proposed project development schedule is depicted in Table 2-5.

**TABLE 2-5, PROJECT IMPLEMENTATION SCHEDULE, PCAC PROJECT**

<table>
<thead>
<tr>
<th>Item</th>
<th>Activity</th>
<th>Duration</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Site Cleaning &amp; Preparation</td>
<td>1-Jun-18 to 31-Jul-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>Foundation Excavation</td>
<td>10-Jul-18 to 15-Jul-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Foundation</td>
<td>15-Jul-18 to 4-Aug-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Structure of Barracks &amp; Hangar</td>
<td>5-Aug-18 to 4-Sep-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>Roofing</td>
<td>5-Sep-18 to 10-Sep-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Outdoor Painting</td>
<td>11-Sep-18 to 21-Sep-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Utility Set-Up</td>
<td>15-Jul-18 to 15-Nov-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>8</td>
<td>Porch &amp; Dock</td>
<td>22-Sep-18 to 12-Oct-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>Interior</td>
<td>18-Oct-18 to 7-Nov-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>Landscaping &amp; Parking</td>
<td>7-Nov-18 to 17-Nov-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

2.7 Project Cost

The estimated total investment of this project is $318,300.00. Table 2-6 provides the breakdown of the project estimated cost.
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>QTY</th>
<th>Unit</th>
<th>Price</th>
<th>EXT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety/ Scaffolds/Support</td>
<td>1</td>
<td>Lot</td>
<td>$5,000.0</td>
<td>$5,000.0</td>
</tr>
<tr>
<td></td>
<td>Tools/ Equipment Rental</td>
<td>1</td>
<td>Lot</td>
<td>$20,000.0</td>
<td>$20,000.0</td>
</tr>
<tr>
<td>2</td>
<td>Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shipping From China</td>
<td>2</td>
<td>Unit</td>
<td>$6,000.0</td>
<td>$12,000.0</td>
</tr>
<tr>
<td></td>
<td>Pre-Fab Boards</td>
<td>1</td>
<td>Lot</td>
<td>$75,000.0</td>
<td>$75,000.0</td>
</tr>
<tr>
<td></td>
<td>Tiles/ Floating Dock/ Plywood</td>
<td>1</td>
<td>Lot</td>
<td>$50,000.0</td>
<td>$50,000.0</td>
</tr>
<tr>
<td>3</td>
<td>Concrete Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excavation / Backfill/compaction</td>
<td>30</td>
<td>cy</td>
<td>$30.0</td>
<td>$900.0</td>
</tr>
<tr>
<td></td>
<td>Concrete Reinforced Column</td>
<td>85</td>
<td>cy</td>
<td>$240.0</td>
<td>$20,400.0</td>
</tr>
<tr>
<td>4</td>
<td>Other Works</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical Works</td>
<td>1</td>
<td>Lot</td>
<td>$20,000.0</td>
<td>$20,000.0</td>
</tr>
<tr>
<td></td>
<td>Plumbing Works</td>
<td>1</td>
<td>Lot</td>
<td>$35,000.0</td>
<td>$35,000.0</td>
</tr>
<tr>
<td></td>
<td>Site Works/Landscape</td>
<td>1</td>
<td>Lot</td>
<td>$20,000.0</td>
<td>$20,000.0</td>
</tr>
<tr>
<td></td>
<td>Window/Door/Interior</td>
<td>1</td>
<td>Lot</td>
<td>$15,000.0</td>
<td>$15,000.0</td>
</tr>
<tr>
<td>5</td>
<td>Labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contractor</td>
<td>1</td>
<td>Lot</td>
<td>$45,000.0</td>
<td>$45,000.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td>$318,300.0</td>
</tr>
</tbody>
</table>
3 PROJECT ALTERNATIVES

This section presents the alternatives considered for the proposed PCAC Project. The alternatives considered with respect to the proposed project are limited to the proposed development as presented in section 2 of this EA document, the proposed alternative with some modifications and alternative site for the project.

The “No Action” Alternative is always considered an option to the proponent even before the project was conceptualized.

Alternative infrastructure design schemes were not presented because of the limited area available for construction. The letters of support provided by the PPUC also influenced the decision of PCAC to implement recommendations made by the PPUC on the water, wastewater and power supply system for the PCAC Project. Hence, no alternative design schemes, other than what was presented in section 2 of this EA document, were considered for this project.

3.1 No Action Alternative

The selection of the “No Action” alternative would mean the discontinuation of project designs and result in the site being retained in its existing form. There are physical and socio-economic implications of this alternative.

Physically, the site is unlikely to undergo any major changes from its present condition. The site will remain undeveloped and is unlikely to be severely affected. The site will remain open to the public. No improvement on site will occur.

The “No Action” Alternative is likely to have the greatest implications on the socio-economic environment of the area and surrounding communities. This option will consequently result in the possible loss of revenue for the applicant and the Koror State Government.

Due to the proposed quality of the development it is anticipated that it would provide an opportunity for employment, foreign exchange revenue, benefits associated with the construction industry and potentially significant business opportunities for existing and new tourism support businesses. The opportunity to promote further development of the economy and create jobs for the Palauan citizens will not be realized as well from the “No Action” alternative.

A development of this caliber will add to the Palau’s ability to market itself to visitors from markets previously under represented through previous marketing activities. It will also fuel the growth and development of Palau’s tourism industry.

If the “No Action” alternative is adopted, the investor would need to find an alternative site for the development or decide to develop the project outside of Palau.
3.2 The Proposed Development

This alternative would see the construction of the development as proposed by PCAC, and as outlined in Section 2 of this EA document. This option and location is fully supported by the local and national government. The properties where the proposed PCAC project is located are owned by KSG and leased to PCAC for fifty years. An FIB Certificate has also been issued to PCAC by The Foreign Investment Board. The Lease Agreements and the FIB Certificate provides favorable support by the government of Palau.

This alternative will provide positive benefits to the community and Palau's tourism product. This includes benefits such as tourism influx, employment opportunities, government tax earnings, increased property values and benefits to ancillary supporters/dependents of the tourism industry. If approved, construction and operation of the project will provide employment for both Palauan and non-Palaean citizens. Additionally, the multiplier effects to the construction and operation of the PCAC project are likely to affect a much larger number of persons.

3.3 The Proposed Development with Modifications

If there are issues concerning the project that may be enhanced, changed or modified to increase the acceptability of the project, then these issues should be considered.

At this time, implementation of the project is not expected to cause significant impacts to the environment and existing infrastructures of the Republic of Palau. The PPUC had been consulted on the proposed development. PPUC has reviewed the infrastructure requirements (water, sewerage and power supply) and indicated minimal impact to the existing water supply, sewerage and power distribution systems in the area. Most of the PPUC’s recommendations have already been incorporated in the project plan as described in this EA document.

If there are other issues that will be identified, these issues are easily resolvable through either modification or compromise and we do not foresee these issues resulting in disapproval of the development by interested community and regulatory agencies.

This alternative retains the same positive benefits as with maintaining the proposed development option.

3.4 The Proposed Development in Another Location

PCAC has considered an alternative site for the proposed project. The site is located in Echang Hamlet, Meyuns, Koror State. The alternative site is shown in Figure 3-1.
FIGURE 3-1, ALTERNATIVE LOCATION, PCAC PROJECT
If and when considering other locations, the preferred site offered the following advantages over the other location considered:

- The proposed site is close to the central business district of Koror State;
- Its distance from the Palau International Airport;
- Its proximity to the business hub and tourist attractions such as the Rock Islands, and the Malakal Harbor.

The recommended alternative is the "Proposed Alternative" because it recognizes the viability and need for the proposed development, is designed to address environmental issues and concerns, meets all local regulatory requirements and supports communication and close relations during all stages of the development between the investor and the community.
4 EXISTING ENVIRONMENTAL CONDITIONS

4.1 Physical Environment

4.1.1 Topography

Palau Chief Air Corporation’s project is situated on a relatively flat area at the southern part of T-dock, Koror, Palau. The leased area is bounded on the north and west by the Koror Harbor, on the east by an existing road and on the south and southwest by an open area.

4.2 Marine and Terrestrial Environment

4.2.1 Preliminary Assessment

On May 3, 2018, the NECO ECS team went to the project site to assess the existing environmental condition of the area. The areas for possible impacts were identified based on the project layout. Areas for biological and water quality investigation were identified based on areas on water area where developments will be made.

4.2.2 Water Quality

On May 7, 2018, water samples for water quality analysis were collected using grab method at three (3) strategic location points around project site based on site development plan.

Water samples were analyzed by Metiek Nginchechol of Palau EQPB for presence of Enterococci using the IDEXXEnterolert Method with incubator set at 41°C. Turbidity was measured following the EPA 180.1 method using Turbidity Meter (Hach 2100P).

Results showed that there is no presence of Enterococci within the area. Water quality standard for Turbidity shows results of 1.00 NTU and more which manifests for Class B waters¹.

Coastal waters in the Republic of Palau are classified in accordance with uses to be protected in each class. Three classifications were listed for the coastal waters in the EQPB Marine and Fresh Water Quality Regulations and these include Class AA, A and B Coastal Waters.

Class AA waters are near pristine natural conditions and must be allowed full protection. Only compatible recreational, oceanic researches, subsistence fishing and other aesthetic enjoyment are allowed within these areas. No point source discharge will be permitted in these waters.

¹ EQPB Earthmoving Regulations Chapter 11401-11 pp 18
Class A waters allow swimming, bathing and other water recreational sports as well as the support and propagation of aquatic life. Only subsistence uses as fishing and recreational purposes as swimming and snorkeling are permitted in these classes of waters. It shall be kept clean of any trash, solid materials and oil, and shall not act as receiving waters for any effluent which has not received the highest degree of treatment.

Class B waters are currently used as small boat harbors, bait fishing, commercial and industrial shipping, support and propagation of aquatic life and aesthetic enjoyment. Discharge of any pollutant in this class of water shall be controlled to the maximum extent possible and that sewage and industrial effluent shall receive highest degree of treatment.

![Water Quality Sampling Results](image)

**FIGURE 4-1. WATER QUALITY SAMPLING RESULTS**

### 4.2.3 Marine Biological Survey

On May 4, 2018, the NECO ECS team conducted marine biological survey on the project site. Sand and rubble encompasses the water/submerged land area of the project site and wherein most developments will take place. Since there is no marine fauna and flora observed within the project site and close to the harbor, the NECO team measured the distance from the dock to the edge of the first seen coral distribution. Ocular survey was then done on that known area of coral distribution by snorkeling perpendicular to the dock for 15 minutes by a two men team.
Two surveys were conducted at the West Southwest (WSW) of the dock and at the
Northeastern (NE) part of the dock including the protected mooring area facing Meyuns
side. These areas investigated are already outside of the project boundaries and are
purposely surveyed only for reporting on marine life of adjacent water/submerged land.

Coral distribution was noted around sixty-five (65) feet from the dock on the West
Southwest (WSW) portion of the project area. Substrate of sand and rubble composes
this portion of water. Results on the survey showed seven (7) species of fish and some
of which were juveniles. Four (4) species of corals where also observed on the area.
Table 4-1 below shows the results of the survey conducted for fish and corals.

<table>
<thead>
<tr>
<th>Category</th>
<th>Palauan/ Common Name</th>
<th>Scientific Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISH</td>
<td>Masch</td>
<td><em>Acanthurus nigrofuscus</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Chelebasoi</td>
<td><em>Chaetodon nuriga</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chesengel</td>
<td><em>Acanthurus nigricauda</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Ngimer</td>
<td><em>Cheilinus undulatus</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ngyaoch</td>
<td><em>Hippocampus longiceps</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Kedesau i engel</td>
<td><em>Lutjanus argenti maculatus</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dukl</td>
<td><em>Pseudobalistes flavimarginatus</em></td>
<td></td>
</tr>
<tr>
<td>CORAL</td>
<td>Staghorn</td>
<td><em>Acropora spp.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leaf plate</td>
<td><em>Mantipora</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td><em>Porites rus</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mushroom coral</td>
<td><em>Fungia</em></td>
<td></td>
</tr>
</tbody>
</table>

On the northeastern (NE) part of the project area, coral distribution was noted only from
60 feet from the dock. Substrate of sand and rubble composes this portion of water.
Results on the survey showed six (6) species of fish, mostly in schools, and some of
which were juveniles. Four (4) species of corals where also observed on the area. Table
4-2 below shows the results of the survey conducted for fish and corals.

