



THE INDEPENDENT STATE OF PAPUA NEW GUINEA

Environment Act 2000

Act, Section. 65 & 66
Reg., Sec. 16(1)

ENVIRONMENT PERMIT

An Environment Permit is hereby issued under *Section 65* of the *Environment Act 2000*.

TO: National Airports Corporation.

OF: P. O. Box 684, BOROKO, National Capital District, Papua New Guinea.

- (a) to carryout redevelopment works at the Tokua Airport which involves civil works on the expansion and extension of the airport, construction of new office facilities, disposal of liquid and solid wastes, ground water abstraction and other works relating to the Tokua Airport redevelopment within the vicinity of the airport at GPS coordinates 4°20 '25"S, 152°22'46" E ("Premises") in Kokopo East New Britain Province.
- (b) to discharge wastes into the environment from its premises while carrying out a Level 2 activity (Subcategory 12.4), associated with "Construction of aerodromes or airfields except unpaved airstrips more than 10 km from an urban area"; and
- (c) to extract water from the environment for use within the premises.

The activity shall be carried out in accordance with the terms and conditions specified in this permit.

Permit Number: EP-L2(740)
Date of Issue: 22nd June 2020
Date of Commencement: 22nd July 2020
Term of Permit: Twenty-five (25) Years
Date of Expiry: 21st July 2045



INTERPRETATIONS

CEPA: means the Conservation and Environment Protection Authority.

Director/Director of Environment: means the Managing Director or the Head of Conservation and Environment Protection Authority. The designation is used to ensure consistency with the title given in s. 15 of the *Environment Act 2000* (as amended) and its roles and functions assigned to that title under s.16 of the Act (as amended).

Environment Act/ the Act: means the *Environment Act 2000* (as amended) and any Environmental Policies and Regulations made thereunder.

Environment Permit Application: refers to the Environment Permit Application submitted by National Airports Corporation submitted on 11th June, 2020 for the Tokua Airport redevelopment and associated activities.

Wastewater: means effluents generated from the contractor's depot areas, offices, terminal buildings within the premises including wastewater from workshop and fuel storage areas.

Grey Water: means wastewater derived from the kitchen and laundry activities and which may contain elevated levels of BOD₅ and detergents.

Permit: means the Environment Permit EP-L2 () issued under *Section 65* of the *Environment Act 2000*.

Permit Holder: refers to National Airports Corporation.

Premises: refers to the vicinity of Tokua Airport at GPS Coordinates 4°20 '25"S, 152°22'46" E ("Premises") in Kokopo East New Britain Province.

Waste Management Plan: refers to a description of waste management programs for different categories of waste streams that are generated from individual activities associated with the redevelopment of the Tokua Airport. The plan should provide quantitative and qualitative data on waste streams and outline the strategies for managing these wastes. The waste management strategies described in the plan should also incorporate the waste minimization principal (reduce, reuse/recycle, treatment and disposal).

Water Quality Criteria: means the criteria for water quality in *Schedule 1* of the *Environment (Water Quality Criteria) Regulations 2002* and those that are prescribed as a condition of this permit.

Works: means the redevelopment works at the Tokua Airport which involves civil works on the expansion and extension of the airport, construction of new office facilities, disposal of liquid and solid wastes, ground water abstraction and other works relating to the Tokua Airport redevelopment.



TERMS AND CONDITIONS OF ENVIRONMENT PERMIT

Annual Charge

The total annual charge under this permit for a L 2 (Sub-category 12.4) activity and which falls under the Fee Rank of 2.3, and will be invoiced in accordance with the Conservation and Environment Protection Authority (CEPA) Management Fees Regulation 2015 (No. 792).

Conditions

General

1. The Permit Holder shall carry out works accordingly with the plans and specifications in the Environment Permit Application.
2. In the event of an inconsistency between the environment permit application and a condition of this permit, the conditions of this permit will apply.

Works

3. The Permit Holder shall employ best available techniques and/or technologies to control the dust/air emission, noise emission, soil erosion, rainfall runoff and sedimentation whilst undertaking works associated with the redevelopment of Tokua Airport and associated facilities as outlined in the Environment Permit Application.

Buffer Zone

4. The Permit Holder shall establish buffer strips and retain vegetation as buffer zones near river banks or near any other surface water to restrict contaminated storm water runoff entering and to prevent land surface that may lead to soil erosion whilst carrying out the works.

Bunding

5. The Permit Holder shall construct bunds around the fuel storage tank, generator shed and workshop using the appropriate bunding specification in the *Australian Standards-AS 1940*.

Rubbish/ Waste Bins

6. The Permit Holder shall provide waste bins at all appropriate locations including contractor's accommodation, workshop, office, etc., for collection and storage of wastes for disposal at a responsible manner in a designated landfill.

Septic Tank

7. The Permit Holder shall install septic tank or mobile toilet for use during the construction period with adequate capacity and discharge appropriately at designated location after getting approval from the municipal or responsible authority.

Spill/Contaminant Control

8. The Permit Holder shall install spill and contaminant control measures including oil-water separator(s) or absorption pads for management of oil-film from contaminated rainfall runoff as well as wastewater emanating from fuel storage facility within the premises. This management shall be designed to comply with the minimum environmental specifications in the *DEC Environmental Code of Practice for Vehicle/Machinery Workshops and Petroleum (Hydrocarbons) Storage/Resale/Usage Site, DEC, 1997*.