<table>
<thead>
<tr>
<th>Category</th>
<th>Palauan/ Common Name</th>
<th>Scientific Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISH</td>
<td>Ngyaoch</td>
<td><em>Hippocampus longiceps</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Masch</td>
<td><em>Acanthurus nigrofuscus</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Chesengel</td>
<td><em>Acanthurus nigricauda</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sekos</td>
<td><em>Belonidae</em></td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Meyas</td>
<td><em>Siganus canaliculatus</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teber</td>
<td><em>Atherinomorus lacunosus</em></td>
<td>School</td>
</tr>
<tr>
<td>CORAL</td>
<td>Staghorn</td>
<td><em>Acropora spp.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leaf plate</td>
<td><em>Mantipora</em></td>
<td></td>
</tr>
</tbody>
</table>
Within the protected mooring area, substrate is composed of 60% sand, 20% coral and 20% rubble. Results on the survey showed two (2) species of fish, mostly in schools, and some of which were juveniles. Two (2) species of corals where also observed on the area. Table 4-3 below shows the results of the survey conducted for fish and corals.

**Table 4-3. Marine Ocular Survey on protected mooring area**

<table>
<thead>
<tr>
<th>Category</th>
<th>Palauan/Common Name</th>
<th>Scientific Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISH</td>
<td>Masch</td>
<td>Acanthurus nigrofuscus</td>
<td>School - Juveniles</td>
</tr>
<tr>
<td></td>
<td>Meyas</td>
<td>Siganus canaliculatus</td>
<td>School</td>
</tr>
<tr>
<td>CORAL</td>
<td>Staghorn</td>
<td>Acropora spp.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td>Porites rus</td>
<td></td>
</tr>
</tbody>
</table>

### 4.2.4 Terrestrial Survey

On April 29, 2018, the NECO team conducted a terrestrial survey within the project area. Only two (2) native species of trees were noted and measured. The trees were measured taking into account the height and circumference at breast height (CBH). The CBH is taken by measuring the tree circumference at 4.5 feet. This is because the 4.5 foot height is a forestry standard and is an arbitrary and convenient place for most people to measure a tree. The circumference was then converted to diameter and later was used to calculate for the tree basal area.

Wherein:  
\[ BA = \pi \left( \frac{DBH}{2} \right)^2 \]

where: \( BA = \) Basal Area  \( DBH = \) Diameter at Breast height  \( \pi = \) pi (3.1416)

Basal area is an important forest measurement as it lets you know the forest density of the area to be affected by this project. Total basal area for the project site is at 1,084.83 sq.cm.

**Table 4-4. Terrestrial Survey**

<table>
<thead>
<tr>
<th>Palauan Name</th>
<th>Scientific Name</th>
<th>Status</th>
<th>Height (m)</th>
<th>Diameter (cm)</th>
<th>Basal Area (sq.cm.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngas</td>
<td>Casuarina equisetifolia</td>
<td>Native</td>
<td>12</td>
<td>30</td>
<td>706.86</td>
</tr>
<tr>
<td>Telentund</td>
<td>Leucaena leucocephala</td>
<td>Native</td>
<td>2</td>
<td>10</td>
<td>78.54</td>
</tr>
<tr>
<td>Telentund</td>
<td>Leucaena leucocephala</td>
<td>Native</td>
<td>2</td>
<td>12.5</td>
<td>122.72</td>
</tr>
<tr>
<td>Telentund</td>
<td>Leucaena leucocephala</td>
<td>Native</td>
<td>2.5</td>
<td>15</td>
<td>176.72</td>
</tr>
</tbody>
</table>
### 4.2.5 Bird Survey

For a single 15-minute interval, all forest and coastal birds seen/heard during the survey was noted last April 29, 2018. A total of three (3) species of birds were noted. Please find below Figure 4-2 for the Bird survey results.

**FIGURE 4-2. BIRD SURVEY RESULTS**

<table>
<thead>
<tr>
<th>Date</th>
<th>4/29/19</th>
<th>Location</th>
<th>T-Dock, Melheti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Time</td>
<td>7:05 a.m.</td>
<td>Temperature (°C)</td>
<td>72°</td>
</tr>
<tr>
<td>Cloud Conditions</td>
<td>Clear</td>
<td>Wind (Beaufort Scale)</td>
<td>Light Air</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place an “X” in the appropriate space for each species that you can see or hear during a 15-minute interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palau Fruit Dove</td>
</tr>
<tr>
<td>Palau Bush - Warbler</td>
</tr>
<tr>
<td>Micronesian Starling</td>
</tr>
<tr>
<td>Palau Swiftlet</td>
</tr>
<tr>
<td>Dusky White-eye</td>
</tr>
<tr>
<td>Palau Fantail</td>
</tr>
<tr>
<td>Palau Flycatcher</td>
</tr>
<tr>
<td>Micronesian Honeyeater</td>
</tr>
<tr>
<td>Cicada bird</td>
</tr>
<tr>
<td>Collared Kingfisher</td>
</tr>
<tr>
<td>Micronesian Kingfisher</td>
</tr>
<tr>
<td>Morning bird</td>
</tr>
<tr>
<td>Micronesian Imperial-Pigeon</td>
</tr>
<tr>
<td>Nicobar Pigeon</td>
</tr>
<tr>
<td>Palau Ground Dove</td>
</tr>
<tr>
<td>Micronesian Megapode</td>
</tr>
</tbody>
</table>

Other:
- Eurasian Tree sparrow: X
- Pacific Golden Plover: X
- Black Noddy: X

Record the total number of species below:

TOTAL NO. SPECIES: 3

Name (print): Collin Joseph
Signature: [Signature]

---

**FIGURE 4-2. BIRD SURVEY RESULTS**
5 IMPACT ASSESSMENT & MITIGATIONS

An impact is any change to the existing condition of the environment caused by human activity or an external influence. Impacts therefore may be positive (beneficial) or negative (adverse), direct or indirect, long-term or short-term, and extensive or local in effect. Impacts are termed cumulative when they add incrementally to existing impacts. Both positive and adverse environmental impacts could arise during the renovation, construction and operational phases of the proposed PCAC Project. These are discussed in this section.

5.1 Impacts During Design & Construction of the Project

5.1.1 Potential Failure/Collapse of the Building if Not Properly Designed & Constructed

Buildings, like all structures, are designed to support certain loads without deforming excessively. The loads are the weights of people and objects, the weight of rain and the pressure of wind called “live loads” and the “dead load” of the building itself.

Structural integrity is an aspect of engineering which deals with the ability of a structure to support the designed load, i.e., both live load and dead load, without breaking, tearing apart, or collapsing, in order to prevent failures in future designs.

The following are some of the major causes of building collapse:

- The structure is not strong enough to support the load and hence it fails when it reaches a critical stress level. The structure may be weak due to its shape, size, or choice of its material.
- The instability due to geometry, design, or material choice, will cause the structure to fail from fatigue or corrosion.
- Failure may also occur due to improper selection of materials, incorrect sizing, improper heat treating, or shoddy workmanship.
- Failure may also occur from use of defective materials. The material may have been improperly manufactured, or may have been damaged from prior use.
- Vandalism, sabotage, and natural disasters can overstress a structure to the point of failure. Improper training of those who use and maintain the construction can also overstress it, leading to potential failures.
Mitigating Measures:

- The building design must be prepared by highly qualified and experienced Civil/Structural Engineer.
- Koror State Government must ensure that the building plans are reviewed by its qualified engineer. This will prevent faulty building designs that may result in building failure.
- The site execution of construction work, especially with respect to the foundations and columns must be supervised by a licensed supervising engineer appointed by PCAC.
- The final copies of design and drawings must be kept which will become useful when any structural repairs are to be done in the future.

5.1.2 Erosion and Sedimentation

Potential erosion and sedimentation could occur as a consequence of localized alterations and land disturbing activities (grading and excavations). Bare soils will be subjected to erosion and subsequently deposited into the ocean.

Loose soils are susceptible to erosion, especially if it rains heavily during construction period. Storm water runoff from the site may carry loose soil particles into the ocean, having a detrimental effect on the water quality. Potential adverse impacts are expected to be short term and temporary.

Erosion is expected to be minimal for this project. Excavations are limited within the footing/foundation for the building. Structures (hangar and deck) overwater will be supported by steel piles. No significant disturbance that may cause excessive sedimentation will occur during project implementation.

Mitigating Measures:

- Erosion and Sedimentation Control Plan (ESCP) required by the EQPB shall be strictly implemented. At this stage, only silt fences and silt curtains are proposed to be installed. The silt curtains shall be regularly maintained throughout the duration of construction activity. The proposed ESCP is attached as Appendix F.
- Earthmoving will not be undertaken during heavy rains.
- All erosion and sedimentation control structures in place shall be inspected regularly and observed, when safe to do so during heavy rainfall to verify efficiency and effectiveness.
- All damaged erosion control structures shall be repaired.
- Additional erosion control measures shall be implemented if found necessary.

5.1.3 Seabed Disturbance

Construction of the PCAC Project will impact on the existing condition of the seabed. As a result of foundation construction, the seabed will be disturbed creating turbid water in the area.

**Mitigating Measures:**

- Silt curtains will be deployed prior to seabed disturbance. Silt curtains will be installed at appropriate place minimizing the potential impacts of pile driving.

5.1.4 Construction Waste Disposal

Solid waste generated during construction work would include typical construction waste (e.g. wasted concrete, steel, PVC pipes, wooden scaffolding and forms, bags, waste earth materials, etc.). This waste would negatively impact the site and surrounding environment if not properly managed and disposed of at an approved dumpsite.

Waste materials burned onsite would generate smoke, possibly impacting negatively on ambient air quality and human health. Vegetation and solid waste, if allowed to accumulate in drainage ways, could cause localised pooling and flooding. Pooling of water, in turn, would create conditions conducive to the breeding of nuisance and health-threatening pests such as mosquitoes. Poor construction waste management constitutes a short-term, possibly long-term, negative impact.

Soil excavation in land will be required for erection of columns foundation. A detailed engineering design and quantity take off will provide the estimated excess soil materials from the proposed project.
Mitigating Measures:

- A site waste management plan should be prepared prior to commencement of project construction. This should include the designation of appropriate waste storage areas, collection and removal schedule, identification of approved disposal site and a system for supervision and monitoring.

- Vegetation and combustible waste must not be burned on the site.

- Unusable construction waste, such as damaged pipes, formwork and other construction material, must be disposed of at an approved dumpsite.

- Excavated soils will be temporarily stockpiled within flat area and surrounded with silt fences. Excavated soils should be stockpiled away from drainage features and used for in filling where necessary.

- If no area is identified within the project site, soil stockpiles will be removed immediately from the site and disposed to the nearest approved landfill site, e.g., the M Dock Landfill.

- If in case the soil stockpile is left overnight, it will be covered by tarpaulin to prevent erosion.

5.1.5 Wastewater and Litter Management

Construction activities are expected to generate wastewater including domestic wastewater from the workers and construction wastewater (e.g., de-watering of excavations, wastewater resulting from equipment washing, etc.).

Inadequate provision of toilets for use by workers can lead to ad hoc defecation in secluded areas on the site, thus creating unsanitary conditions and sources of fly infestation.

Improper disposal of food cartons and other domestic forms of construction camp garbage could lead to littering of the site and pollution of adjacent coastal waters.

Mitigating Measures:

- Portable toilets, i.e., portalets, shall be installed at the site during construction phase of the project. Regular cleaning and/or desludging of the portable toilets shall be done.
- Wastewater from the excavations will be diverted into an excavation and allowed to settle prior to discharge, if necessary. Otherwise, the water will be left on the excavation until it dries up.

- Proper solid waste receptacles and storage containers should be provided in sufficient numbers, particularly for the disposal of lunch and drink boxes, so as to prevent littering of the site.

- Desludging of the portalets used during the construction of the project will be coordinated with the Koror-Airai Sewage Treatment Plant personnel. Sludge will be disposed at the Malakal STP.

5.1.6 Air Pollution

Unmanaged air pollution—especially from particulate and gaseous emissions generated by construction machinery—may create nuisance and, in extreme cases, adverse health impacts and property damage. Construction will require breaking up, digging, crushing, transporting, and dumping of large quantities of dry material and will generate dust in and around construction areas.

Dust emissions may result from the excavation works while gaseous pollutant concentrations from construction vehicle activities, such as earthmoving/grading may increase at the project site, but these impacts are largely unavoidable and temporary (short term).

This situation will be worst during the dry season and during the afternoons when the trade winds are most prevalent. High rainfall in Palau is expected to help minimize fugitive dust emission from the mentioned activities. The occurrence of dusting is periodic and short-term, lasting for the duration of the construction activity.

**Mitigating Measures:**

- Access roads and exposed ground should be regularly wetted in a manner that effectively keeps down the dust;

- Maintaining moisture on construction materials;

- Stockpiles of fine materials (e.g. sand) should be wetted or covered with tarpaulin during windy conditions;

- Covering exposed soil or storage areas.

- Limiting excavation and land leveling works to rainy season, and
Minimizing the onsite storage time of construction material.

Workers on the site should be issued with dust masks during dry and windy conditions.

To minimize or reduce gaseous emissions from the construction equipment, truck engines idling shall be reduced, cleaner fuel (e.g., low sulphur diesel, etc.) will be used and pollution control equipment (e.g., diesel oxidation catalyst or a particulate matter filter) will be installed.

5.1.7 Noise

Noise generation is expected in any construction activity. The use of heavy equipment such as grader and excavator is expected to increase the noise level in the area.

The increase in noise level due to the construction activity will only be temporary (short term) and is not considered to be a significant threat to the health or well being of humans.

Mitigating Measures:

- All equipment operating within the construction area will be properly muffled.
- Construction activities that will generate disturbing sounds should be restricted to normal working hours, i.e., work hours will be limited between 7:00 AM and 6:00 PM, Monday through Saturday.
- No night time activity, that will generate noise, will be performed at the project site.
- Workers operating equipment that generates noise should be equipped with noise protection gear.
- Workers operating equipment generating noise levels greater than 80 dBA continuously for 8 hours or more should use earmuffs.
- Workers experiencing prolonged noise levels of 70 – 80 dBA should wear earplugs.
- Surrounding establishments will be advised of expected noise generation during construction.
5.1.8 Visual Impact

The new hangar building and other structures will introduce a new visual feature to the existing view in the Meketii. The new visual feature, however, is expected to improve the existing site.

**Mitigating measures:**

- Set back model will be adapted wholly for the building to reduce the pressure brought by the building to the road and bring rich hierarchies.
- Set back from the road and other design requirements stipulated in the Koror State Building Code will be strictly implemented.

5.1.9 Earth Material Sourcing

Earth materials needed for construction, e.g., sand and gravel, are normally obtained from quarry and mining operations. Conscious or unwitting purchase of these materials from unlicensed operations indirectly supports, encourages and promotes environmental degradation at the illegal quarry sites and causes medium to long-term negative impacts at source.

**Mitigating Measures:**

- Sand, gravel and other earth materials must be obtained from officially licensed and approved quarries.

5.1.10 Material Transportation

The various materials required for construction and building (e.g. steel, blocks, lumber, sand, asphalt, etc.) will be obtained mainly from Malakal, Koror State and transported to the site. Transportation of these materials, typically in over-laden and sometimes uncovered trucks, usually results in undue road damage.

In the case of fine earth materials, dusting and spillages occur on the roadways between source and site. Dusting degrades local air quality and material spillages worsen driving conditions and increase the risk of road accidents. These occurrences represent indirect, short-term, reversible, negative impacts on public health and safety.
The transport of materials from source to site would entail use of heavy trucks, which have the potential to produce polluting gaseous emissions and dust and falling objects, depending on the material being transported.

The frequency of heavy trucks delivering construction materials on site may also potentially damage the existing paved road.

### Mitigating Measures:

- Trucks used for that purpose should be fitted with tarpaulins to cover the materials.
- Fine earth materials must be enclosed during transportation to the site to prevent spillage and dusting.
- The cleanup of spilled earth and construction material on the road should be the responsibility of the contractor and should be done in a timely manner (say within 2 hours) so as not to inconvenience or endanger other road users. These requirements should be included as clauses within the contracts made with relevant sub-contractors.
- The transportation of lubricants and fuel to the construction site should only be done in the appropriate vehicles and containers, i.e. fuel tankers and sealed drums.
- Trucks and vehicles used to transport lubricants and fuels must be provided with appropriate spill kit.
- During summer, the existing road must be watered to reduce dust emission generated by the construction vehicles and trucks.

### 5.1.11 Material Stockpiling/Storage

Improper siting of stockpiles and storage of sand, gravel, cement, etc., at the construction sites could lead to fine materials being washed away, during heavy rainfall events, into the adjacent marine environment. This would contribute to turbidity and sedimentation with consequent negative impacts on inshore marine water quality and ecology of the shallow marine environments, including corals.

Hazardous and flammable materials (e.g. paints, thinner, solvents, etc.) improperly stored and handled on the site are potential health hazards for construction workers and spilled chemicals would have the potential to contaminate soil and inhibit plant growth in localized areas. It is anticipated that refueling or maintenance of large vehicles will take
place on the construction site and therefore there will be a requirement to store fuel and lubricants in a safe manner on the site.

**Mitigating Measures:**

- Stockpiling of construction materials should be properly controlled and managed. Sands and other fine grained materials should be stockpiled away from surface drainage channels and features.
- Sand/Fine material stockpiles should be surrounded by about 1m bund and/or covered with tarpaulin to prevent them from being washed away during rainfall.
- Safe storage areas should be identified and retaining structures put in place prior to the arrival and placement of material.
- Hazardous chemicals (e.g. fuels) should be properly stored in appropriate containers and should be safely locked away. Conspicuous warning signs (e.g. ‘No Smoking’) should be posted around hazardous waste storage and handling facilities.

5.1.12 Employment/Income Generation

At this stage it is expected that a minimum number of workers (approx. 5) will be employed on the site during the construction phase. These levels of short-term employment opportunities would have a positive impact on the local economy and on regional unemployment.

**Mitigating Measures:**

- The project proponent shall give the residents of Koror State and Palau in general priority in hiring construction workers, subject to qualification and experience.
- On the job training should be provided to some Palauan residents who are not qualified to do the work.

5.2 Impacts During Operation of the Project

5.2.1 Wastewater Generation and Disposal

One of the identified impacts of the proposed project is the wastewater generation especially during peak season when the PCAC Project is fully operational. The
wastewater from the project if not properly collected, will have the potential to contaminate the water, which may consequently impact the water quality and endanger public health.

Increased nutrient loading from sewage and waste can cause eutrophication. Eutrophication causes changes in the original biological environment, including reducing species diversity and increasing marine floral bloom and habitation of undesirable species.

It is not expected the sewage from the PCAC Project will cause significant impacts to the public sewerage system.

Mitigating Measures:

- Ensure provision and implementation of a maintenance plan for the building infrastructure including the plumbing system.

- Provide adequately sized sewage holding tank to receive and store sewage generation from the Project.

- Undertake regular monitoring of the sewage holding tank and the pumping system to ensure its efficient operation and prevent sewage overflow.

- As a precautionary measure to prevent sewage overflow from the holding tank, a ball-tap in the tank connected to an alarm at the reception and guard house will be installed. The sounds will alert the staff that the tank is near its full capacity and pumping of sewage from the holding tank is required within the next 24-48 hours.

- If the sewage holding tank reaches its capacity and unable to be pumped as required, all toilet facilities discharging into the tank must be locked to prevent uses. This temporary measure will prevent sewage overflow. The use of the toilet facilities will resume when the sewage is pumped out of the tank.

5.2.2 Solid Waste Generation, Collection and Disposal

Poor garbage management at the PCAC Project would lead to unsanitary conditions including vermin and fly infestation and odours as well as unsightly conditions.

There should be an effort from the occupants to minimize solid waste generation and practice waste segregation.
Mitigating Measures:

- A waste management plan will be prepared and strictly implemented.
- PCAC will institute waste separation and recycling procedures at the staff barracks and tourist receiving and waiting area and the extent to which these can be effectively executed will be examined.
- PCAC shall coordinate with the Koror State Government on the efficient collection of solid waste from the buildings.

5.2.3 Impact from Refrigeration/Air Conditioning Systems

The use of certain refrigerant in number of refrigeration and air conditioning systems has the potential to cause depletion of the ozone layer in the atmosphere leading to greenhouse effect. Some of these refrigerants include:

- Dichlorodifluormethane (R-12) is a colorless gas usually sold under the brand name Freon-12, and a chlorofluorocarbon halomethane (CFC) used as a refrigerant and aerosol spray propellant. Its manufacture was universally banned in 1996, in compliance with the Montreal Protocol, due to concerns about its damaging impact to the ozone layer.

- Chlorodifluoromethane, better known as HCFC-22 or R-22 is one of the most popular refrigerant used in cooling system. R22 is the halocarbon compound named monochlorodifluoromethane with chemical formula CHClF2 and it is the hydrochlorofluorocarbon (HCFC). However, it has very high potential to exacerbate ozone-depletion. R22 is also a global warming gas. The depletion of ozone layer from the upper layers of atmosphere results in ultraviolet rays of the sun to reach the surface of the earth. This leads to high temperature on the earth and the ultraviolet ray themselves are very harmful to the skin of human beings. To avoid the long-term dangers of the R22 and other CFCs, it has been decided to phase out the use and production of R22 completely along with other CFC refrigerants.

Mitigating Measures:

- Ensure that refrigeration and air conditioning system to be used for the project do not use banned refrigerants, that include R-12.
- If the proponent opted to use R-22 as refrigerant in the cooling system, permit must be applied with the EQPB prior to importation to Palau.
Consult with the EQPB on the proposed use of refrigerant for the project prior to importation of refrigerant to Palau.

5.2.4 Safety Issues

Safety of the crew, guest and tourists must be an important consideration during operation of the PCAC Project. As such, adequate safety measures must be implemented.

**Mitigating Measures:**

- Smoke alarms must be installed on the ceilings of each staff room, hangar building and tourist receiving and waiting area the to warn the people of potential fire.
- Emergency/Evacuation Plan must be posted on conspicuous places to provide the tourists with information on evacuation procedure.

5.2.5 Employment Generation

The operation and maintenance of the PCAC Project is expected to generate jobs (e.g., pilot, maintenance crew and ticketing/receptionist) during its full operation.

**Mitigating Measures:**

- In accordance with the Foreign Investment Approval Certificate, the proponent shall to the maximum extent possible, employ and train citizens of the Republic of Palau in the operation and maintenance of the project.
- Whenever economically feasible and practical, the proponent shall favor Palauan citizens or entities as sub-contractors or concessionaires over non-Palauan individuals or entities.

5.2.6 Income from the Project

A positive impact of the project implementation is the income from the operation and the annual taxes to be imposed by the Koror State Government from the operation of the PCAC Project.
Mitigating Measures:

- Ensure that taxes imposed on the real property, income and other related taxes are correct and are properly collected.

5.3 Secondary Impact Assessment

Secondary impacts of the proposed PCAC Project refer to the impacts on the environment, which are not a direct result of the project and often produced away from or as a result of a complex pathway. Indirect impacts are not as important as the direct impacts of the project because of the perceived difficulty of measuring off-site impacts or the assumption that these are a relatively insignificant component of the total impact.

Nevertheless, the perceived secondary impacts of the PCAC project are more leaning towards positive (indirect) impacts such as:

- Potential income for the locals if they will be allowed by PCAC to sell locally made arts, foods and other services to the tourists.
- Potential income for the boat owners/operators who are not directly employed by PCAC but would be allowed to dock and hired by both local and foreign tourists.
- Potential conduct of training, e.g., first aid/safety training, not administered by PCAC but would be made available or required by the government for all boat owners/operators, tourist guides, etc.

5.4 Checklist of Environmental Impacts & Mitigation

Table 5-1 provides a summary checklist of environmental impacts and the mitigating measures proposed for this project. Other mitigating measures to be recommended by the EQPB during the permitting process and project construction shall also be implemented.
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<tr>
<td>1. Potential failure/collapse of the building if not properly designed and constructed</td>
<td>✓</td>
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<tr>
<td>2. Erosion and sedimentation</td>
<td>✓</td>
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<tr>
<td>3. Construction waste disposal</td>
<td>✓</td>
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<td></td>
<td>4. Wastewater and litter management</td>
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</table>

- If in case the soil stockpile is left overnight, it will be covered by tarpaulin to prevent erosion.
- Spill kit shall be made available on site.