Erosion /Sediment Control

9. The Permit Holder shall ensure that construction of roads, bridges culverts and extraction of gravel shall substantially comply with the *PNG Guideline for Roads and Bridges Construction*.

Cut-Off Drain

10. The Permit Holder shall construct cut-off drains to prevent storm water runoff from cross contamination with waste fuel, oil, lubricants, etc., from location where machinery and fuel are stored and maintained.



Operational

Waste Treatment Facilities

11. The Permit Holder shall carry out routine inspection and maintenance of the Rubbish/ Waste Bins (*Condition 6*), Septic Tank (*Condition 7*), Spill/Contaminant Control (*Condition 8*), Erosion /Sediment Control (*Condition 9*), and the Cut-Off Drain (*Condition 10*) in order to maintain the treatment efficiency of these waste treatment facilities.
12. The Permit Holder shall ensure that excavated material temporarily stored in spoil heaps must be located (where practicable) at least 100m from the nearest stream or surface water.

Rehabilitation

13. The Permit Holder shall undertake progressive landform rehabilitation including topsoil management and soil conservation, and the rehabilitation of disturbed areas at all project sites including landfill, and camp site that are not required for further use or development after the works are completed.

Workshop & Fuel Storage

14. The Permit Holder must install trays or similar apparatus beneath machinery to protect the soil and vegetation from leaks or spills of fuels, lubricants and/or hazardous materials during breakdowns and/or servicing away from a designated workshop area.
15. The Permit Holder must ensure that all fuels, lubricants and/or hazardous materials are stored in accordance with the relevant requirements and requirements in the *PNG Environmental Code of Practice for Vehicle/Machinery Workshops and Petroleum (Hydrocarbons) Storage/Resale/Usage Site, DEC, 1997*.
16. The Permit Holder must ensure that spills of fuels, lubricants and/or hazardous materials are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminant into waterways. Equipment and soil contaminated by fuels, lubricants, shall be treated appropriately

Environment Management

Environment Management Plan

17. The Permit Holder shall submit an Environment Management Plan (EMP) for its operation to the Director for approval within three (3) months from the date of commencement of this permit.

Waste Management Plan

18. The Permit Holder shall incorporate a Waste Management Plan into the Environment Management Plan referred to in *Condition 17* and include waste minimization strategy (reduce, reuse, recycle, treatment, disposal) into the Waste Management Plan.

Air Emission

19. The Permit Holder shall employ appropriate control measures to minimize aerial emissions from works associated with the redevelopment of Tokua Airport. These abatement measures may include periodic maintenance of mobile and plant machineries, watering of gravel road with watering carts, using cleaner fuel, etc.

Noise

20. The Permit Holder shall ensure that noise levels from the premises are minimized through the use of appropriate noise control measures. These abatement measures may include noise barriers, scheduling of operating hours, attenuation of sound from machinery and equipment, putting speed limits, etc.

Solid Waste

21. The Permit Holder shall ensure that all solid wastes that are generated within the premises are sorted out, properly stored in appropriate waste receptacles and dispose appropriately according to the approved Waste Management Plan.



Rainfall Runoff

22. The Permit Holder shall segregate clean rainfall runoff from locations where machinery and fuel are stored in order to avoid cross-contamination with the rainwater.

Spills/Waste Oil

23. The Permit Holder shall ensure that spill and emergency response plan are standardized and communicated; employers are trained and competent to handle fuel pumps and associated plant and mobile equipment, machineries, etc., to avoid chemical spills and accidents.

Waste Discharge

24. The Permit Holder shall ensure that domestic wastewater from the construction site are directed to the septic tank referred to in *Condition 7* for storage, treatment and disposal.
25. The discharge of wastewater from the premises into the environment shall not exceed the Water Quality Criteria given in Table 1, below.

Table 1. Water Quality Criteria

Parameters	Water Quality Criteria
*Faecal Coliform	≤200 faecal coliform/100ml
Dissolved Oxygen	>6.0 mg/L (>80-90% saturation)
Total Suspended Solids	<10% change from background mean seasonal values
Oil & Grease	Non noticeable as visible film & deposits or detected by odour
pH	6.5 – 9.0

*Criteria based on not fewer less than five samples taken over not more than a 30day period, in which the median value of faecal coliform bacteria content of the surface water shall not exceed 200 per 100 ml.

Monitoring

26. The Permit Holder shall undertake regular monitoring of the wastewater discharge on water quality. The monitoring program shall be carried out in accordance with the requirements in Table 2 and with respect to the parameters specified in *Condition 25* (Table 1), above.

Table 2 – Water Quality Monitoring Program.

Sample Location	Description	Frequency
1. Discharge Point	Assess effluent quality prior to mixing with surface water.	Monthly
2. A location of 20m upstream of Discharge Point.	<i>Control site.</i> Assess background water quality prior to contact with wastewater form the premises.	Monthly
3. A location of 30m downstream of DP	Assess water quality after mixing with surface water.	Monthly

Reporting

27. The Permit Holder shall submit an Environment Performance Report to the Director at the end of each calendar year or other reports as directed by the Director for evaluation and compliance. The report shall include but not limited to –
- raw data (from analysis by certified laboratories) from the water quality monitoring program.
 - interpretation of raw data,
 - incidence of non- compliance and reasons, and
 - status of compliance with the Waste Management Plan and other conditions of this permit.
28. The Permit Holder shall notify the Director on any significant environmental incident that occurs in relation to the Tokua Airport redevelopment activity and discharge of wastes into the environment.