- Portable toilets shall be installed at the site during construction. Regular cleaning and/or desludging of the portable toilets shall be done.
- Wastewater from the excavations will be diverted into an excavation and allowed to settle prior to discharge.
- Proper solid waste receptacles and storage containers should be provided, particularly for the disposal of lunch and drink boxes, so as to prevent littering of the site.
## Impact

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<tr>
<td>5. Air pollution - dust</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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- Regular desluding of portalets and disposal to Koror Sewage Treatment Plant.
- Enclose the construction sites.
- Access roads and exposed ground should be regularly wetted to keep down the dust.
- Maintain moisture on construction materials.
- Stockpiles of fine materials (e.g. sand) should be wetted or covered with tarpaulin during windy conditions.
- Cover exposed soil or storage areas.
- Minimizing the onsite storage time of construction material.
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6. Air pollution – gaseous emissions  

- Positive  
- Negative  

- Short Term  
- Long Term  

- Localized  
- Widespread  

- Insignificant  
- Moderate  

- Severe  

- Workers on site should be issued with dust masks during dry and windy conditions.  
- Regular maintenance of construction vehicle.  
- Reduce engine idling.  
- Use cleaner fuel such as low sulphur diesel, biodiesel, etc.  
- Install pollution control equipment such as diesel oxidation catalyst or particulate matter filter.  
- Diesel particulate filters shall be fitted to power generation equipment standby or prime power generator.  

7. Noise  

- Positive  
- Negative  

- Short Term  
- Long Term  

- Localized  
- Widespread  

- Insignificant  
- Moderate  

- Severe  

- All equipment operating within the construction area will be muffled.
## Impact Assessment Table

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<td>Work hours will be limited between 7:00 AM and 6:00 PM, Monday through Saturday.</td>
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<td>No nighttime activity will be performed at the project site.</td>
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<td>Sand and gravel must be obtained from officially licensed and approved quarries and if imported overseas, these materials should be transported through legal channel.</td>
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<tr>
<td>Earth material sourcing</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Material transportation</td>
<td>√</td>
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<td>The cleanup of spilled earth and construction material on the main roads should be done in a timely manner by the contractor.</td>
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<td>Transportation of lubricants and fuel to the construction site should only be done in the appropriate vehicles</td>
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- Positive
- Negative
- Short Term
- Long Term
- Localized
- Wide-spread
- Insignificant
- Moderate
- Severe

10. Material stockpiling/storage

- √
- √
- √
- √

- Sands and other fine grained materials should be stockpiled away from surface drainage channels and features.
- Sand/Fine material stockpiles should be surrounded by about 1m bund and/or covered with tarpaulin.
- Safe storage areas should be identified and retaining structures
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<tr>
<td>11. Employment/ Income generation</td>
<td>✓</td>
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- Hazardous chemicals (e.g. fuels) should be properly stored in appropriate containers and should be safely locked away.
- Conspicuous warning signs (e.g. ‘No Smoking’) should be posted around hazardous waste storage and handling facilities.
- In accordance with the Foreign Investment Approval Certificate, the proponent shall to the maximum extent possible, employ and train citizens of the Republic of Palau in the operation and maintenance of the project.
- Whenever economically feasible and practical, the proponent shall favor Palauan citizens or entities as sub-contractors or concessionaires.
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<td>12. Solid waste generation, collection and disposal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>13. Impact from refrigeration/air conditioning system</td>
<td>✓</td>
<td>✓</td>
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- A waste management plan will be prepared and strictly implemented.
- Waste receptacles to be provided within the tourists area.
- Ensure that refrigeration and air conditioning system to be used for the project do not use banned refrigerants, that include R-12.
- If the proponent opted to use R-22 as refrigerant in the cooling system, permit must be applied with the EQPB prior to importation to Palau.
- Consult with the EQPB on the proposed use of refrigerant for the project prior to importation of refrigerant to Palau.
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<td>14. Worker’s safety during construction of the project</td>
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<td>15. Safety of the guests</td>
<td>✓</td>
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6 CONCLUSION & RECOMMENDATIONS

6.1 Conclusion

The site for the proposed project is currently unutilized. If the project will push through as planned by the Proponent, the benefits are expected to outweigh the negative impacts of the Project.

The negative impacts of the proposed PCAC Project during construction phase will include soil and seabed disturbance/erosion and sedimentation, dust emission, vibration and noise from heavy equipment. These impacts are typical of any type of development and can be mitigated through proper erosion control measures and construction management. No substantial degradation to environmental quality is foreseen.

When the PCAC project becomes operational, the negative impacts identified include potential increased water demand, sewage generation and disposal, solid waste and storm water management. The increase in water demand is estimated to be only 0.01% of the current water demand of the Koror-Airai Water System. Therefore, the PCAC project is not expected to significantly impact the water infrastructure in Koror. Likewise, sewage generated by the project is considered insignificant compared to the current wastewater generation. Sewage generated during operation of the PCAC project will be temporarily stored in a holding tank and then automatically pump to the public sewerage system.

The project also proposes to harvest rainwater as an alternative or supplemental supply of water for the project. This will prevent additional volume of surface runoff being released to the public storm water drainage facilities. Collected rainwater will be stored and used for non-potable use such as irrigation, cleaning/washing of boats and cars, dust suppression and cleaning of road, parking lots and driveways.

During operation, the PCAC project is deemed beneficial due to creation of new jobs, increase in tax revenue for the Palau Government and other indirect positive impacts such as potential income for the Palauan people from the sale of local foods, locally made souvenir item (e.g., story boards). Unfavorable effects may include increase in traffic problems and security concerns.

The results of this assessment are that the negative impacts that have been identified in this document shall be adequately minimized by the suggested mitigation measures. Therefore, the proposed action should not result in significant impacts on the environment.

It is suggested that an Environmental Impact Statement (EIS) is not required for the proposed PCAC project. A Finding of No Significant Impact (FONSI) is anticipated, and a Negative Declaration is determined to be in order.
6.2 Recommendations

6.2.1 Implement Proper Erosion Control Measures

Incorporate all mitigation measures in the design that will prevent or minimize erosion during construction and operational phases. The ESCP (Appendix F) developed for the project shall be considered as preliminary plan. Determination of the actual and appropriate locations of the silt fences, sediment basins and other erosion control structures shall be based on actual condition of the site. The Project Proponent shall ensure proper implementation of the ESCP.

6.2.2 Manage Stormwater

Rainwater collection system, as recommended by PPUC should be implemented and utilized for some beneficial uses. This will reduce the volume of rainwater to be discharged off the road site. Additionally, PCAC should limit the area to be paved so as not to discharge significant volume of stormwater.

6.2.3 Ensure Proper Management, Operation and Maintenance of the Sewage Holding Tank

Adequately sized sewage holding tank will be designed and constructed for the Project. Regular monitoring of the sewage holding tank must be undertaken to ensure the tank is operated and maintained properly.

As additional measure to prevent sewage overflow, a ball-tap in the tank connected to an alarm at the guard house and reception area/office will be installed. The sounds will alert the staff and crew if the pump fails to operate and the holding tank is near its full capacity.

6.2.4 Consultation with the EQPB on the Proposed Air-conditioning System

The use of certain refrigerant in number of refrigeration and air conditioning systems has the potential to cause depletion of the ozone layer in the atmosphere leading to greenhouse effect. As such, it is important to consult with the EQPB on the proposed use of refrigerant for the project prior to importation of refrigerant to Palau.

6.2.5 Establish an Adequate Green Area within the Project Site

Greening the area will help prevent erosion and reduce stormwater runoff. It is therefore important to limit the paving surfaces for the parking lots because as impervious surface is increased, the amount of surface runoff also increases.

Additionally, the trees will also provide shades and reduce the heat generated by impervious surfaces during dry hot weather.
REFERENCES

Environmental Quality Protection Board (EQPB), Republic of Palau, Earthmoving Regulations

Guide to Solid Waste and Recycling Plans for Development Projects (Santa Barbara County Public Works Department); May 1997; https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates

http://ifmlab.for.unb.ca/People/Kershaw/Courses/For1001/Erdle_Version/TAE-BasalArea&Volume.pdf


CERTIFICATE OF APPROVAL OF AMENDMENT NO. 1
TO FIAC NO. 604-2017

The Foreign Investment Approval Certificate No. 604-2017 issued to Palau Chief Air Corporation on January 06, 2017 is hereby amended to read as follows:

Section 2: **Scope:** This Certificate authorizes the Grantee to engage in the following activities:

a. To operate a seaplane business in the Republic of Palau.

All other terms and conditions of Foreign Investment Approval Certificate No. 604-2017 remain in full force and effect.

Date this ___31___ day of __October___, 2017.

[Signature]
Susan Ngirausui
Chairperson, FIB
FOREIGN INVESTMENT BOARD

P.O. BOX 1723
KOROR, PALAU PW 96940
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FAX NO: (680) 488-3722
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Vice Chairperson
Susan Ngaranai

Members
Ephraim Nguadhei
Fermin R. Merang
Quincy Kioyoshi
Stephanie Nakamura

Legal Counsel
Elizabeth Miles

FOREIGN INVESTMENT APPROVAL CERTIFICATE NO. 604-2017

BE IT KNOWN THAT PALAU CHIEF AIR CORPORATION (“Grantee”) is hereby authorized by the Government of the Republic of Palau Foreign Investment Board (“Grantor”), pursuant to Title 28, Chapter 1, of the Palau National Code (the “Foreign Investment Act”) to carry on a business enterprise in the Republic of Palau subject to the following:

1. TERM: The term of this Certificate shall be for a period of fifty (50) years.

2. SCOPE: This Certificate authorizes the Grantee to engage in the following activities:
   a. To operate a helicopter business in the Republic of Palau.

3. CONDITION(S): This Certificate is subject to the following condition(s):
   a. Grantee shall comply with the minimum wage requirements of the Republic of Palau. The Grantee shall pay into the National Treasury of the Republic of Palau an annual fee of five hundred dollars ($500.00) for each non-citizen employed as required by 28 PNCA § 108(4)(9).

   b. Pursuant to 28 PNC Section 108(4)(8), Grantee shall deposit ten thousand dollars ($10,000.00) in a Palau Branch of a bank operating in the Republic of Palau within sixty (60) days after the issuance of this Certificate and shall present evidence to Grantor of same. The account shall be established jointly under the name “Foreign Investment Board and Palau Chief Air Corporation. Any withdrawal from this account shall require the signature of Grantor’s authorized representative and any three active members of the Grantor. This account shall be maintained throughout the term of this Certificate. Prior to establishing the joint account, Grantee shall sign both copies of the Bank Deposit Agreement and Disbursement Authorization enclosed with the FIAC and shall present one copy to the bank at which the account is established and return the other to the Foreign Investment Board.

   c. Grantee shall not engage in any other business activities unless an amended FIAC is granted by the FIB.
d. Grantee shall provide training program which will upgrade the skills, including managerial skills of all Palauan employees. Grantee shall use its best effort to promote qualified Palauan employees to managerial position as soon as possible.

e. Grantee must provide written documentation to the Office of the Foreign Investment Board within six (6) months of issuance of this Certificate that the workforce of the business enterprise is comprised of at least 20% Palauan citizens as required by Section 106 of the Foreign Investment Act.

f. For each and every calendar year of the term of this Certificate, Grantee shall submit copy of annual report to Grantor no later than July 31 of each year before 4:30 p.m.

g. Grantee shall notify the Grantor if the owner seeks to transfer some of his/her ownership interest in the Grantee.

h. Grantee shall commence its proposed business activities in the Republic of Palau consistent with the stated purpose, scope and objectives within one (1) year from the date of being granted its FIAC, or be able to demonstrate substantial progress toward obtaining all necessary licensing.

i. If Grantee fails to commence its business activities before the end of twelve (12) months, as stated above, fifty percent (50%) of the required deposit under Section 3(b) of this FIAC, shall be forfeited to the Palau National Treasury.

4. **APPLICABLE LAWS:** This Certificate is granted subject to full compliance by the Grantee with all applicable Republic of Palau and State laws and regulations, including but not limited to the following:

   a. **License(s):** The Grantee shall acquire and keep up to date such business license(s) required by applicable Republic of Palau and State laws and regulations governing the conduct of any business activity engaged in by the Grantee.

   b. **Taxes:** The Grantee shall make timely payment of taxes lawfully levied under applicable Republic of Palau and State laws for any business activity engaged in by the Grantee.

5. **RESTRICTIONS:** This Certificate is granted subject to the following restrictions:

   a. **Employment of Citizens of Palau:** The Grantee shall to the maximum extent feasible employ and train citizens of the Republic of Palau in the business activity in which it engages or may engage in the Republic of Palau.

   b. **Utilization of the Republic of Palau Sub-Contractors and Concessionaires:**

      Whenever economically feasible and practical, the Grantee shall favor Palauan citizens or entities as sub-contractors or concessionaires over non-Palauan individuals or entities.
c. **Assignment, Transfer, Sub-Contract and Concession**: This Certificate and the authority granted hereby shall not be assigned or transferred and shall not be construed as granting authorization for any sub-contractor or concessionaire to do business in the Republic of Palau.

d. **Not Exclusive Franchise**: This Certificate is not and shall not be construed as an exclusive license or franchise.

e. **Real Property**: This Certificate is not and shall not be construed as the approval of any acquisition by Grantee of any ownership of any real property.

f. **Payment of Certificate Fee**: Receipt of five hundred dollars ($500.00) as processing and filing fee for this Certificate is hereby acknowledged. Grantee shall be liable for and shall pay any annual fee for this Certificate that may be established by law or regulations.

6. **REVOCATION OF CERTIFICATE**: This Certificate shall be subject to abridgement, modification, suspension, or revocation by the Grantor for the following reasons:

   a. If Grantee is found to have provided false or fraudulent information in its application for this Certificate, in any documentation or material submitted in support of such application or in any subsequent submission of information to Grantor, either verbal or written.

   b. If Grantee engages in activities which are illegal under the laws of the Republic of Palau, or outside the scope of this Certificate, its Charter or Articles of Incorporation.

   c. If the Grantee fails to comply with any provisions of this Certificate or the Foreign Investment Act.

   d. If Grantee's Corporate Charter or Business License expires or is revoked.

   e. Any other reason identified in the Foreign Investment Act, regulations thereunder or any other Republic of Palau or State laws or regulations.

GRANTED THIS 06 DAY JANUARY, 2017.

__________________________
John Skebong
Chairman
Foreign Investment Approval Certificate No. 604-2017
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This Foreign Investment Approval Certificate No. 604-2017 shall be valid as of the date it is signed on behalf of the Foreign Investment Board, provided the following statement is signed by the Grantee's authorized representative within 30 days of the date the Foreign Investment Approval Certificate is signed on behalf of the Foreign Investment Board. If this document is not signed by the Grantee's authorized representative within the 30 days period, it is void and of no effect unless otherwise agreed by the Foreign Investment Board in writing.

I, William L. Bidpath, hold the title of Corporate Counsel of Palau Chief Air Corporation (the "Grantee") and am authorized to execute this statement on its behalf. I have read and understood the foregoing Foreign Investment Approval Certificate and agree on behalf of the Grantee to be bound by its provisions. I understand that this Foreign Investment Approval Certificate sets forth specific terms, conditions and restrictions relating to the conduct of the Grantee's business enterprise as established in the Republic of Palau and that the Grantee's failure to comply with any one of these provisions will render this Certificate subject to modification, suspension or revocation.

I further understand that the conduct of the Grantee's business enterprise as established in the Republic of Palau is subject to the applicable laws of the Republic of Palau and the various States, including specifically the Foreign Investment Act, 28 PNCA § 101 et. seq. In particular, I understand and am aware that the Foreign Investment Act sets forth criminal penalties for certain conduct violative of its provisions. I understand and agree on behalf of the Grantee to comply with Section 108(k)(9) of the Foreign Investment Act, which requires the Grantee to pay to the National Treasury an annual fee of $500.00 for each non-citizen it employs. Finally, I understand that in order to lawfully engage in any business activity, other than the activity authorized in this Certificate, the Grantee must either apply for an amendment to this Certificate or apply for a new Foreign Investment Approval Certificate.

[Signature]
Name of Authorized Representative

[Signature]
Date 1/20/17
Appendix B
Lease Agreement and Water Use Rights
COMMERCIAL LEASE
STATE OF KOROR, REPUBLIC OF PALAU

This is a Commercial Lease between KOROR STATE PUBLIC LANDS AUTHORITY, P. O. Box 116, Koror, Palau 96940 ("KSPLA") and PALAU CHIEF AIR CORPORATION, P. O. Box 155, Koror, Palau 96940 ("Lessee"). This Lease commences on 1/18/2018 ("Effective Date"). Certain documents are attached to this lease, and these documents are made part of this lease. Lessee and the KSPLA are the only parties to this Lease. Entries herein may be typed, printed or hand written.

WHEREAS, Lessee wishes to lease a certain parcel of land from the KSPLA for commercial purposes, and

WHEREAS, the KSPLA agrees to so lease to Lessee said parcel of land in the manner stated in this lease, and

WHEREAS, both the KSPLA and the Lessee acknowledge that there is sufficient consideration for this lease and both the KSPLA and the Lessee intend to be legally bound by this lease.

NOW, THEREFORE, the parties agree as follows:

SECTION 1. DESCRIPTION OF THE PROPERTY. KSPLA hereby leases to the Lessee the following property ("the Property") as Category 1 at T-Dock area of Meketii Hamlet, and more particularly described as Property Lot No. 18KS02-02, with a leasehold area measuring approximately two hundred (200) square meters, as shown on KSPLA Worksheet No. 18KS02, (a map of which is attached herewith as Exhibit A).

SECTION 2. USE OF PROPERTY. Lessee agree that the Lessee may only use this property for the purpose of operating the proposed and approved commercial business that is set out in Lessee’s commercial development proposal that is attached to this Lease as Exhibit B and is hereby incorporated by reference. Lessee understands that it may operate its proposed commercial business only if it is allowed by law and is properly licensed by the Republic of Palau and Koror State Government. Lessee understands that he/she cannot use the property for any other purpose unless the KSPLA consents to the requested change in writing. Lessee also understands and agrees that the KSPLA has the sole discretion to grant or deny any changes in the proposed use of the property and that any unauthorized use of the property will be considered a material breach of this Lease Agreement.

SECTION 3. DURATION OF LEASE. This Lease starts on the Effective Date and continues for fifty (50) years. The Lease may be terminated as set forth in this Lease.

SECTION 4. RENT.

SECTION 4.1. Lease Payments. Lessee shall pay the KSPLA an annual rental payment

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of six hundred and 00/100 dollars ($600) which constitutes a three dollars and 00/100 ($3.00) per square meter of the Property. This is called the “Base Rent”. The Base Rent shall be paid in advance in equal quarterly installments, on the first business day of January, April, July and October of each year of the Lease term. Ten years after the Effective Date of this Lease, the Base Rent will be increased by five percent (5%) over the Base Rent that was being charged at the beginning of the Lease. Thereafter, every ten years the Base Rent will be increased by five percent (5%) over the Base Rent charged at the beginning of that ten year period. When each such decennial increase occurs, the first increased payment will be paid on the first business day of January, April, July or October, whichever date occurs first after the beginning of that ten year period.

SECTION 4.2. Late Fee. If any rent is past due by at least fifteen (15) days, Lessee shall pay to the KSPLA a late fee equal to five percent (5%) of the delinquent Rent. Lessee’s payments shall be applied first to late fees and second to rent.

SECTION 4.3. Option to Pay Rent Monthly. The Lessee shall have the option to pay rent in an amount equivalent to the rent set forth in Section 4.1 hereof, on a monthly pro-rated basis.

SECTION 5. UNLAWFUL ACTIVITY. The Lessee shall never commit, or allow to be committed upon the Property, any violation of this lease or any violation of State or National laws, including State or National regulations or court orders, and traditional law. This section requires compliance with all licensing, permit requirements, tax laws, and all rules and regulations of Koror State and the Republic of Palau.

SECTION 6. IMPROVEMENTS; INDEMNIFICATION.

SECTION 6.1. Consent; Performance of Work. Before starting work on constructing, remodeling, renovating or erecting any building or improvement on the Property; including the placement of landfill and commencement of earth-moving, the Lessee must submit a written proposal and obtain the written consent of the KSPLA. The KSPLA has Sixty (60) days to approve or prohibit the construction. If KSPLA does not permit or prohibit the construction within that time period, then the Lessee may start work on the construction under the plan submitted. Lessee agrees that the KSPLA has no duty, obligation or responsibility to review these plans for safety, sufficiency or compliance with applicable law. Lessee shall indemnify and hold harmless the KSPLA from any and all damages, attorney’s fees and costs of litigation that may result from any claim arising from the plan.

SECTION 6.2. Requirements for the Performance of Work. Before starting work on constructing, remodeling, renovating or erecting any building or improvement on the Property, (the “Performance of Work”), Lessee must have obtained all necessary approvals and/or consent from relevant governmental entities required under the laws of Palau. Lessee understands and agrees that it is the Lessee’s sole responsibility to insure that all Performance of Work adheres to all existing zoning and building requirements. Lessee understands and agrees that it is the Lessee’s sole responsibility to insure that the construction of any buildings or improvements is done in accordance with the submitted construction proposal including the location of the

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proposed construction on the leased property. Any deviations from the construction proposal require the consent of the KSPLA and must adhere to all existing zoning and building requirements. Lessee further understands and agrees that in the event that Lessee fails to adhere to the requirements of this provision, KSPLA may require Lessee to remove any buildings or improvements constructed in violation of this provision at Lessee’s own expense. The failure to do so within thirty (30) days of such request by KSPLA will be considered a material breach of this Lease Agreement.

SECTION 6.3. Minimum time for development of Commercial Leases. A commercial Lessee, within two (2) years of the issuance of the lease, shall commence development of the leasehold so that leasehold can be used for the commercial purposes specified in the lease. In the event that the lessee has not started developing the property within the two (2) year period and after three (3) years of non-development, KSPLA shall consider this a material breach and may terminate the lease.

SECTION 7. Indemnification. Lessee alone bears all duties, responsibility and liability for all activities relating to the improvement of the property, including all injury and damage claims relating to these activities. Lessee shall indemnify and hold harmless the KSPLA from liability for all claims and expenses (including attorneys, court and expert witness fees) related to these activities or the failure to perform such activities.

SECTION 8. MAINTENANCE. Lessee shall keep the Property maintained, clean, and in good condition, and shall keep all improvements on the Property in good repair at Lessee’s own expense. The Lessee must keep the Property in compliance with all National and State laws and regulations at Lessee’s own expense. KSPLA has the power to require that any structure it considers offensive or unattractive be removed by the Lessee within ten (10) days after the KSPLA directs the Lessee, in writing, to remove such structure.

SECTION 9. FINANCING OF IMPROVEMENTS; CONSENT TO MORTGAGE.

SECTION 9.1. Lessee Right to Use Property as Security. Lessee may execute a promissory note secured by a mortgage of the Lessee’s leasehold interest in the Property and Lessee’s interest in any improvements on the Property. The KSPLA must consent, in writing, to the execution of such promissory note and mortgage; this consent must be signed by an authorized KSPLA representative and must be approved as to form by KSPLA legal counsel. If the Lessee does not obtain this consent before he/she/they execute(s or no s) such promissory note and mortgage the KSPLA has the power to declare the lease in material default immediately and evict the Lessee under the terms of this Lease.

SECTION 9.2. KSPLA’s Right to cure Default: Note to the KSPLA. The note, mortgage, consent and related documents, referred to in Section 9.1, must grant the KSPLA the right to cure any default or breach of the mortgage agreement that may be caused by the default of the Lessee.

SECTION 9.3. Instrument Copy to the KSPLA. The Lessee must furnish KSPLA a copy of any document encumbering the Property within thirty (30) calendar days from the

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execution of that document; if the Lessee fail to do so it will be considered a material default under this Lease.

SECTION 10. DAMAGE; DESTRUCTION. The Lessee’s obligation to pay rent remains in force even if the improvements on the property are damaged or destroyed. Lessee agrees that the KSPLA is not required to repair or rebuild any damaged or destroyed improvements on the property. The Lessee agrees not to alter damage, destroy, or remove any part of the Property or its improvements without the KSPLA’s prior written permission to do so.

SECTION 11. ASSIGNMENT, SUBLEASE & TRANSFER.

SECTION 11.1. Requirement of the KSPLA’s Approval. Lessee shall not sublease, assign or transfer, nor give or allow any license, use right, occupation or easement on any part of its interest in this lease within the first ten (10) years of the lease. Thereafter, any sublease, assignment, transfer, license, use right, occupation or easement of any part of the subject property will require KSPLA’s prior written consent. Lessee shall not sublease, assign or transfer, nor give or allow any license, use right, occupation or easement on any part of its interest in this lease without the KSPLA’s prior written consent. The KSPLA has sole discretion as to whether to grant such consent. No sublease, assignment, transfer, license, easement or use right shall be valid or binding without such consent. The terms of this lease prevail over the terms of any sublease, assignment, transfer, license, easement or use or possessory right.

SECTION 11.2. Effect of Lease Termination. If either Party terminates this Lease, the KSPLA may, in its sole discretion, terminate any sublease and sub-tenancies or cause them to be assigned to the KSPLA. Lessee agrees to so provide all of Lessee’s subleases.

SECTION 11.3. Incorporation of the Terms of the Lease into any Sublease. Any sublease of the Property shall incorporate the terms of this lease into the sublease.

SECTION 11.4. Collection from Sub-Lessee. It is agreed that in the event the Lessee shall fail to pay any obligation under this lease for more than thirty (30) days, the Lessee assign to the KSPLA funds sufficient to satisfy such deficiency from any money due to the Lessee under any sublease of the Property. Thus, in the event the Lessee fail to pay any obligation under this lease for more than thirty (30) days, the KSPLA shall have the option to collect the amount due under the Lease directly from the sub-Lessee(s), to the extent that the sub-Lessee(s) (is) (are) obligated to the Lessee under the sublease. Any sublease that is entered into by the Lessee must provide for and permit collection of the obligations of this lease in this manner. Lessee shall not harass or in any manner retaliate against any sub-Lessee who have paid the KSPLA any money under the provisions of this section or attempt to collect any money from the sublease which has been paid to the KSPLA under this section.

SECTION 12. RESERVATION OF RIGHTS OF WAY & EASEMENTS.

SECTION 12.1. Electricity and Telephone Lines; All Other Utilities. The KSPLA hereby reserves the right and easement during the period of the Lease to erect, construct, install, operate, maintain, repair, alter, inspect and replace any and all utilities and other incidental
equipment over, on and across the Property. “Utilities” shall include a public, private, cooperative and/or government line, facility or system used to carry, transmit and/or distribute cable television, electric power, telephone, telegraph, water, gas, oil, other petroleum product(s), steam chemicals, sewage, storm water and/or any similar commodity. Lessee will not receive any compensation for any such easement.

SECTION 12.2. Roads and Drainage. The KSPLA reserves the right and easement to construct and maintain on, over and across the Property, temporary or permanent roads and related drainage. The KSPLA shall have reasonable discretion to decide the matter of where such boundaries, roads and related drainage shall be situated. KSPLA may reduce Lessee’s lot size and reduce Lessee’s rent obligation without notice to Lessee if KSPLA constructs or allows the construction of a permanent road on Lessee’s leased property, which thereby permanently inhibits Lessee’s use of that portion of the Property.

SECTION 12.3. Right to Remove. This reservation of Rights of Way and Easements shall include the right to remove trees, vegetation, signage and other obstructions which may, in the KSPLA’s sole discretion, need to be removed in order to carry out the purposes of this section; said removal shall be without compensation to the Lessee.

SECTION 13. UTILITY SERVICES / SIGNAGE.

SECTION 13.1. Arrangement for Utilities. Lessee may enter into agreements to provide utility services necessary for Lessee’s enjoyment of the property. Lessee must promptly give the KSPLA a copy of any agreement for utilities entered into by Lessee and a plat or diagram showing the exact location on the Property of the utility services to be provided. KSPLA does not guarantee the installation of any utility on the Property.

SECTION 13.2. Connection to Sewer and Water. If the Property is not connected to the public sewer and water systems Lessee must connect it to such systems within sixty (60) days at the Lessee’s expense.

SECTION 13.3. Signage. Lessee must have the KSPLA’s written consent to display, anywhere on the Property, any sign, advertisement or marketing material.

SECTION 14. LIENS, TAXES & ASSESSMENTS.

SECTION 14.1. Tax Liens. Lessee shall keep the Property and all improvements thereon free and clear of liens, taxes, encumbrances and other charges. Lessee shall immediately pay any such lien, tax, encumbrance or charge that is reduced to judgment.

SECTION 14.2. Taxes. Lessee shall promptly pay all taxes, licenses, fees, assessments and other charges levied upon the Property (or any interest in the Property) as they become due, and upon request shall provide KSPLA with proof of such payment.

SECTION 14.3. Indemnification. Lessee shall protect, indemnify and hold harmless the KSPLA, the Lease and the Property (and all KSPLA interest therein and improvements

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thereupon) from all claims, tax assessments and other charges, and from all costs, including attorneys, court and expert witness fees, in connection therewith.

SECTION 15. EMINENT DOMAIN.

SECTION 15.1. Complete Taking. If during this Lease the entire Property is taken by eminent domain, then Lessee’s entire leasehold interest and all other Lessee’s rights herunder shall terminate on the actual date of such taking and the KSPLA shall refund any excess rent paid by Lessee. In any condemnation proceeding that may be brought pertaining to the Property, Lessee shall be entitled to file and to prosecute a claim against the condemnor for the value of its leasehold interest in the Property and for the value of its interest in the improvements and the KSPLA shall be entitled to pursue a claim against the condemnor for the full value of its interest in the Property and the Property improvements.

SECTION 15.2. Partial Taking. In the event of a partial taking by eminent domain, this Lease shall remain in effect covering the property not taken, except that the annual Base Rent shall be reduced by an amount equivalent to the square meter area taken multiplied by the per-square-meter Base Rent rate in effect at the time of the taking.

SECTION 15.3. Award Apportionment. All compensation awarded by reason of such taking shall be divided between Lessee and the KSPLA according to their respective interests in the Lease, the Property, the Property’s improvements, and in the remainder at the time of such taking.

SECTION 16. KSPLA’S NON-LIABILITY; LESSEE ASSUMPTION OF RISK & INDEMNIFICATION OF THE KSPLA. Lessee assume and shall indemnify the KSPLA from all risk, cost, and expense of every kind and all loss, injury and damage to any person or property of anyone that results from any activity or omission to act at, on, near, or in connection with the Property; this shall include all damage regardless of the nature of its causation and shall include damage caused by defects or conditions in the Property or the improvements, construction, or structures located at or on the Property. Lessee’s assumption of risk and duty to indemnify under this section shall include damages and expenses, including attorney’s fees, court and expert witness fees and other costs. Lessee further assume all risk of damage, loss or injury to the property by insects or other animals; accident, water, explosions, storm, fire or other casualty, theft, tort, recklessness, or any other source of such damage, loss or injury; the Lessee shall pay attorney, court, and expert witness fees that may be incurred in connection with such damage, loss or injury. Every Lessee’s insurance policy concerning the Property and/or any improvement thereon shall name the KSPLA as an additional insured.

SECTION 17. DEFAULT OR BREACH; REMEDIES.

SECTION 17.1. Time. Lessee agree and acknowledge that time is of the essence with regard to Lessee’s performance hereunder. All Lessee’s payments, notices and other activities must be sent or performed within the deadlines set forth in this Lease or, if no time for performance is specified herein, must be sent or performed with reasonable diligence.
SECTION 17.2. Default / Breach. All terms of this Lease are material and a breach of any term shall be considered a material breach. The Parties specifically agree and acknowledge that the following, among other acts and omissions, constitute Lessee’s material default and/or breach of this Lease: (a) the Lessee filing a bankruptcy or insolvency petition; (b) an assignment for the benefit of creditors by or against Lessee; (c) any receivership for or over Lessee that lasts for more than twelve (12) months; (d) any levy under execution or attachment by any process of law or equity, or the issuance by a court of an order for sale pursuant to any process of law or equity, of Lessee’s leasehold interest in the Property; (e) Lessee’s abandonment of the Property or improvements hereon for more than thirty (30) consecutive calendar days which will entitle the KSPLA without any notice to Lessee to immediately enter and protect the Property and improvements and personal property located on the Property; and (f) Lessee’s failure to timely pay the KSPLA any sum due under this lease or to timely and completely perform any other Lease term, covenant or condition.

SECTION 17.3. Remedies. The Parties agree and acknowledge that the KSPLA may do any and all of the following if Lessee default or breach this Lease:

SECTION 17.3.1. If the KSPLA notifies Lessee in writing of any breach or default of this lease the Lessee must remedy such breach within ten (10) calendar days; if Lessee do not do so, the KSPLA may file a lawsuit for collection of the amount due under the lease and may recover the amount due with interest as provided in this lease plus reasonable attorney’s fees and all expenses of litigation.

SECTION 17.3.2. Thirty (30) calendar days after the KSPLA notifies Lessee of such default or breach, and such breach or default continues, the KSPLA may terminate this Lease effective immediately and/or re-enter the Property but not limited to using self-help. KSPLA may remove all persons and the Lessee’s personal property from the Property, and store, sell or otherwise dispose of such personal property. Any amount obtained by the KSPLA from sale of such personal property shall be offset against the amount Lessee owes KSPLA; the balance shall be remitted to the Lessee.

SECTION 18. COVENANTS OF KSPLA; QUIET ENJOYMENT

SECTION 18.1. Title. The KSPLA undertakes to Lessee that at Effective Date and during the term of the Lease, it has good title to grant the Lease and shall assist Lessee to complete any property registrations under applicable law; and it has obtained all consents required for the purpose of this Lease. KSPLA shall not be liable to Lessee or any other party should legislation be enacted which effects title to the Property lease or inhibits KSPLA’s ability to lease the land for the duration described in Section 3. Any such changes made by agencies or governmental bodies outside of KSPLA’s control shall not constitute a breach of these Covenants by KSPLA.

SECTION 18.2. Quiet Enjoyment. The KSPLA covenants that Lessees shall peacefully enjoy the Property for the purpose described and detailed in this Lease’s Section 2, as long as Lessees comply with the terms of this Lease.

SECTION 19. NOTIFICATION TO KSPLA OF DAMAGE; WASTE. Lessee shall
promptly notify the KSPLA of any activity on or about the Property that poses a danger of damage or waste to the Property or constitutes a threat to the public’s health or safety. Such notices must be in writing, as required by this Lease. However, in the event of serious and imminent danger to life or property, immediate oral notification, followed by written notification in the manner required by this Lease, must be given to KSPLA by the Lessee; it shall be a material breach of this Lease for the Lessee to fail to so notify the KSPLA.

SECTION 20. RETURN OF PROPERTY; HAZARDOUS SUBSTANCES.

SECTION 20.1. Surrender of Property. At the end of the Lease Lessee shall surrender the Property to the KSPLA and all buildings, structures and improvements shall immediately and automatically merge with the Property and become the KSPLA’s property. At the end of the Lease Lessee agrees to surrender to the KSPLA possession of the Property and all improvements in good condition, excepting reasonable wear and tear.

SECTION 20.2. Cleanup of Property and remediation of hazardous conditions. Lessee shall, at Lessee’s sole expense, remove and/or have removed all debris and personal property (but not fixtures) from the Property. Lessee shall be solely responsible for removing from the Property and its soil all hazardous substances and remediating any hazardous conditions on the property and its soil. Lessee shall not, and shall not allow anyone else, to locate on, beneath or about the Property any hazardous substances without the KSPLA’s written consent. During the Lease the Lessee shall remEDIATE hazardous conditions that shall occur on the Property and remove hazardous substances that shall be present on the Property immediately and at Lessee’s sole expense.

SECTION 20.3. Indemnification of KSPLA. Lessee shall indemnify and hold harmless the KSPLA (during or after the Lease term) from any liabilities and losses, damages and claims, including diminution of the value of the property, which may result from hazardous substances contamination by Lessee or Lessee’s employees, invitees, agents or contractors. This indemnification of the KSPLA by Lessee includes all costs incurred in connection with any investigation of the site conditions and any cleanup, remediation, removal or restoration required by any government agency or political subdivision that is in whole or in part attributable to Lessee and/or Lessee’s employees, invitees, agents or contractors. For the purposes of this Lease, the term “hazardous substances” includes asbestos materials, petroleum products, and such other substances, materials and wastes that are or become regulated under applicable local, state or federal laws, including any chemical, material, element, compound, solution, mixture, substance or other matter that is defined or listed as a hazardous substance in the federal Comprehensive Environmental Response Compensation and Liability Act of the United States, 42 USC §9601 et seq., as amended (and its regulations); the United States Department of Transportation Hazardous Materials Table (49 CFR 172.101); the United States Environmental Protection Agency Hazardous Substances (40 CFR Part 302); and amendments; environmental laws and regulations administered by the Republic of Palau Environmental Quality Protection Board or its delegates; similar laws and regulations of the State of Koror, the Republic of Palau, or any governmental or quasi-governmental organization or agency.

SECTION 21. RIGHT TO ENTRY. During this Lease’s Term, the KSPLA has the
right, after reasonable notice to Lessee, to enter, inspect and/or survey the Property and all improvements thereon.

SECTION 22. HOLDING OVER.

SECTION 22.1. Agreement Lapse. Holding-over by Lessee after this Lease lapses shall not constitute a renewal or an extension hereof or give to Lessee any rights under this Lease or in or to the Property or the improvements thereon; in the event of holding-over Lessee shall be considered a tenant-at-sufferance. In the event of holding-over the Lessee shall pay to the KSPLA rental equivalent to one hundred fifty percent (150%) of the Base Rent under Section 4.1 of this Lease in effect at the Lease’s termination, pro-rated daily, as well as the rental provided for in Section 4.1 hereof.

SECTION 22.2. Agreement Termination. Immediately after any termination of this Lease (other than expiration of the Lease) becomes effective, Lessee shall completely vacate the Property, and shall remove all of Lessee’s personal property. Lessee shall compensate the KSPLA for each day it fails to do so at a rate equivalent to Two-Hundred Percent (200%) of the Base Rent under Section 4.1 of this Lease in effect at the time of the Lease’s termination, pro-rated daily, as well as the rental provided for in Section 4.1 hereof.

SECTION 22.3. Tenant Holding Over Bound by Obligations under this Lease. Lessee holding over as a tenant-at-sufferance shall be subject to all the obligations owed to the KSPLA which are set forth in this lease during the period the Lessee shall hold over.

SECTION 23. KSPLA’S RIGHT OF REIMBURSEMENT. If Lessee fails to timely and properly pay or perform any obligation under this Lease, then the KSPLA may pay or perform it and obtain reimbursement from Lessee for all such costs, including interest at the greater of twelve percent (12%) per annum or the highest rate then allowed by Palauan law from its due date until paid, plus attorneys and all other collection-related fees.

SECTION 24. GENERAL PROVISIONS.

SECTION 24.1. Miscellaneous. This Lease: (a) is executed in, and shall be exclusively controlled by (and interpreted according to) the English language; (b) shall be construed fairly (with no inference drawn against the drafting Party). Each Party agrees at the request of the other Party or its agents or attorney(s) to execute any additional documents reasonably necessary to perfect and/or otherwise effectuate this Lease’s provisions. Facsimile and photocopied signatures shall bind the Parties and do not affect this Lease’s validity. Any provision herein that may be interpreted reasonably as being intended by the Parties to survive this Lease’s termination or expiration shall do so. All payments required by this Lease shall be made in United States dollars.

SECTION 24.1.1 Requests by the lessee for modification to the lease agreement, including but not limited to extension of term, transfers, assignments, subleases, payment plans, adding or removing leaseholders, and any other request that requires a lease amendment, will subject the amended lease agreement to any new standard lease terms that have been adopted by
SECTION 24.1.2. The Open Government Act may require disclosure of lease terms and agreements. By entering into this lease lessee acknowledges understanding that the lease agreement may be disclosed, in whole or part, to a third party upon said third party making the appropriate request. The KSPLA further informs lessee that all lease agreements are recorded with the court and are available as public record from the Court.

SECTION 24.2. Governing Law. This Lease shall be exclusively interpreted, construed and enforced under the laws of the Republic of Palau. The Parties hereby consent to such governing law.

SECTION 24.3. Jurisdiction / Venue. The Parties agree that venue for any and all disputes arising out of or relating to this Lease shall be in the courts of the Republic of Palau, and the Parties consent to such venue and the jurisdiction of such courts, and waive any objection to same.

SECTION 24.4. Entire Agreement. This Lease sets forth the Parties entire agreement regarding the subject matter herein. This Lease shall only be amended or modified in a writing signed by the Parties.

SECTION 24.5. Legal Expenses. If the KSPLA prevails in any legal action brought against Lessee, the KSPLA shall be entitled, in addition to any and all of its other rights and remedies, to reimbursement for its expenses, including court costs, reasonable attorneys fees, and expert witness fees and expenses.

SECTION 24.6. Benefits. This Lease shall bind and inure to the benefit of the parties, and their heirs, assigns, successors-in-interest, and legal representatives, subject to any and all assignment restrictions set forth herein. The heirs, assigns, successors-in-interest, legal representatives of the Lessee shall be bound by all the terms of this Lease and shall be obligated to the KSPLA in all respects and in the same manner as the Lessee. The foregoing notwithstanding, this Lease is not a third party beneficiary contract and shall not be construed to be for any third party’s benefit (and no third party shall have any claim or right of action hereunder).

SECTION 24.7. Severability / Waiver. If any term of this Lease is held by a court of competent jurisdiction to be invalid or unenforceable, or is deemed unlawful by the enactment of any legislation or regulations by any agency other than the KSPLA, then this lease, including all of the remaining terms, shall remain in force and effect as if such invalid or unenforceable or unlawful term was not included.

SECTION 24.8. Relationship of the Parties. The KSPLA and Lessee are not agents, partners or engaged in a joint venture. Lessee have no authority to assume or create any express or implied obligation for or on behalf of the KSPLA.

SECTION 24.9. Injunctive Relief. The Parties acknowledge that monetary damages are
an inadequate remedy for the breach of certain provisions of this Lease. Accordingly, if Lessee breaches (or threatens to breach) any of Lessee’s obligations, the KSPLA shall be entitled, without showing or proving actual damage sustained, to a stipulated temporary restraining order, and shall thereafter be entitled to apply for a preliminary injunction, permanent injunction and/or an order compelling specific performance, to prevent the continued or threatened breach of Lessee’s obligations hereunder.

SECTION 24.10. Notice. Any notice required by this Lease (or given in connection with it) shall be in writing and effective on confirmed delivery to the appropriate Party by personal delivery or three (3) business days after being sent via first class mail postage prepaid at/to the respective Party’s address set forth at the beginning of this Lease or at/to such other address as a Party provides hereafter by written notice to the other Party.

SECTION 24.11. Independent Investigation. Each Party has: (a) read and understood this Lease and agrees to all of its terms and conditions; (b) independently evaluated the desirability of entering into this Lease and is not relying on any representation, guarantee or statement not set forth herein; and (c) been afforded the opportunity to consult legal counsel with regards to its rights and obligations set forth in this Lease (and has either accepted or refused such counsel) and accordingly has negotiated this Lease.

IN WITNESS WHEREOF, the Parties have executed this Lease either personally or by a duly authorized representative and acknowledge that they understand and agree to be bound by this Lease’s terms and conditions.

LESSEE:

[Signature]
Mr. Mike Yung Ha, President/Chairman
Palau Chief Air Corporation

Date Signed: 01/13/2018

KOROR STATE PUBLIC LANDS AUTHORITY:

[Signature]
Laurinda F. Marin, Chairperson
Rosemary Mersai

Date Signed: 1-18-2018

Initials: [Signature]
This form was approved as to form by Koror State Public Lands Authority Legal Counsel. Any changes to this FORM require additional legal review and approval.

Kassie McEntire, Legal Counsel

Date Signed: January 5, 2018

RECORDATION

Recorded in Book No. AB 25, Page 70, No. 12-0053, on this 19th day of January, 2018.

Clerk of Court
Palau Supreme Court
Zonielynn Jonathan
Courtroom Clerk/Interpreter I
Palau Supreme Court
WATER/SUBMERGED LAND USE RIGHT

GRANTOR: KOROR STATE GOVERNMENT

GRANTEE: PALAU CHIEF AIR CORPORATION

LOCATION/AREA: Water/submerged land area in T Dock, Meketii Hamlet, Koror, identified as Lot No. 18KS02-01, as shown on the survey drawing attached hereto and incorporated as though fully set forth herein.

SIZE: One thousand, eight hundred (1,800) square meters, more or less, with the boundaries, coordinates, and measurements as shown in the attached drawing, which is incorporated as though fully set forth herein.

PURPOSE/USE: To build and operate a commercial enterprise. Grantee shall make all necessary hookups to the public sewer system as may be required, and may connect to other utilities such as water, electricity, cable television, internet, and other public utilities. All uses shall comply with applicable Koror Planning Commission building and zoning requirements and permits. Grantee shall obtain and abide by all Environmental Quality Protection Board permits, permit conditions, rules and regulations, and water classifications and uses and restrictions. Grantee may not discharge raw sewage, drain water, or other wastewater into the environment. Grantee shall make all reasonable attempts to mitigate damage to the seabed and coral reefs, and to minimize adverse environmental impacts during construction of any improvements or renovation.

TERM: This use right shall be in effect for fifty (50) years from February 1, 2018, through January 31, 2068, subject to the provisions herein below.

RENT: Grantee shall pay annual rent at the rate of $3.00 (three dollars) per square meter per year, or $5,400.00 (five thousand, four hundred dollars) per year. Grantee shall pay the annual rent in twelve (12) equal monthly installments of $450.00 (four hundred and fifty dollars), payable in advance, beginning on February 1, 2019, and continuing to be paid in advance by the 1st day of each month thereafter.

All of the foregoing rent shall increase automatically upon any increase in commercial lease rates established or charged by the Koror State Public Lands Authority. Any past due rent shall bear interest at the highest rate allowed by law for commercial credit as of the date of this agreement (7.25% per annum), and interest shall be charged continuously from the date due until fully paid. In addition, for any Rent that is past due by at least fifteen (15) days, Lessee shall pay to Koror State Government a late fee equal to five percent (5%) of the delinquent Rent. Grantee payments shall be applied first to interest, second to late fees, then to any other amounts due and owing to Koror State, and finally to rent. All payments shall be made at the Treasury Department at the Koror State Government building.
IN ADDITION TO ANY OTHER RIGHT OR REMEDY AVAILABLE TO GRANTOR, IF RENT IS NOT PAID FOR THREE (3) CONSECUTIVE MONTHS, OR IF THE RENTAL AMOUNT DUE, PLUS PENALTIES, EXCEEDS THE MONETARY AMOUNT OF THREE (3) MONTHS RENT, THEN THIS AGREEMENT AND ALL RIGHTS AND INTERESTS GRANTED HEREIN SHALL AUTOMATICALLY TERMINATE, WITHOUT ANY FURTHER NOTICE REQUIRED BY GRANTOR. GRANTOR MAY ACCEPT ANY PAST RENTS OR OTHER MONETARY AMOUNTS DUE WITHOUT WAIVING OR OTHERWISE AFFECTING THE TERMINATION, AND ANY EXCESS PAYMENT MADE SHALL BE RETURNED TO GRANTEE, MINUS ANY AMOUNTS DUE AND OWING TO GRANTOR. ACCEPTANCE OF ANY PAYMENT BY GRANTOR SHALL NOT BE DEEMED OR EQUATE TO A WAIVER BY GRANTOR OF ANY DEFAULT OR TERMINATION.

THIS USE RIGHT is given under the following terms and conditions, in addition to the foregoing terms and conditions:

1. This use right is granted exclusively to Grantee for the purposes described above. This use right, and use or possession of the premises described above, may not be given, assigned, or transferred to any other person or entity as described in paragraph “8.” herein below. In the event of any change of use of the premises by Grantee, or occupancy or use of the premises by any other person or entity, then this use right shall automatically terminate, and Grantor may take possession of the premises and all improvements thereto. This use right is also given subject to future capital improvement programs and projects, such as sewer line expansion or modification, road improvements, and similar public projects.

2. Grantee may build, erect, or construct the improvements and renovation described above in the location and within the authorized area described above. Grantee may not remove corals or sea life (any marine flora or fauna), may not make any other improvements, may not make any change to the uses, plans, attached or incorporated designs, or take any other construction or improvement action unless specifically described above, and as may be necessary to complete the improvements described above (and in attachments and incorporated documents). Grantee may not limit or interfere with public access or uses outside of the boundaries of the construction or uses authorized under this agreement. Grantor reserves the right to authorize filling and dredging and other uses to other persons in the land or waters adjacent to and/or annexed to Grantee’s premises and improvements.

3. Grantee shall make the improvements and perform the construction as described, and upon expiration or termination of this authorization, all improvements and construction, including all “infrastructure” such as water and electricity shall belong to Grantor. Grantee may not alter, renovate, remove, or deconstruct any such improvements without the prior written consent of Grantor. Grantee shall maintain and repair all improvements, and keep them in a neat, clean, and sanitary condition. Grantee may possess and use all such improvements until the expiration or termination of this use right. Upon expiration or termination of this use right, Grantee is entitled to all improvements made and all fixtures on the improved premises, and Grantee shall peacefully vacate the premises and all improvements without court action or other legal process.
4. Grantee shall apply for and obtain all necessary and required permits and authorizations, including building permits, Environmental Quality Protection Board permits and authorizations, EQPB Rules and Regulations including water classifications and permitted uses, historical clearances and approvals (as applicable), Koror Planning Commission Building Permit and Koror zoning laws, and any other license, permit, or authorization as may be required now, or as may be required by subsequent laws, rules, or regulations. Grantee shall not allow any discharge of any kind into the seawater, or onto the land, and Grantee shall provide and construct all necessary drainages, sewer and wastewater hookups or wastewater treatment facility, and electrical hookups necessary.

5. Grantee shall obey and abide by all applicable laws, rules, and regulations, and shall insure that all persons on or in the use right area comply with this use right, and with all applicable laws, rules, and regulations, including but not limited to criminal laws, foreign investment laws, tax and business license laws, Koror State laws, all other applicable permitting or licensing laws, littering laws, and environmental preservation, conservation, and protection laws.

6. Grantee shall indemnify and hold harmless Grantor for any and all claims, demands, or requests for relief which may be asserted against Grantor as a result of this use right, and any occupancy, use, or activity conducted as a result of this use right, including any claim or demand arising out of negligent or non-negligent acts, errors, or omissions, and including reckless and intentional acts, and including any injury, harm, damage, or loss to persons and/or property. Grantor may utilize the services of its own attorney of choosing to defend against any matter asserted against Grantor, and Grantee shall reimburse Grantor for all attorney’s fees, costs, expenses, and other financial liability incurred by or imposed against Grantor.

7. Grantee agrees to pay all attorney’s fees, court costs, and expenses incurred in relation to the enforcement of this use right or any court action arising as a result of this use right, including but not limited to any pre-litigation enforcement efforts, and any post litigation enforcement and collection activities. To the extent possible, Grantee waives any limitation that may be placed upon the award of attorney’s fees, costs, and expenses, such as the limitation upon the amount of attorney’s fees that may be collected under RPPL 7-11.

8. This use right, and all right and interests granted herein, may not be mortgaged, obligated, encumbered, pledged, sold, subleased, transferred, assigned, given, or otherwise clouded by any obligation of Grantee to any third party or other person or entity, whether voluntary or involuntary, without the express written approval of Grantor signed by Grantor in advance. This use right may not be assigned, transferred, sold, conveyed, pledged, subleased, or otherwise given to any person, whether voluntary or involuntary, and no other person or entity may possess, occupy, or use the premises for any purpose, without the express written consent of Grantor. No other person may have any license, use right, or other possessor right or interest in and to this use right, and in and to the land, waters, reefs, seabed, and improvements authorized under this agreement. In the event of any actual or attempted transfer, sale, assignment, sublease, conveyance, grant, authorization, license, or other conveyance of the premises or any use rights or possessor interests therein, voluntary or involuntary, by agreement, execution, attachment, order in aid of judgment, or by any other method or process, without the express written consent of Grantor in advance, then this use right shall automatically terminate without any action required by Grantor, and Grantor may take immediate possession of the premises and all improvements made and allowed under this use right.
9. Grantee shall abide by and do or perform all terms, conditions and covenants, including but not limited to making all timely payments in full and when due. Grantor may re-enter the premises and take possession and control of the premises and all improvements upon any breach of this agreement, or any default in any performance due. Time is of the essence for the performance of any and all obligations by Grantee.

10. The terms and conditions of this agreement shall apply regardless of any future action such as legislation, litigation, or any other operation of law, including litigation by any person claiming right, title, or interest in the adjoining land to the contrary.

11. This use right supersedes and replaces any and all prior negotiations, discussions, drafts, proposals, and understandings, and may only be modified in writing signed in advance by both parties. The acceptance of any partial or incomplete performance or duty by Grantor, including the acceptance by Grantor of rent or other performance when Grantee is in default under this use right, shall not be deemed a waiver of full performance to be made by Grantee, and Grantor may accept any partial or incomplete performance and may thereafter demand full and satisfactory performance of any obligation due, may declare a breach for the non-performance of any duty or obligation not made when due and as required, and Grantor may exercise any and all remedies allowed in law or in equity, regardless of any acceptance by Grantor of partial or incomplete performance, or lack of performance, by Grantee. All remedies are cumulative, and are not in derogation or limitation of any remedy available at law, in equity, or under this agreement. Grantor may only waive any performance, obligation, or duty, and may only waive a breach of this use right, in writing signed in advance of the effectiveness of any such waiver. All terms of this authorization are deemed material, and a breach of any term or condition shall be deemed a material breach.

12. The person signing this use right on behalf of Grantee warrants that he or she is duly and properly authorized to sign this use right and to bind Grantee, and further warrants that Grantee and all persons working with, for, or on behalf of Grantee (including any contractors or other persons or entities) accept and shall abide by all terms, conditions, and requirements set forth in this use right and all related permits, and with all applicable national government and Koror State laws.

SO AGREED this ___ day of the month of November, 2017.

Ming Yung Ha, GRANTEE
President and Chairman
Palau Chief Air Transportation

Yositaka Adachi, Governor, GRANTOR

(Attachment (1): Drawing of Lot No. 18KS002-01,

Recorded at Koror State Finance 1-12-2018
Date

Page 4 of 4
Appendix C
PPUC Water Supply and Demand Analysis
WATER SUPPLY ANALYSIS FOR THE PROPOSED PALAU CHIEF AIR

WATER SUPPLY AND DEMAND ANALYSIS

1. Facilities Estimated Water Demand:

ESTIMATED WATER USAGE (recomputed)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DEMAND</th>
<th>GPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 staff (barracks and office)</td>
<td>70 GPD x 6</td>
<td>420</td>
</tr>
<tr>
<td>Facility</td>
<td>35 GPD</td>
<td>35</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>455</strong></td>
<td></td>
</tr>
</tbody>
</table>

2. KAWTP Production capacity:

\[ Q_{KAWTP} = 4 \text{MGD} \]

3. 1M Distribution Tank Recovery:

Tank Diameter = 74 ft.
Recovery rate = 2 ft./hr. (actual tank filling rate observe)

\[ Q_{\text{tank}} = \frac{\text{(Area of tank)(Recovery rate)}}{4} = \frac{\pi(74)^2}{4} \]

\[ Q_{\text{tank}} = 1,551,744 \text{ GPD} \]

4. Discharge of 8inches distribution line:

Consider velocity of water inside 8inches pipe = 1.75 m/s (from design values for flow of water inside 8inches pipe)

\[ Q_a = 8 \text{inches pipe discharge} = 0.2m \]

\[ Q_a = (\text{Area of 8inches pipe} \times \text{(design velocity in 8inches pipe)}) = \pi(0.175)^2 \times 0.555 \text{ m}^3/\text{sec} \]

\[ Q_a = 1,255,305 \text{ GPD} \]

5. Percentage relation of demand and supply:

Percentage of demand from KAWTP production = \( \frac{455 \text{ GPD} \times 100\%}{4 \text{MGD}} = .01 \% \)
Percentage of demand from **distribution tank recovery** = \( \frac{455 \text{ GPD} \times 100\%}{1,551,744 \text{ GPD}} = 0.03\% \)

Percentage of demand from **8inches distribution line** = \( \frac{455 \text{ GPD} \times 100\%}{1,255,305 \text{ GPD}} = 0.04\% \)

6. **Capacity of 2inches PVC line**

Demand = 455 GPD = 0.32 GPM

Flow in 2inches pipe, 400 ft. length with 40 PSI pressure = 86 GPM (from tabulation)

Actual site condition:
Pipe size = 2inches PVC, Sch 80
Actual Area Pressure = 40 PSI
Proposed Pipe Length = Approx. 600 ft.

Approximated Actual flow = 60 GPM

Approximated Actual and demand flow relation:
*Demand is lesser than actual site flow.*

**Conclusion and Recommendation:**

Basing from the estimated demand by the proposed project, it is concluded that PPUC's water supply and distribution system can cope with the proposed project's water consumption and can be hooked up to the system.
Appendix D
PPUC Report on Details of Sewerage network
1. LOCATION OF THE PROPOSED DEVELOPMENT

The following portrait shows that the existing sewerage network near the proposed Palau chief air development project.

2. SEWERAGE DIVISION

The following notes are submitted in response to set general and specific conditions for Wastewater management.

1. As per our initial survey we can confirm that the proposed development is not feasible to connect nearest manhole of PPUC centralized sewer network / connection point (wash out) at summer house through gravity line. It can be connected to PPUC sewer system by pumping network.
2. Nearest PPUC centralized sewerage network manhole is some 200 meters (660 feet) away and other connection point at summer house is some 125 meters (410 feet) away from the proposed development.
3. However, laying of proposed gravity line from the new development to PPUC sewerage system is difficult due to existing terrain is lower than the two points (PPUC manhole and connection point at summer house) and some other pipe laying (gravity network) issues.

4. Hence it is recommended that, you will have to design a septic holding tank, network and install a submersible pump (as per the capacity of flow) to pump all the sewage coming out from the proposed development to PPUC manhole/connection point.

5. The following rough drawing is for your general understanding.

6. You may submit the design and drawings of the proposed development to PPUC for further clarifications.

7. PPUC reserves the right to impose any further conditions.

Prepared and reviewed by

NAVEEN KUMAR REJETI,

Thursday, May 3, 2018  New sewer connection at T-dock  Page 2 of 2
Appendix E

PPUC Certification on Capacity to Provide Power
May 03, 2018

CERTIFICATION

This is to certify that PPUU has the capacity to provide power for the application of Palau Chief Air located in Meketii, Koror.

The proposed customer will get power from the Alrai – Koror Feeder 13.8KV Distribution line with maximum feeder capacity of 7.5MW and actual load of 3.4MW.

PPUC status of Electrical Hardware:

- Feeder of Main Distribution Line has the capacity to supply additional load required by Palau Chief Air.
- Primary Voltage – 13.8KV
- Secondary Voltages – 120/208, 120/240, 240/480
- Power poles are all concrete and stable.
- Line hardware are in good condition.

This certification is being issued in order to support the application of the above mentioned customer.

Certified by:

[Signature]
James Meheolo
Manager, SCD
Notes:

1) Electrical Plan or Load of customer and Voltage requirement is not given on the application.

2) Size of transformer and secondary line to be determined once the load is available.

3) 2 Power pole and cable for the extension of Primary line will be 13m concrete pole and 270 ft. #2 AWG copper wire.

4) 2 Secondary pole and 420 ft. cable for the secondary line.

5) All materials and labor cost will be shouldered by the customer.
PROJECT SUMMARY

1. Extend Primary line from existing pole besides WCTC Auto Shop to Ongiall waiting house.

2. Upgrade existing wooden pole at Ongiall waiting house to 13M concrete pole.

3. Install pole mounted transformer after upgrade.

4. String secondary line from Ongiall waiting house to project site (dead end pole).

NOTE:

Proposed additional power pole to be located next to WCTC fenced lot is to align the extension of primary line to run along the property boundary line to Ongiall and on to project site.
SILT CURTAIN (SEE TYPICAL SECTION/INSTALLATION)

3 FT x 3 FT SEDIMENT POND (LOCATION TO BE VERIFIED ON SITE)

NOTE: SURFACE RUNOFF MUST BE DRAINING TO THE SEDIMENT PONDS; DIVERSION DRAINS TO BE CONSTRUCTED ON SITE AT APPROPRIATE LOCATIONS.

3 FT x 3 FT SEDIMENT POND (LOCATION TO BE VERIFIED ON SITE)

0.5 FT BERM (TO DIVERT SURFACE RUNOFF)